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## ОСОБЛИВОСТІ ТРАНСФОРМАЦІЇ ВИЩОЇ ОСВІТИ В ПЕРІОД ПОСТПАНДЕМІЇ У ВИМІРІ ЄВРОПЕЙСЬКИХ ДОСЛІДЖЕНЬ

**Анотація.** У статті представлено аналітичний огляд наукових досліджень українських та європейських науковців із проблеми трансформації вищої освіти в період пандемії та після її завершення. Автори виокремили основні напрями досліджень, здійснили їх аналіз. Здійснений аналітичний огляд проблем трансформації вищої освіти в українському та європейському вимірах у період пандемії та постпандемії дають змогу виокремити такі основні напрями: увага українських дослідників зосереджена на моніторингу та визначенні викликів, бар'єрів, труднощів, що виникають в умовах пандемії та по її завершенню, а також частина досліджень – на соціально-емоційному стану студентів та викладачів; натомість європейці працюють над розв'язанням низки проблем: психологічні проблеми студентів та викладачів під час карантину; якості вищої освіти в умовах соціального дистанціювання; особливості організації освітнього процесу в умовах дистанційної освіти та вдосконалення форм налагодження взаємодії студентів та викладачів з метою забезпечення такого ж якісного освітнього процесу; проблеми діагностики позитивних та негативних наслідків пандемії та вимушеного соціального дистанціювання, спричиненого цією пандемією.

Основними викликами для українських закладів вищої освіти на початку пандемії стали: методична готовність викладачів до здійснення дистанційного навчання; для європейської університетської освіти це були такі: пошук удосконалення форм дистанційної освіти та забезпечення її якості. Здійснене дослідження дає можливість українським науковцям, що працюють над проблемами подолання викликів, пов'язаних із соціальним дистанціюванням та втратою соціально-емоційного аспекту освітнього процесу, вибудувати вектор подальших напрямів та механізмів оптимізації організації вищої освіти в період після пандемії з урахуванням уже здійснених у європейських країнах досліджень та досвіду, отриманого за результатами таких досліджень.

**Ключові слова:** вища освіта, трансформації, виклики та перспективи, наукові дослідження в Європі, постпандемічний період.

## PECULIARITIES OF THE HIGHER EDUCATION TRANSFORMATION IN THE PERIOD OF POSTPANDEMIC IN THE DIMENSION OF EUROPEAN RESEARCH

**Abstract.** The article presents an analytical review of scientific research of Ukrainian and European scientists on the problem of transformation of higher education during the pandemic period and after its completion. The authors identify the main areas of research, their analysis. The authors' analytical review of the transformation of higher education in the Ukrainian and European dimensions during the pandemic and post-pandemic will highlight the following main areas: Ukrainian researchers focus on monitoring and identifying challenges, barriers, difficulties arising in the pandemic and its completion, as well as part of the research on the socio-emotional state of students and teachers; instead, Europeans are working to solve problems such as: the psychological problems of students and teachers during quarantine; the quality of higher education in terms of social distancing; features of the organization of the educational process in terms of distance education and improving the forms of interaction between students and teachers in order to ensure the same quality educational process; problems of diagnosing the positive and negative consequences of a pandemic and the forced social distancing



caused by this pandemic. The main challenges for Ukrainian higher education institutions at the beginning of the pandemic were: methodological readiness of teachers to implement distance learning; for European university education, these were the search for improved forms of distance education and quality assurance. The study enables Ukrainian scientists working on overcoming challenges related to social distancing and loss of socio-emotional aspect of the educational process to build a vector of further ways and mechanisms to optimize the organization of higher education in the post-pandemic period, taking into account already implemented in European countries research and experience gained from the results of such research.

**Keywords:** higher education, transformations, challenges and prospects, research in Europe, post-pandemic period.

## INTRODUCTION

**The problem formulation.** Over the past three years, the higher education system has undergone forced transformations in its various structural components (network of institutions, mechanisms of functioning of universities and higher education institutions of different levels of accreditation, forms, methods and means of organizing the educational process, etc.). challenges facing the Ukrainian and global higher education system as a whole due to the spread of the coronavirus and the introduction of quarantine measures in each country. Enormous challenges that forced higher education to respond to quarantine restrictions and through social distancing to reformat into new forms of organization of the educational process in a forced mode.

