FINTECH ALLIANCE

SOCIO-ECONOMIC RELATIONS IN THE DIGITAL SOCIETY

СОЦІАЛЬНО-ЕКОНОМІЧНІ ВІДНОСИНИ В ЦИФРОВОМУ СУСПІЛЬСТВІ

ТОВАРИСТВО З ОБМЕЖЕНОЮ ВІДПОВІДАЛЬНІСТЮ
«ФІНТЕХАЛЬЯНС»

СОЦІАЛЬНО-ЕКОНОМІЧНІ ВІДНОСИНИ
В ЦИФРОВОМУ СУСПІЛЬСТВІ

ЗБІРНИК НАУКОВИХ ПРАЦЬ

SOCIO-ECONOMIC RELATIONS
IN THE DIGITAL SOCIETY

PUBLICATION OF SCIENTIFIC PAPERS

№ 2 (48), 2023

КИЇВ 2023

ЗМІСТ

Viktoriia Shcherbachenko
Candidate of Economy Sciences,
Associate Professor, Senior Lecturer of
Internationa Economic Relations
Department, Sumy State University,
Sumy, Ukraine;
v.shcherbachenko@macro.sumdu.edu.ua
ORCID: 0000-0002-4570-3389
(Corresponding author)

Anna Diana Sluisarenko
Student, Sumy State University, Sumy,
Ukraine;
ORCID: 0009-0003-6971-2997

PROSPECTS AND CHALLENGES OF ONLINE EDUCATION DEVELOPMENT IN UKRAINE

ABSTRACT

The article presents the findings of the study of the prospects and challenges for the development of online education in Ukraine. The aim of the study is to identify prospects for the development of the online education sector in Ukraine, as well as to detect the constraints that affect the slowdown in the evolution of online education in Ukraine. In order to achieve the defined purpose, the following objectives need to be realised: to consider the reasons for the transition to online learning, to analyse the latest research related to online education both in Ukraine and abroad, to determine the weaknesses and strengths of online education in Ukraine, to examine the prospects for the development of online education in Ukraine, as well as challenges that the Ukrainian education system is facing today. Primary research methods applied are as follows: comparative analysis of scientific research, observing and analytical methods such as analysis of statistical and secondary data, provided by domestic and foreign researchers.

During the study, statistical data and literary sources related to the research topic were analysed. The strengths and weaknesses of the Ukrainian education system were identified. The most important threats identified include the russian invasion of Ukraine and the associated losses. The study determined that distance education is a trend in the world and has gained popularity in recent years due to the forced isolation of the population due to Covid-19. It was defined that Ukraine lacks a strong formalised system of distance education and a conscious focus on lifelong learning. Nevertheless, Ukraine has started to move in this direction. The main impediment is the military situation in the country, which causes underfunding and insufficient focus on the education sector, as well as a high level of risks for stakeholders and the overall educational crisis in the country.

Keywords: online education, distance learning, Covid-19 pandemic, education system, education crisis, russian invasion

JEL Classification: I23, I26

INTRODUCTION

The Covid-19 pandemic has formed a new environment in which digital skills have become a primary focus in both work, school, and everyday life in order to save time and reduce face-to-face contact, which was critical during the epidemic's peak.

Education research is important for a number of reasons. For starters, it is a record of transformative processes in the realm of education. Second, considering the sequence of events, identifying effective and ineffective methods of problem-solving in times of crisis will assist us in developing a correct strategy of step-by-step heads in similar situations, and in general, will form a certain view of the level of development of online education in Ukraine and the education sector in general.

The recognition of weaknesses and consideration of already implemented methods that work will aid us in looking at the prospects for further development of the education sector in Ukraine and formulating recommendations for countries that have found themselves or may find themselves in similar conditions with a similar context.

