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## **E-LEARNING DURING THE COVID-19 PANDEMIC: A PRACTICAL ASPECT**

*The proposed article considers the relevance and feasibility of the transition of higher education institutions to e-learning during the COVID-19 pandemic, outlines the features and problems that arise in e-learning.*

*Keywords:* e-learning, online educational platform, synchronous learning, asynchronous learning.

**Background.** The World Health Organization recognized officially the spread of COVID-19 as a pandemic on March 11, 2020 [1]. It changed almost every sphere of society, including education, because strict quarantine measures accelerated introduction and development of e-learning. A significant problem for higher education institutions in Ukraine in this situation was the unpreparedness for the full transition to distance or blended learning.

An analysis of the domestic experience of using distance learning in higher education institutions as a separate form shows that only 9 of them offer the possibility of distance learning. At the same time, distance learning offered only in certain areas of study [2].

In Europe, distance learning is becoming more widespread. In particular, according to the study [3] of surveyed 241 higher education institutions, almost all began to use e-learning tools. At the same time, 91 %

of the surveyed institutions use blended learning, integrating e-learning into the regular teaching system, but it is important that 82 % of the surveyed institutions state that they offer distance learning courses. While almost all institutions are involved in some forms of e-learning, the level of penetration of online teaching varies considerably.

Scientists predict that by 2025 the number of distance learners could reach 650 million [4].

New challenges have signaled profound structural changes in higher education. A few years ago, at some point, it seemed that mass open online courses (MOOC), available to an unlimited number of students through the Internet, would form a new quality of education. However, it turned out that this is far from the case, a much smaller percentage of those who signed up for it finish the course [5]. So now, it depends on university teachers whether the situation with the pandemic will be able to mobilize us to create completely different content. Meanwhile, all educational process participants are adapting to new conditions and trying to anticipate or overcome difficulties that arise during distance learning.

There is no answer how long education will function in the current format. In addition, it is important to consider what future generations of students will expect from a higher education institution. After all, these people perceive the world from a different angle, because their lives consist of both standard and virtual reality. They want to get a specific specialty, have other aspirations, and want to be able to combine leisure and free time with a career [6]. Moreover, here there is another, natural, question: what can the university offer in this case?

**Analysis of resent research and publications.** The works of domestic scientists such as V. Shovkun [5], I. Batsurovska [7], N. Terenda, O. Terenda, M. Horishnyi, N. Panchyshyn [8] etc., are devoted to the development of distance education problem at preparation of students of certain specialties.

The main trends of e-learning in Ukrainian higher education in the context of pandemic constraints are highlighted in the works of A. Oleshko, A. Rovnyagin, V. Godz, V. Bakirov, M. Ogarkov, S. Bondarenko [9–11] and others.

The work of S. Brammer, T. Clark [12] examines the evidence of how COVID-19 can affect business schools in the short, medium and long term [12].

Study of the students learning experience through online teaching methods during the COVID-19 lockdown period is in the work of Mahiswaran Selvanathan, Nur Atikah Mohamed Hussin, Noor Alyani Nor Azazi [13]. The article of Shivangi Dhawan [14] includes importance of online learning and Strengths, Weaknesses, Opportunities, & Challenges (SWOC) analysis of e-learning modes in the time of COVID-19 crisis.

**Materials and methods.** Methods of analysis and synthesis of methodological aspects of e-learning, comparison, generalization and systematization of the researched material were used.

**Results.** Higher education institutions forced to resolve in a short time a number of pressing issues that aimed at maintaining quality assurance system of higher education with the implementation of quarantine restrictions. It is especially difficult in this task to maintain interest in learning from the students in the educational process, because they belong to Generation Z or "Digital Native" and electronic way of obtaining information has already become the norm.

Therefore, young people usually welcome the use of high technology in educational process, but also it makes additional demands, especially on the content of disciplines and the choice of tools for their implementation. The popularity of e-learning is due to the flexibility and availability of this technology.

A distance-learning laboratory has been operating in Kyiv National University of Trade and Economics (KNUTE) since 2005, later it has been reorganized into distance-learning support department, whose functional responsibilities include technical support of the corporate distance-learning platform.

Distance learning is a set of technologies that help to provide a certain amount of initial content and knowledge, interaction between teacher and students, giving them opportunity to search, analyze and structure the studied material. Distance learning performs informational, indicative, management functions, as well as the function of reinforcement and control [15].