**Analysis of recent research and publications.** Recently, works devoted to solving this problem have appeared in the psychological and pedagogical scientific literature (O. Anisimov, S. Bratchenko, V. Panok, V. Slobodchikov, V. Levy, Y. Schwab). Most of these authors focus on the study of mainly applied aspects of expert activity in the field of education, bypassing its theoretical foundations.

## AIM AND TASKS RESEARCH

**The purpose of the article** is to substantiate a special form of scientific and practical knowledge – humanitarian and psychological examination of education and determine the principles of its implementation.

## RESULTS OF THE RESEARCH

The Covid-19 pandemic has been going on for the second year in a row, which has significantly affected the educational process in Ukraine. In Ukraine, according to the practice of foreign countries, educational institutions were also temporarily closed, the 2019/2020 school year was completed remotely. Distance learning, new requirements for the educational process have become a challenge for the domestic education system. The pandemic affected the lifestyles of students, their families, teachers, caused far-reaching economic and social consequences, exacerbated a number of socio-economic issues, including: equal access to education (different levels of provision of families with distance learning and unequal access to quality Internet) ; provision of educational services to students with special educational needs (students with certain nosologies do not have the opportunity to receive educational services remotely); other socio-economic problems caused by the pandemic. The Government of Ukraine responded to the new challenges fairly quickly and adequately, and took the necessary measures to ensure the continuity of the educational process. During the period of long-term quarantine, digital resources and online resources for distance learning ( ) have become available on the Internet. Cedos analyzed the changes introduced by the government in the organization of the educational process during quarantine, as well as the recommendations of international organizations on distance learning. Attention was drawn to the problems and difficulties that arise with the health and safety of participants in the learning process. SEDOS experts analyzed the impact of the pandemic on the quality and accessibility of education.

An analysis of the decisions of the Government of Ukraine from September 2020 to May 2021, as well as the recommendations of the Ministry of Education and Science (MES) and the Ministry of Health (MOH) provided from September 2020 to July 2021 on distance and full-time education showed that In some higher education institutions, only a part of students went to study and studied full-time in the first two weeks of September, after which the study continued in a distance format. Provisions on the updated conditions for the organization of distance learning appeared only on October 16, 2020 - one and a half months after the start of training (Order of the Ministry of Education and Science of Ukraine, 2020). It should be noted that this provision has existed since 2013 and contained general recommendations on the organization, provision and technology of distance learning. The order of the Ministry of Education and Science (hereinafter - MES) from 8.09.2020 № 1115 added only some changes related to the organization of distance learning in various educational institutions, including vocational and technical (Some issues of distance learning, 2020). However, the provision did not contain any other significant changes. A letter with recommendations based on this provision was sent to general secondary education institutions only in early November (Letter from the Ministry of Education and Science of Ukraine, 2020). The government's decision of November 11, 2020 abolished the division into zones according to the epidemiological level and established that all educational institutions, except for preschool, general secondary, extracurricular and specialized art education, can be attended by only 20 people. Accordingly, the Ministry of Education and Science has provided recommendations for vocational, pre-professional and higher education institutions to conduct blended learning from November 16, provided no more than 20 people in one group (Letter from the Ministry of Education and Science of Ukraine, 2020). In the period since the beginning of the pandemic and later, research by Ukrainian researchers on the challenges posed by severe lockdown has intensified. The first monitoring studies were conducted by a group of authors led by N. Melnyk, O. Kovtun, I. Rogalska-Yablonska, S. Hryniuk, I. Postolenko (Melnyk, 2020), A. Yelinska (Yelinska, 2020), A. Oleshko Oleshko, 2020) and others. Peculiarities of forming the educational route of students in higher education institutions as a means of overcoming challenges in a pandemic were analyzed and presented by N. Melnyk (Melnyk,