LITERATURE REVIEW

The problems and prospects of the development of online education in Ukraine and the world have received a lot of attention in recent years. In particular, studies on the impact of the Covid-19 pandemic in Europe and Central Asia have been conducted by Bol T. [2], who investigates the impact of homeschooling and parental support on the educational process among children in primary and secondary schools. Shmis T., Sava A., Teixeira J. E., and Patrinos H. A. [19] in their scientific work offer suggestions and guidance to decision-makers on how to respond to the COVID-19 crisis in the education sector, propose measures to mitigate the negative impact on learning. Donnelly R., Patrinos H. A., and Gresham J. [4] in their work discuss the impact of school closures due to the COVID-19 pandemic on education in Europe, with a focus on Ukraine and emphasized the need for learning recovery programs, protection of education budgets, and preparation for future shocks to mitigate the negative effects of the pandemic. Among the Ukrainian researchers, Demianenko O. [3] emphasises the importance of solving a set of problems and ensuring support from management, material and technical resources, personnel and methodological support for distance learning provision. Koval O. [7] discusses the prospects for the future of the digitalisation of education in Ukraine with case studies of its implementation in other countries. Lapin Y. in his work [8] conducts research on the distinction between distance and online learning among education experts. Pashkov V. [15] examines the political and economic factors influencing university reform and highlights the close relationship between higher education dynamics and political factors, and points out the critical state of science and research which is seen as a potential national security challenge.

AIMS AND OBJECTIVES

The purpose of the study is to identify prospects for the development of the online education sector in Ukraine, as well as to detect the constraints that affect the slowdown in the evolution of online education in Ukraine. In order to achieve the defined purpose, the following objectives need to be realised: to consider the reasons for the transition to online learning, to analyse the latest research related to online education both in Ukraine and abroad, to determine the weaknesses and strengths of online education in Ukraine, to examine the prospects for the development of online education in Ukraine, as well as challenges that the Ukrainian education system is facing today and the possible consequences that may affect economic growth in the future.

METHODS

Primary research methods applied in writing this article are as follows: comparative analysis of scientific research, literature review, observation and analytical methods such as analysis of statistical and secondary data, provided by domestic and foreign researchers. Comparative analysis of scientific research is used to examine the accessibility and quality of education, as well as the impact of online learning and distance education on various aspects of individuals' lives. It refers to international studies, such as the American survey conducted in April 2020. Additionally, the article mentions research conducted in primary and secondary education in the Netherlands to discuss disparities in parental support and gender inequality. Legal documents are analyzed to establish the rights and guarantees related to education. The article relies on the analysis of statistical and secondary data provided by domestic and foreign researchers to support its claims. It references the Distance Learning Regulation approved by the Ministry of Education and Science of Ukraine to outline the objectives and standards of distance learning in the country. Moreover, it utilizes data from the global online learning platform Coursera to demonstrate the growing demand for online courses during and after the Covid-19 pandemic. The article also presents a SWOT analysis of Ukraine's education sector, which involves analyzing data on the destruction of educational institutions during the russian invasion.

RESULTS

As stated in Article 26 of the Universal Declaration of Human Rights, the Constitution of Ukraine and the Law of Ukraine "On Education" [9], education is one of the fundamental human rights. Accessibility and quality of education directly affect an individual's income, employment, personal development, health and social adjustment.

According to Article 3 of Ukraine's "On Education" Law of 05.09.2017, Ukraine opposes educational limitations and promotes equal access to education [9]. As a result, the right to an education is guaranteed regardless of age, gender, race, health status, citizenship, nationality, skin colour, place of residence, the language of communication, origin, social and property status, criminal record, political, religious, or other beliefs, or any other circumstance or characteristic.

Under Article 8 of the Law of Ukraine "On Education", every person may enjoy his or her right to education throughout life by receiving formal, non-formal and informal education. In Ukraine, formal education, which comprises distance learning, is the most common [9].

The Distance Learning Regulation, approved by Order of the Ministry of Education and Science of Ukraine No. 466 dated 25 April 2013, establishes the objectives of distance learning, which include the provision of educational services using modern information and communication technologies in accordance with established state education standards. This comprises educational and qualification levels, citizen preparation for admittance to educational institutions, foreign training, and employee professional growth.

In 2020 Ukraine converted to emergency remote teaching, which, compared to online education, is utilized in reaction to crises and is only temporary. Emergency remote teaching varies from online education in several respects, including the absence of formal pieces of training for teachers to develop digital competencies and the educational institution's lack of technological, organizational, and methodological support for the educational process. The educational program's architecture remains a framework designed for traditional classroom instruction, with asynchronous interactions generally absent and learning taking place solely through video conferencing. Furthermore, many platforms, communication tools, and video communication technologies are employed [11].

Following the COVID-19 epidemic in the spring of 2020, Ukraine made the move to online learning. Later, due to the onset and progression of russia's full-scale invasion of Ukraine, a remote study in Ukraine became a requirement in 2022.