University teachers used online educational platforms (Microsoft Teams, Google Classroom and Moodle), first in the form of webinars, which were somewhat monologue even before quarantine, and e-learning became an integral part of all educational programs in April 2020.

The use of a single platform for the whole institution is an appropriate method of the organization of educational process in universities during pandemic. There are many different software products for use in the educational environment, but access to most of them is on a paid basis (*table*) [16]. Thus, Moodle is one of the most functional programs, which is the basis of the corporate distance-learning platform.

*Table*

**Characteristics of the main software products of distance learning by functional purpose**

Criterion	Moodle	iSpring	Teachbase	WebTutor	GetCourse
Content creation	+	+	+	+	+
Ability to sell courses	+	-	+	-	+
Mobile learning	+	+	+	+	+
Possibility of conducting webinars	+	+	+	+	+
Possibility of location on the cloud	+	+	-	+	-
Free access	+	-	-	-	-
<b>Rating score</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>

KNUTE has introduced Moodle platform (modular object-oriented dynamic learning environment) common in the educational environment – a free learning management system that is constantly improved and supplemented with new tools and solutions [17].

The students access Moodle via the Internet so they do not depend on a specific place and time, and they can choose their own schedule of study material from any part of the globe (this fact should be taken into account, as foreign students also study at KNUTE). Moodle system is convenient not only for distance learning, but also for traditional classroom learning. Due to this, full transition to distance learning in a pandemic was not too painful. Thus, each teacher has the right to choose the tools of communication with students: GoogleClass, Docs and Drive, GoogleMeet, Dou, Zoom, Skype, Telegram, Viber and others. However, the main information about it (with active links) focused on Moodle platform. The system can create and store e-learning materials, set the sequence of their study, conduct video lectures and control activities.

At this stage, teachers are working to improve the forms and methods of modern educational technologies of distance learning with possibility of their further use during students training in the classroom. The main task for students is to achieve program-learning outcomes in educational programs, to obtain appropriate competencies. In addition, teachers' confidence comes here in the first place as their abilities will be enough to master and successfully apply all technologies. This should include the choice of Internet platform for classes, increased workload and technical problems. Training and methodological support of disciplines need particular attention, because distance education should be adapted to the respective application conditions, and be more elaborated and systematized.

Thus, quality of material retention by the students increases with the use of synchronous interaction with the teacher through video communication, chat classes. Teacher feedback from students is an indicator of learning quality of the educational program. Thus, lectures, practical tasks, seminars and laboratory classes are giving online.

In addition, you should pay attention to the asynchronous type of online learning, which eliminates direct contact of the students with the teacher. It is worth noting the high cost of creating educational content, as well as the lack of live communication between the students and the teachers.

Another problem of online teaching is teachers and students depersonalization. Teachers can always understand the student's personality with all its pros and cons, individuality, ability to absorb information, the level of his soft-skills and hard-skills. When learning online, students generally are perceived as one group (course), and this makes it difficult to assess both the level of knowledge and communication skills. Accordingly, it is difficult

for the teacher to understand how well the material is taking. During offline classes students ask questions, so the teacher can also focus on facial expressions, emotions, student behavior, but in most cases there is a presentation of material and strict control of written tasks in the framework of e-learning.

In addition, during April-May 2020, the State Service of Education Quality of Ukraine conducted an anonymous survey [18] of researchers and educators of higher education institutions of all types and forms of ownership, based on the need to clarify the situation related to the use of distance learning technologies in quarantine. This fully corresponds to the results of the survey of teachers (158 people) and students (1045 people) at KNUTE, conducted during February-March 2021.

The results of the analysis of the data obtained during these two studies indicate that the majority of respondents, both students and researchers, are satisfied with the introduction of distance learning technologies in higher education institutions. In particular, 70 % of students and 91 % of teaching staff, respectively, expressed their full and partial satisfaction with such forms of education [18].

The main problems of distance learning during this pandemic, according to students are lack of constant access to the Internet, the risk of biased assessment, insufficient self-organization of participants in the educational process, irregularity and variety of communication with the teacher, lack of equipment at home, lack of modern methods of submission educational materials (video, audio tools, presentations, etc.). In turn, according to the scientific and pedagogical staff, the main problems are the lack of "live" contact with students, insufficient technical support of the educational process, weak level of communication tools and telecommunications technologies, risks of academic dishonesty and lack of well-designed online courses.