2020). The researcher conducted a monitoring study and found that the construction of students' educational route in terms of forced distance learning of foreign languages is determined by both positive and negative features: on the one hand - the student's ability to flexibly plan their educational activities, distribute workload; on the other hand, the process of forcing is characterized by psychological tension, the need to respond quickly and flexibly to messages and information from the teacher (Melnik, 2020). In the scientific publication "Peculiarities of humanitarian disciplines high-school teaching staff adaptation to the work in the conditions of forced social distancing provoked by COVID-19 in Ukrainian universities" by N. Melnyk, O. Kovtun, I. Rogalska-Yablonska, S. Hryniuk presented a study of the state of adaptability of teachers to the forced introduction of distance learning in a hard lockdown introduced through Covid-19.

The study provides a multifaceted study of the difficulties which humanitarian disciplines high-school teaching staff faced and overcome in Ukrainian Universities to ensure the educational process in a wide distance format through the pandemic COVID-19. The results of the study allowed to determine: 1. Barriers to the accelerated introduction of distance learning in higher education in conditions of forced social distancing (psychological, socio-economic, pedagogical methods and approaches barrier (methodological), ICT and communicative, cultural and administrative barriers); 2. Features of adaptation of scientific and pedagogical employees of higher education institutions that teach foreign languages, as well as representatives of the administrative level and employees of distance education departments, etc. (these peculiarities are: forced introduction of the wide range of distant learning tools and platforms into the educational process, high-school teachers' speed mastery of different means of distant learning tools and resources, accommodation to provide classes on different distant learning video-tools etc.); 3. Positive strategies and practices of Ukrainian higher education institutions to optimize the management of rapid implementation of distance learning in the context of forced social distancing through the COVID-19 pandemic in administrative and individual contexts (creating of staff focus groups which manage the organization of distant learning, creation of staff group which help to organize the explanation procedure on effective management of educational process in different disciplines ect.); 4. Optimal (qualitative and effective) mechanisms for overcoming barriers and difficulties of accelerated introduction of distance learning in higher education institutions in different blocks (psychological, socio-economic, pedagogical methods and approaches barrier (methodological), ICT and communicative, cultural and administrative barriers). On the bases of the investigation results the group of authors proposed a set of guidelines and a series of trainings on optimizing the management of implementation of distance learning in the context of forced social distancing through the COVID-19 pandemic at different levels: individual, administrative and collective. It is planned to develop a roadmap for optimizing the management of distance and blended learning in higher education institutions in different blocks and discuss the problem of research on a broader scientific scale in the context of further action on higher education institutions in forced social distance through the COVID-19 pandemic.

The next stage of the research work initiated by N. Melnyk was to determine O. Kovtun of general and communication impacts of the covid-19 pandemic on higher education: global and ukrainian dimensions. The results of the study were proposals for minimizing the risks of communication barriers in emergency online teaching the teachers of the humanities should have a well-developed technical competence, be flexible in using communication strategies, get used to the thought that online communication differs from face- to-face communication and focus on informative, not emotional outcomes (Kovtun, 2020).