The rapid growth of online education has become feasible due to the Covid-19 pandemic and the forced isolation of the population. The high mortality rate due to the pandemic resulted in the worldwide shutdown of educational institutions. At the outbreak of the pandemic, around 90 % of schools remained closed globally. All educational institutions in Ukraine switched to online learning in the spring of 2020. During the initial six months of 2020, over 185 million schoolchildren resided at home due to the pandemic. In spite of the widespread availability of higher education, students from underprivileged backgrounds are more prone to dropping out or achieving lower qualifications during their tertiary studies compared to their more advantaged counterparts. The widening income gap has hindered skills development among individuals with a lower socioeconomic status [18].

An American survey conducted in April 2020 shows that 38 % of college students had trouble focusing on their studies and work, with 74 % of students having trouble doing their daily chores. Due to isolation, students experienced increased anxiety, sadness, and feelings of loneliness [1].

Research conducted in primary and secondary education in the Netherlands found a growing disparity between parental support for children of parents with higher education and those without it. Thus, about 75 % of parents with an academic background say they are able to support their children with schoolwork, while only 40 % of less educated parents are willing to help their children. There is also an increase in gender inequality. Parents are more supportive of girls, who are more interested in doing schoolwork than boys [2].

In order to support the education system, a number of initiatives to facilitate online learning were introduced across Ukraine. Originally, they envisaged broadcasting video lessons via television as well as utilising online platforms to deliver online education. The EdCamp Ukraine implemented a professional training initiative and exchange of teachers' experience in online learning. Furthermore, awareness campaigns such as "School, We Are Ready" were implemented in partnership with UNICEF Ukraine to share guidelines to ensure safe and sustainable learning experiences during the COVID-19 school year of 2020-2021 [4].

One important distinction that should be mentioned here is the difference between online learning and distance learning. Online learning implies real-time lessons, with the possibility of communicating with the teacher and peers at the same time. Online learning refers to a type of learning which is often used as a compulsory form of education and mirrors the methods of traditional face-to-face learning.

Assignments are also completed in real-time. It is especially important for those who value communication in the learning process. The availability of a clear timesheet makes it easy for the learner to navigate and plan their time and attention. While online learning has its advantages, including the convenience of presentations and videos, access to online testing, etc., there are also disadvantages. Connectivity issues, as well as the lack of personal contact between the teacher and the students, are the primary concerns.

Distance learning offers a fundamentally new approach to interaction and learning structure. With distance learning, educators may not meet with students in online classes in person, providing support via chat on occasion. Distance learning includes a range of technical features, from audio podcasts, videos, various simulators and online tests. However, the main

feature is attentive tracking of the learner's academic performance to create an individual learning trajectory. The absence of a timetable provides a certain amount of freedom, yet requires a high level of commitment and self-management on the part of the learner [8].

Education systems around the world are long overdue for modernisation, and the coronavirus outbreak brought all of its shortcomings to light abruptly. The coronavirus outburst caused education systems around the world to be rapidly transformed.

The following graphs illustrate the rapid growth in demand for online courses on the global online learning platform Coursera from the onset of the Covid-19 pandemic.
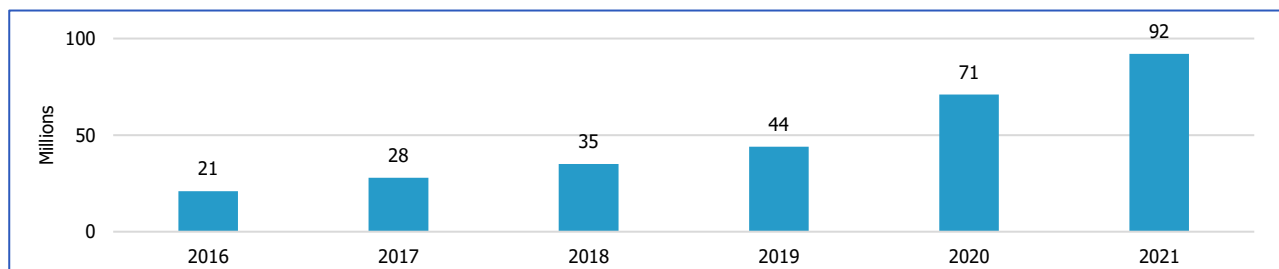