The use of active and diverse methods of working with students, developed content adapted to remote perception, exclusion of passive presentation of material, use of multimedia technologies, special video effects, animation elements, etc., including in an integrated form, will help to solve such problems. The methods recommended for classroom work will come to the rescue. At the same time, the teacher (according to the survey of participants of the educational process KNUTE) is not just a source of information for students and controller, but also he is an equal partner, organizer and interlocutor, who will help find solutions.

An example is the organization of a seminar using case studies to encourage students to discuss and analyze the situation, model role situations, as well as decision-making, or a seminar-conference with speakers and experts. An important role is by testing, which can be widely used to control knowledge, including self-control, as well as increase the level of assimilation of the material, which requires specially prepared differentiated tests.

**Conclusion.** Thus, the e-learning format in the current pandemic conditions helps universities to continue their education and find new material, but at the same time, it became clear that no technology could replace the live communication of participants in the learning process. This format differs from traditional classroom teaching, requires mastery of modern computer technology and a conscious attitude to the choice of form and significant efforts to fill the educational content by the teacher and high self-organization by students, psychological adaptation. In any case, online forms of learning have become a global reality, so you should identify and analyze all its weaknesses in order to prevent them in the future, find new approaches to its use to motivate learning and personal development.

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*Притульська Н., Божко Т., Камінський С. E-learning в умовах пандемії: практичний аспект.*

**Постановка проблеми.** В усьому світі в умовах пандемії COVID-19 e-learning набуває дедалі більшого поширення. Відповіді, як довго освіта буде функціонувати в актуальному форматі, немає. До того ж майбутні покоління студентів сприймають світ під іншим кутом, оскільки їхнє життя складається і зі стандартної, і з віртуальної реальності. Тому актуальним є питання практичного аспекту організації освітнього процесу із застосуванням e-learning.

**Аналіз останніх досліджень і публікацій** показав, що тема e-learning в умовах пандемії COVID-19 є назрілою як серед вітчизняних науковців, так і дослідників з іноземних вишів.

**Мета статті** – розглянути практичні аспекти застосування e-learning в умовах пандемії COVID-19 на прикладі організації освітнього процесу в Київському національному торговельно-економічному університеті.

**Матеріали та методи.** У процесі дослідження використано методи аналізу та синтезу методологічних аспектів електронного навчання, порівняння, узагальнення та систематизації досліджуваного матеріалу.

**Результати дослідження.** Популярність e-learning серед сучасної молоді пояснюється гнучкістю та доступністю цієї технології, яка в свою чергу висуває додаткові вимоги, особливо щодо наповнення контенту дисциплін та вибору інструментів їх провадження. В запропонованій статті розглянуто питання актуальності та доцільності переходу закладів вищої освіти на e-learning в умовах пандемії COVID-19, окреслено особливості та проблеми, що виникають при електронному навчанні, а також варіанти їх вирішення на прикладі досвіду викладачів та фахівців відділу супроводу дистанційного навчання КНТЕУ.

Запропоновано виключити пасивне подання матеріалу, використовувати різноманітні активні методи роботи зі студентами, адаптований до дистанційного сприйняття контент, мультимедіатехнології, спеціальні відеоефекти, елементи анімації тощо, в тому числі в інтегрованій формі. Також стануть у нагоді методи, рекомендовані і для аудиторної роботи.

**Висновки.** Формат e-learning у сучасних умовах пандемії допомагає вишам продовжувати навчання та знаходити новий матеріал, але в той же час стало зрозумілим, що жодні технології не в змозі замінити живого спілкування учасників освітнього процесу. Такий формат відрізняється від традиційного аудиторного навчання, вимагає опанування сучасних комп'ютерних технологій й свідомого ставлення до вибору форми та значних зусиль щодо наповнення навчального контенту з боку викладача і високої самоорганізації з боку студентів, психологічної адаптації. Проте в будь-якому випадку, онлайн-форми за подібними форматами навчання стали глобальною реальністю, тому слід виявляти та аналізувати всі їхні недоліки з метою запобігання у майбутньому, знаходити нові підходи до їх використання для мотивування до навчання та розвитку особистості.

**Ключові слова:** e-learning, освітня онлайн-платформа, синхронне навчання, асинхронне навчання