Next step in the investigative work was implemented and in the monograph issue "Challenges for scientific and pedagogical staff of higher education in Ukraine after the pandemic: identification and analysis of the problem." N. Melnyk's research identified challenges to the scientific and pedagogical staff of higher education institutions, the nature of which is the peculiarities of professional activities of teachers and challenges to the scientific and pedagogical staff of higher education institutions, the nature of which are features of students' educational activities, namely: Group 1 - motivation professional activity; reorientation of the organization of professional activity from remote to off-line format (adjustment to new time frames - time management (working from home the teacher did not have to spend time on the road); provision, because not in all domestic institutions of higher education 100% technical support, working "from home" the teacher could present a presentation, educational material on the topic, etc. without unnecessary obstacles); psychological aspects of returning to work offline (during the period of social distancing communicative aspects of communication have changed - the teacher did not work "on the audience", switching to a new mode of work will directly or indirectly affect the emotional state of teachers, provoking emotional stress, etc.); Group 2 - motivation of students (according to surveys of students presented in the article, their motivation for cognitive activity also decreased, which is explained not only by stress caused by forced social distancing, forced mastery of distance learning platforms, multi-vector instruction and speed of change, but also the fact that "staying at home" students had more time to prepare, and therefore it was possible to "postpone study" (according to an oral survey of students of Ukrainian higher education institutions), quite a long time, distance learning platforms (especially those that were not uploaded to the distance platform), teachers had to spend on mastering certain distance learning platforms - registration on platforms, development of electronic resources, etc. All this allowed students to perceive the first lockdown as a vacation. Although var then emphasize that this is not an absolute majority; organization of the learning regime, another challenge that will need to be overcome by scientific and pedagogical staff after quarantine (we connect this challenge with the fact that teachers will not only come up with new forms of high motivation of students to cognitive activity, but also completing tasks, preparing for couples and advice on the best ways to master the training material, etc.); provision of ICT audiences with funds, etc. (Melnik, 2021).

The research of A. Yelinska (Yelinska, 2020), A. Oleshko (Oleshko, 2020), S. Bondarenko (Bondarenko, 2020) also deserves attention. Thus, in the work of A. Yelinska, assumptions were made about the fact that in the period of Post-pandemic educational institutions may need to identify the challenges they may face and prepare for tough decisions



in the coming months. University leaders will need to reflect on your educational process to ensure that the results (Yelinska, 2020). In the study of A. Oleshko the main tendencies of distance learning in higher education in Ukraine and the world in the conditions of pandemic restrictions were determined. Emphasis is placed on the features of the use of telecommunications technologies, learning platforms and online courses that provide interactive interaction between teachers and students. Using the methods of questionnaires, the advantages and disadvantages of distance learning from the point of view of Ukrainian students are revealed, which is important in the formation of a student-centric model of higher education. The advantages of distance learning include a flexible learning schedule, the ability to combine work and study, the ability to master additional competencies, courses, hobbies and increase motivation for self-study. The disadvantages of distance learning during the pandemic are: technical problems, inability to access the Internet, the difficulty of learning the material yourself, low level of knowledge of teachers and students of information technology. It has been determined that scientific and pedagogical workers need additional protection during the pandemic. In particular, it is necessary to improve technical, economic, organizational and psychological working conditions, provide motivation for teachers, provide them with tangible and intangible incentives for high-quality professional activities and professional development in distance learning (Oleshko, 2020).

Ukraine also used international recommendations of UNESCO, international expert organizations on the organization of distance learning, foreign research and secondary data (Webinar: UNESCO; Annual Report 2019 - UNESCO; Learning cities: Drivers of inclusion and sustainability. 2020; Supporting teachers; QS. 2020). Among European studies, the group of scientists Thomas Farnell, Ana Skledar Matijević, Ninoslav Šukanec Schmidt made up an analytical report provides a synthesis of emerging evidence on what impact COVID-19 has on three specific aspects of higher education in Europe: teaching and learning; the social dimension of higher education (i.e. the effect on underrepresented, vulnerable and disadvantaged learners); and student mobility. Drawing upon 14 rapid-response surveys carried out in 2020 by university networks, student organizations and researchers, as well as over 50 journal articles, reports and publications, the analytical report synthesizes the emerging evidence and presents policy recommendations on actions to be taken at the level of higher education systems and by higher education institutions themselves (Farnell, 2020).