Figure 1. Total number of registered learners on Coursera. *(Source: [23])*
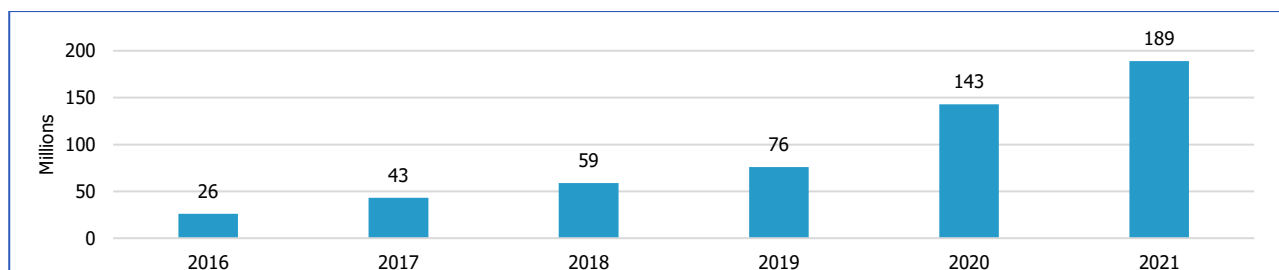

Figure 2. Total number of enrollments on Coursera. *(Source: [23])*

The above figures illustrate the upward trend in the increasing popularity of the Coursera education platform. From 2016 to 2019, the number of registered users has risen by 23 million. With the onset of the Covid-19 pandemic, the previous year's figure increased by more than 1.5 times to 71 million in 2020.

As we see the number of students enrolled in Coursera continued to rise in 2021, in contrast to the number of enrolments in online colleges. The Coursera platform continued to become ever more popular, with a total of 92 million users in 2022.

There is a similar trend in course enrolments for online learning. In 2020, the number of enrolments more than doubled, and the following year witnessed a further increase of 32%, reaching a peak of 189 million. This surge in enrolments demonstrates a significant shift towards online education during and after the pandemic.

In terms of national figures, the United States ranked first with over 17 million individuals participating in online learning. Second place goes to India with 13.6 million. There was a significant margin between these two countries and Mexico, which had nearly 5 million participants, while Brazil and China rounded out the top five.

Moving back to the Ukrainian education system, at the time of the Covid-19 pandemic, the following gaps manifested in the system: the absence and delayed provision of methodological recommendations for teachers to follow, considering the lack of experience in online learning, lack of state funding for personal protective equipment for educational institutions, teachers' lack of previous online learning experience, lack of the necessary equipment and internet access, discrepancies between TV lessons and the school curriculum, most of the material being self-study rather than online learning, no compensation for teachers for extra workload, and the inability to postpone the defence of qualification papers and, accordingly, the threat of students being expelled from the institution [12].

Table 1 below provides a SWOT analysis of Ukraine's education sector. It should be emphasised that the main threat at the moment is ensuring the physical integrity of students and teachers under martial law due to russian invasion of Ukraine. In the wake of the hostile attack, the Ukrainian society and economy underwent serious changes that resulted in significant destruction and damage to infrastructure, particularly public and social buildings, including a large number of educational

institutions. About 3200 educational institutions fell victim to brutal attacks, of which more than 250 were completely destroyed [16].

Among the victims of the violence are students and educational staff, including those who were killed and wounded. In the areas affected by the ongoing hostilities in eastern and southern Ukraine, living conditions have become extremely difficult. Consequently, many Ukrainian pupils, university students and their families are compelled to migrate to safer regions of the country or beyond to save their lives and health. Nevertheless, this exposes them to substantial threats of being separated from their families, parental loss, and the possibility of being exposed to violence, cruelty, sexual exploitation, or human trafficking. The majority of affected children have experienced extremely traumatic events and are in need of immediate measures to ensure safety, stability and psychosocial support.

However, physical integrity is not the only problem. Currently, we observe a certain level of alienation due to distance. This is especially noticeable among the older generation, who are not used to the exclusive distance learning mode: demotivation among teachers and students, difficulty in adapting to the distance mode, and communication at a distance loses its sense of humanity and becomes mechanised instead. The outflow of qualified personnel and families with children leads to a decrease in demand for educational services and the possibility of their implementation. The crisis in the higher education system is a weak point in Ukrainian education [15].

Table 1. SWOT analysis of the Ukrainian national higher education system. *(Source: [10])*

Strengths	Weaknesses
▪ A wide network of higher education institutions aimed at making higher education accessible to many people. ▪ An ESG-based higher education quality assurance system has been implemented to ensure high standards of education. ▪ Transparent admission procedures that have gained public trust. ▪ Strong demand for higher education and a high level of education of the population. ▪ Readiness to change in the context of European integration. ▪ Current educational legislation and higher education standards. ▪ Availability of highly qualified academic and research staff. ▪ A combination of academic traditions and experience in implementing changes. ▪ A wide range of educational programmes of various types and directions. ▪ Acceptable cost of educational services. ▪ Sufficient capital facilities to support the educational process. ▪ Experience in international educational and scientific cooperation.	▪ The process of incorporating into the European Education Area and the European Research Area. ▪ The global trend of increasing numbers of international students. ▪ Broadening access to international funding sources for educational and research activities. ▪ The shift towards a high-tech and innovative foundation for the global economy. ▪ The digitization and rapid growth of the IT industry. ▪ The availability and accessibility of contemporary educational content. ▪ Recognizing the necessity and goals of lifelong learning. ▪ The potential for synergy between higher education institutions and research organizations. ▪ The interest in collaborating with higher education institutions driven by the demand for skilled professionals from businesses. ▪ The societal need for the development of independent thought centres.
Opportunities	**Threats**
▪ Insufficient funding allocation to the higher education system and limited development of alternative funding sources. ▪ Discrepancies between graduates' competencies and the skills demanded by employers. ▪ Budget legislation that hampers the financial autonomy of higher education institutions. ▪ Inadequate prediction of the economy's workforce requirements and specialization needs. ▪ Inadequate monitoring of professional qualifications and employment outcomes of higher education graduates. ▪ Insufficient translation of the quality of higher education into tangible societal benefits. ▪ Fragmentation and duplication of training profiles within higher education institutions. ▪ Deterioration of scientific schools and a lack of groundbreaking research outcomes. ▪ Limited autonomy granted to higher education institutions. ▪ Prevalence of unfair practices, imitation, and corruption within the system. ▪ Secondary focus on research and innovation activities. ▪ Low employee motivation within higher education institutions. ▪ Outdated educational spaces, equipment, and research infrastructure. ▪ Limited opportunities for individuals with disabilities and special educational needs. ▪ Insufficient practical training provided to students in higher education institutions.	▪ Heightened competition in higher education as a result of globalization. ▪ EU education's appeal for employment and emigration prospects. ▪ Increased competition from less reputable foreign universities offering affordable distance learning. ▪ The military and political ramifications stemming from russia's invasion of Ukraine. ▪ Disparities in social and economic development. ▪ A prolonged absence of comprehensive state-level policy documents pertaining to higher education. ▪ Unfavourable demographic conditions within the country. ▪ Fragmented integration into the European educational landscape. ▪ Alluring opportunities in other nations that contribute to the emigration of highly skilled researchers, academics, and teaching staff. ▪ Limited demand for higher education in complex technical fields, hindering the growth of technical and knowledge-intensive education. ▪ The nation's low technological structure within its economy.

During the martial law period, government measures were significantly different from those taken during the quarantine. The official website of the Government released a message from the Ministry of Education and Science (MES) on 24 February, briefly explaining the mode of operation of educational institutions in the context of martial law. Within the next day, on 25 February, educational institutions suspended the educational process and announced a two-week holiday. The recommendation of the Ministry to temporarily suspend the educational process allowed it to draft the necessary documents and enable universities to adjust to the current circumstances. At the beginning of March, the Ministry of Education and Science adopted a decree mandating the heads of higher education institutions to take appropriate actions ensuring the students' safety. Furthermore, the Ministry of Education and Science emphasised the need to develop preferential treatment for students enrolled in the Armed Forces of Ukraine or territorial defence units, or engaged in volunteer activities.

State guarantees that ensure organisation and security for students, retention of jobs and average income, scholarships and other benefits, and living and eating expenses for students were enshrined in law. The Parliament delegated to the Ministry of Education and Science (MES) the power to elaborate regulations to facilitate the proper running of the education system under martial law regime and to adopt relevant orders in the sphere not covered by the law. These measures enabled the MES to promptly address education-related concerns without delay and to speed up the approval of critical management decisions. The aim behind this was to maximise students' potential to complete their studies [13].