The aim of such authors as Romeo M., Yepes-Baldy M., Soria M.B. and Jayme M. was to analyze the extent to which the psychosocial aspects can characterize the affective states of the teachers, administrative staff, and undergraduate and postgraduate students during the quarantine. A questionnaire was answered by 1,328 people from the community of the Universitat de Barcelona (UB), Spain. The survey was partially designed ad hoc, collecting indicators related to sociodemographic variables, the impact of COVID on the subjects or in their personal context, the psychosocial context of coexistence and perceived social support, characteristics related to the physical context during the quarantine, and labor conditions. Additionally, it included two validated instruments: the Survey Work-Home Interaction–Nijmegen for Spanish Speaking Countries (SWING-SSC) validated in Spanish and PANAS, the Positive and Negative Affect Schedule. Classification and Regression Trees (CART) were performed to identify which variables better characterize the participants' level of positive and negative affective states. Results according to groups showed that students are the ones who have suffered the most as a result of this situation (temporary employment regulation, higher scores in negative work-home and home-work interaction, lower scores in positive home-work interaction, and negative effects of teleworking). Additionally, they reported a higher mean score in interpersonal conflict and worse scores with regard to negative affective states. Based on sex, women were the ones whose environment was shown to be more frequently affected by the pandemic and who exhibited more negative effects of teleworking. In general terms, participants with the highest scores in negative affective states were those who perceived an increase in conflict and a high negative effect from work spilling over into their personal lives. On the contrary, participants with the highest levels of positive affective states were those with medium to low levels of negative home-work interaction, over 42.5 years old, and with medium to high levels of positive work-home interaction. Our results aim to help higher education to reflect on the need to adapt to this new reality, since the institutions that keep pace with evolving trends will be able to better attract, retain, and engage all the members of the university community in the years ahead (Romeo, 2021).

The psychological aspect was also investigated in the issues of Zurlo, M. C, Cattnaeo Della Volta, M. F., and Vallone, F. (2020); Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C.S., et al. (2020); Odriozola-González, P., Planchuelo-Gomez, B., Irujo, M. J., and de Luis-García, R. (2020). Emotional aspects were studied by Tasso, A. F., Hisli Sahin, N., and San Roman, G. J. (2021) in the issue COVID-19 disruption on college students: academic and socioemotional implications. Sultana, M. S., Khan, A. H., Hossain, S., Ansar, A., Sikder, M. T., and Hasan, M. T. (2021) investigated the prevalence and predictors of post-traumatic stress symptoms and depressive symptoms among Bangladeshi students during COVID-19 mandatory home confinement: a nationwide cross-sectional survey. Closure of Universities due to coronavirus disease 2019 (COVID-19): Impact on education and mental health of students and academic staff was proved out by Sahu, P. (2020).

### **CONCLUSIONS AND PROSPECTS OF FURTHER RESEARCH**

An analytical review of the transformation of higher education in the Ukrainian and European dimensions during the pandemic and post-pandemic will highlight the following main areas: Ukrainian researchers focus on monitoring and identifying challenges, barriers, difficulties arising in the pandemic and its completion, and also part of the research on the socio-emotional state of students and teachers; instead, Europeans are working to solve problems such as: the psychological problems of students and teachers during quarantine; the quality of higher education in terms of social distancing; features of the organization of the educational process in terms of distance education and improving the forms of interaction between students and teachers in order to ensure the same quality educational process;



problems of diagnosing the positive and negative consequences of a pandemic and the forced social distancing caused by this pandemic.

The main challenges for Ukrainian higher education institutions at the beginning of the pandemic were: methodological readiness of teachers to implement distance learning; for European university education, these were the search for improved forms of distance education and quality assurance. At the present stage of overcoming the challenges to higher education in Ukraine, the attention of researchers is focused on predicting further problems related to the loss of motivation of students to educational activities, reducing the productivity of teachers in teaching; while the European on the forecast of the further picture of higher education, its development and transformation in the future, in the future for the next 5-10 years. The study enables Ukrainian scientists working on overcoming challenges related to social distancing and loss of socio-emotional aspect of the educational process to build a vector of further ways and mechanisms to optimize the organization of higher education in the post-pandemic period, taking into account already implemented in European countries research and experience gained from the results of such research.

It should be emphasized that the special mission of this study is also to prepare a methodological concept for forecasting the further development and transformation of higher education, forms the basis for the implementation of research-oriented principle, based on real practice and emerge from the demands of modern higher education. . Given the outlined, in today's conditions, the conducted analytical research requires further theoretical and methodological understanding and expansion, conducting empirical research, which is the prospect of further scientific research.

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