Online education in wartime faces serious challenges, including excessive stress for children due to the constant danger of gunfire, explosions and uncertainty about the future. In addition, they face a substantial shortage of educational materials, school equipment and adequate learning conditions. Mastering the topics of the lessons without the help of a teacher proves to be extremely difficult, and the lack of self-discipline among children makes the learning process even more difficult [14].

The results of a study conducted by experts from the State Education Quality Service in Poltava Oblast are as follows: 21 % of teachers indicated that they found the level of pupils' learning to be visibly lower during online learning. Close to a third of pupils recognise that they are given plenty of content that is difficult to learn and use. Seventeen per cent of parents agree. Despite the fact that schools generally use a single electronic platform for organising and conducting lessons, it turns out that the most popular means of communication are groups in Viber and Telegram messengers, as confirmed by 70 % of parents and half of teachers in the survey [5].

The Ukrainian distance learning system is in its infancy. With international expertise and the integration of cutting-edge distance education technologies combined with the latest traditional education methods or practices, Ukraine's distance education system could achieve significant progress over time. Nevertheless, extensive implementation and promotion of distance education in Ukraine require solving a set of tasks in the following areas:

- administrative and organisational support;
- financial and technical support;
- personnel management corresponding to the needs of distance education;
- guidelines and methodological assistance based on the specifics of distance learning;
- distance education advancement within the field of education and the labour market [3].

DISCUSSION

The problems of education have been widely discussed in society worldwide. Best practices and experiences of online learning for students are presented in the works of such scholars [6, 17, 20, 25], which may be used in Ukrainian distance learning forced by war. Different tools of communication between students and lecturers are presented in [21, 22, 24].

Since 21 March 2023, Oksen Lisovyi has been the Minister of Education and Science of Ukraine, and Mykhailo Fedorov, Vice Prime Minister for Innovation, Education, Science and Technology, collaborates with him. Among the key objectives of their joint efforts is the digitalisation of education [7].

With global trends in the development of distance education expanding, the process is expected on a growing scale to affect national interests. The adoption of distance learning enables the realisation of the lifelong learning principle, creating a continuous path of education. Over the past few years, distance education has gained considerable popularity driven largely by the benefits it offers, including the possibility to obtain a degree while working, efficient use of time and resources, and expansion of supplementary education, etc.

CONCLUSIONS

Based on the research, it was determined that the field of online learning in Ukraine is in its early stages, and it has especially evolved during the Covid-19 pandemic and forced isolation of the population. The Ukrainian education system has strengths and weaknesses. Strengths include a focus on integration with the European educational area; a wide network of higher education institutions; transparent admission procedures; high demand for higher education and a high level of education; a wide range of study programmes of various types and areas; and reasonable cost of educational services. Weaknesses include recognition of the need for and goals of lifelong learning and a slow transition to new values of the learning process; rethinking the role of the teacher as a tutor, facilitator, mentor, who is now responsible for individual pedagogical support and coordination of the learning process; availability and accessibility of modern educational content. The main threats include the deterioration of the military situation in the country, the risk to the physical integrity of students and teachers; the longstanding absence of comprehensive state-level policy documents in the field of higher education; the attractiveness of EU education for employment and emigration; and the low technological structure of the country's economy. Opportunities include the potential for the digitalisation of education; expanding funding for education; transforming the quality of higher education into tangible public benefits; and introducing the principle of lifelong learning.

However, it should be noted that martial law significantly limits the possibility of implementing fundamental changes in the education sector, at least in terms of underfunding the education sector and focusing on the general continuation of education rather than a rapid leap in the quality of education.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

Conceptualization: *Viktoriia Shcherbachenko*
Data curation: *Viktoriia Shcherbachenko*
Formal Analysis: *Anna Diana Sluisarenko*
Resources: *Viktoriia Shcherbachenko, Anna Diana Sluisarenko*
Supervision: *Viktoriia Shcherbachenko*
Validation: *Viktoriia Shcherbachenko*
Investigation: *Anna Diana Sluisarenko*
Visualization: *Anna Diana Sluisarenko*
Funding acquisition: *Viktoriia Shcherbachenko*
Writing – review & editing: *Viktoriia Shcherbachenko, Anna Diana Sluisarenko*
Writing – original draft: *Anna Diana Sluisarenko*

FUNDING

REFERENCES

1. Active Minds (2020). The Impact of COVID-19 on Student Mental Health. Retrieved from https://www.activeminds.org/studentsurvey/

2. Bol, T. (2020, April 30). Inequality in homeschooling during the Corona crisis in the Netherlands. First results from the LISS Panel. https://doi.org/10.31235/osf.io/hf32q

3. Demianenko, O. (2018). Perspektyvy rozvytku dystantsiinoi osvity v Ukraini. Retrieved from National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". https://ela.kpi.ua/bitstream/123456789/23646/1/Osvita.PDF

4. Donnelly, R., Patrinos, H. A., & Gresham, J. (2021, April 2). The impact of COVID-19 on education – Recommendations and opportunities for Ukraine. https://www.worldbank.org/en/news/opinion/2021/04/02/the-impact-of-covid-19-on-education-recommendations-and-opportunities-for-ukraine

5. Dystantsiine navchannia pid chas viiny: yak ne vtratyty yakist? (2023, April 21). https://sqe.gov.ua/distanciyne-navchannya-pid-chas-viyni-yak/

6. Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. Educause Review, 27, 1–12. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

7. Koval, O. (2023, March 23). Koly osvita ta tsyfrovi tekhnolohii — odne tsile: Shcho novoho chekaie na ukrainsku osvitu? https://osvitoria.media/experience/koly-osvita-ta-tsyfrovi-tehnologiyi-odne-tsile-shho-novogo-chekaye-na-ukrayinsku-osvitu/

8. Lapin, Y. (2020, November 10). Dystantsiine ta onlain-navchannia – chy tse odne y te zh same? Dumky 4-kh osvitnikh ekspertiv. Ukrainska Pravda. https://life.pravda.com.ua/projects/majbutnje-shkoly/2020/11/10/242946/

9. Law of Ukraine On Education from September 5 2017, № 2145-VIII. https://mon.gov.ua/ua/npa/law-education

10. Ministry of Education and Science of Ukraine. (2022). SWOT-analiz natsionalnoi systemy vyshchoi osvity (No. 1/3263-22). https://mon.gov.ua/storage/app/media/news/2022/04/15/VO.plan.2022-2032/SWOT.stsenariyi-23.02.22.pdf

11. National Agency for Higher Education Quality Assurance. (2020, October). Nadzvychaine viddalene navchannia vs onlain osvita. https://naqa.gov.ua/2020/10/%D0%BD%D0%B0%D0%B4%D0%B7%D0%B2%D0%B8%D1%87%D0%B0%D0%B9%D0%BD%D0%B5-%D0%B2%D1%96%D0%B4%D0%B4%D0%B0%D0%BB%D0%B5%D0%BD%D0%B5-%D0%BD%D0%B0%D0%B2%D1%87%D0%B0%D0%BD%D0%BD%D1%8F-vs-%D0%BE%D0%BD%D0%BB%D0%B0/

12. Nazarenko, Y., Syrbu, O., & Kohut, I. (2020). Koronavirus ta osvita: analiz problem i naslidkiv pandemii. https://cedos.org.ua/researches/koronavirus-ta-osvita-analiz-problem-i-naslidkiv-pandemii/

13. Nikolaiev, Y., Rii, H., & Shemelynets, I. (2023). Vyshcha osvita v Ukraini: zminy cherez viinu. Analitychnyi zvit. https://osvitanalityka.kubg.edu.ua/wp-content/uploads/2023/03/HigherEd-in-Times-of-War.pdf

14. Osoblyvosti dystantsiinoho navchannia pid chas viiny. (2022, December 26). https://erudyt.net/novini/novini-shkilnoi-osviti/osoblyvosti-dystantsiynoho-navchannia-pid-chas-viyny.html

15. Pashkov, V. (2021). The crisis in the higher education system of contemporary Ukraine in the context of national security challenges. Strategic Panorama, (1-2), 80-93. https://doi.org/10.53679/2616-9460.1-2.2021.06

16. Riley, E, Capps, N., Ward, N., McCormack, L., Staley, J. (2021). Maintaining academic performance and student satisfaction during the remote transition of a nursing obstetrics course to online instruction. Online Learn., 25(1), 220–229. https://doi.org/10.24059/olj.v25i1.2474

17. Sarwar, H., Akhtar, H., Naeem, M.M., Khan, J.A., Waraich, K., Shabbir, S., et al. (2020). Self-reported effectiveness of e-learning classes during COVID-19 pandemic: A nation-wide survey of Pakistani undergraduate dentistry students. Eur J Dent, 14 (S01), 34-S43. https://doi.org/10.1055/s-0040-1717000

18. Save Schools In Ukraine. (2023). https://saveschools.in.ua/

19. Shmis, T., Sava, A., Teixeira, J. E., & Patrinos, H. A. (2020). RESPONSE TO COVID-19 IN EUROPE AND CENTRAL ASIA: Policy and Practice Recommendations. https://thedocs.worldbank.org/en/doc/862141592835804882-0090022020/original/ECAEducationResponseNotev9final.pdf

20. Turnbull, D., Chugh, R., Luck, J. (2021). Transitioning to E-learning during the COVID-19 pandemic: how have higher education institutions responded to the challenge? Educ. Inf. Technol, 23, 1–19. https://link.springer.com/article/10.1007/s10639-021-10633-w

21. Turula, A. (2017). Teaching presence in telecollaboration. Keeping an open mind. System, 64, 21–33. https://doi.org/10.1016/j.system.2016.12.001

22. Wang, K., Zhang, L., & Ye, L. (2020). A nationwide survey of online teaching strategies in dental education in China. J Dent Educ, 85 (2), 128–134. https://doi.org/10.1002/jdd.12413

23. Wood, J. (2022, January 27). These 3 charts show the global growth in online learning. https://www.weforum.org/agenda/2022/01/online-learning-courses-reskill-skills-gap/

24. Zheng, M., Bender, D., & Lyon, C. (2021). Online learning during COVID-19 produced equivalent or better student course performance as compared with pre-pandemic: empirical evidence from a school-wide comparative study. BMC Med Educ, 21, 495. https://doi.org/10.1186/s12909-021-02909-z

25. Zina, A., & Ahlem, S. (2021). Perception of E-learning during the health crisis of COVID-19: case of algerian university teachers. J. Inf. Technol. Manag, 13(2), 154–172. https://doi.org/10.22059/JITM.2021.80360

Щербаченко В., Слюсаренко А.Д.

ПЕРСПЕКТИВИ ТА ВИКЛИКИ РОЗВИТКУ ОНЛАЙН-ОСВІТИ В УКРАЇНІ

У статті представлено результати дослідження перспектив та викликів розвитку онлайн-освіти в Україні. Метою дослідження є визначення перспектив розвитку сектора онлайн-освіти в Україні, а також виявлення обмежень, які впливають на вповільнення еволюції онлайн-освіти в Україні. Для досягнення поставленої мети необхідно реалізувати такі завдання: розглянути причини переходу до онлайн-навчання; проаналізувати останні дослідження, пов'язані з онлайн-освітою і в Україні, і за кордоном; визначити слабкі та сильні сторони онлайн-освіти в Україні; дослідити перспективи розвитку онлайн-освіти в Україні, а також виклики, із якими стикається українська система освіти сьогодні. Основними методами дослідження є: порівняльний аналіз наукових досліджень, спостереження та аналітичні методи, такі як аналіз статистичних і вторинних даних, наданих вітчизняними та зарубіжними дослідниками.

У ході дослідження були проаналізовані статистичні дані та літературні джерела, близькі до теми дослідження. Визначено сильні та слабкі сторони системи освіти України. Серед визначених актуальних загроз сьогодення найбільшу роль відіграє російське вторгнення в Україну та пов'язані з цим утрати. Було визначено, що дистанційна освіта характеризується трендовим напрямом у світі та набула популярності в останні роки через вимушену ізоляцію населення у зв'язку з пандемією Covid-19. Відзначено зростання кількості навчальних курсів на глобальних онлайн-платформах, таких як Coursera. Було визначено, що в Україні наразі немає оформленої сильної системи дистанційної освіти та усвідомленого спрямування на навчання впродовж життя. Та все ж Україна почала рухатися в цьому напрямі. Головним гальмівним фактором виступає воєнна ситуація в країні, яка спричиняє недофінансування та недостатню увагу до сектора освіти; також високий рівень ризиків для стейкхолдерів та загальна освітня криза в країні.

Ключові слова: онлайн-освіта, дистанційне навчання, пандемія Covid-19, система освіти, освітня криза, російське вторгнення

JEL Класифікація: I23, I26