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DOI <https://doi.org/10.32999/ksu2413-1865/2020-93-20>**NEW CHALLENGES FOR DISTANCE EDUCATION**

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The world has recently been divided by the pandemic, which has caused a number of medical, economic and political problems worldwide. In education, it has forced the education institutions to switch to distance learning. As a result, it has become, on the one hand, an incentive for the introduction of innovative technologies, and on the other – an indicator of its main shortcomings and problems. The paper outlines the main challenges and discrepancies caused the rapid distance education implementation brought to life by the unexpected introduction of global studying remotely.

The paper studies a concept of distance education in a range of scientific works in order to find its clear definition in the scientific literature and makes an effort to distinguish the key features of distance learning through the comparison of didactic principles used in traditional teaching with modern ideas of distance education. The educational subjects' interaction without direct communication with the teacher resulted in persuading the educational community in the inevitability of creating a specific didactic system suitable for new forms of learning. It is stated that the application of modern information technologies and successful teaching methods is not the only necessary condition for effective learning.

The analysis has been made of the main difficulties teachers and learners undergone in the process of changing to the remote way of teaching. A range of techniques for maintaining teacher-student interaction is regarded as a beneficial solution on condition of establishing clear rules for such communication. However, recent observations proved that the habit of foolhardy relying on technical devices in order to achieve ready-made answers have deteriorated the learners critical thinking, lessened creativeness and abilities to express their ideas clearly and correctly, which might even sometimes impede expressing thoughts both orally and in written form.

The paper emphasizes the importance of developing a national unified system of distance education for regulating the relationship between distance learning participants and coordination of theoretical, methodological and organizational support.

Key words: *distance education concept, distance learning, distance education, education through life, online learning, traditional educational system.*

НОВІ ВИКЛИКИ ДИСТАНЦІЙНОГО НАВЧАННЯ

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Нещодавно світ розділений пандемією, яка спричинила низку медичних, економічних і політичних проблем. В освіті це змусило навчальні заклади перейти на дистанційне навчання. Як результат, це стало, з одного боку, стимулом для впровадження інноваційних технологій, а з іншого – індикатором основних його проблем і недоліків. У статті розглядаються основні виклики та розбіжності, спричинені швидким упровадженням дистанційної освіти.

Аналізуються описані в низці наукових робіт концепції дистанційної освіти задля знаходження її чіткого визначення в науковій літературі та робиться спроба визначити ключові особливості дистанційного навчання шляхом порівняння дидактичних принципів, що використовуються в традиційному навчанні, із сучасними ідеями дистанційної освіти. Наголошується, що дистанційне викладання навчальних предметів без безпосереднього спілкування з викладачем переконало освітню спільноту в необхідності створення особливої дидактичної системи, придатної для нових дистанційних форм навчання.



чання. Зазначається, що застосування сучасних інформаційних технологій і методів навчання є недостатньою умовою його ефективності.

Також наведено перелік основних труднощів, які поставали перед викладачами та студентами в процесі переходу на дистанційний спосіб навчання. Наголошується на необхідності встановлення чітких правил спілкування задля успішної взаємодії між викладачем і студентами, зокрема у використанні електронної пошти, соціальних мереж і різноманітних месенджерів. Також розглядається низка негативних наслідків бездумного запровадження технічних засобів для навчання і спілкування, надмірне використання яких заради пошуку готових відповідей і рішень може призвести до погіршення критичного мислення студентів, завадити розвитку їхніх творчих здібностей і здатності чітко й правильно висловлювати свої думки та ідеї, навіть спричинити складнощі в спілкуванні як усній, так і в письмовій формі.

У результаті розгляду особливостей запровадження дистанційного навчання в час світової пандемії наголошується на важливості розробки єдиної національної системи дистанційної освіти для врегулювання взаємин між усіма суб'єктами дистанційного навчання та координації його теоретичного, методологічного й організаційного забезпечення.

Ключові слова: концепція дистанційної освіти, дистанційне навчання, дистанційна освіта, освіта протягом усього життя, онлайн-навчання, традиційна освітня система.

Introduction

In modern conditions of pandemics spreading around the country and the world, our society is undergoing a number of transformations in all spheres of our life. In order to prevent the spread of infection, the Ministry of Education recommended the educational establishments to change traditional form of teaching to distance one. The pandemic in the spring of 2020 has undoubtedly been a powerful driver for digitalization in education. All subjects of the educational process had to urgently get acquainted with distance learning techniques. Due to the fact that the crisis affected around 421 million students worldwide, it was necessary to determine the forms of distance education and the outline the main questions that were brought by unexpected introduction of global studying remotely (UNESCO, 2020).

1. Theoretical substantiation of the problem

The concept of distance education has not been clearly defined yet, but is widely used in the scientific literature. A number of authors define this concept as a specially organized, purposeful process of remote interaction between teachers and students, aimed at knowledge acquisition, skills and abilities development (Means and others, 2014), or as an systematic interaction between a teacher and students aimed at the set educational goals achievement (Head and others, 2002). The backbone of this concept contains a key idea of distance learning as a process and as an interaction, which should be regarded as a two-way activity.

Most of modern scientists agree with the definition of distance education either as a remote learning process, when the learner is separated by distance; or educational technology, which gives an opportunity for every person living in any place to study according to the program of any college or a university;

or a new form of studying based on the principle of independent learning (Head and others, 2002). However, most of scientists agreed on the idea of regarding the distance learning as a *process* and *interaction* between students and teachers.

2. Methodology and methods

In distance learning, the teaching methods and forms of interaction between the teacher and students differ significantly. It is necessary to identify the distinctive characteristics of this type of education. V. Kukharenko distinguishes the following features of distance learning: students receive ready-made materials in printed or digital form, the meetings between a teacher and a student are possible but not necessary, participants of the educational process can live in the same or different area, but training can take place in an asynchronous mode (time discrepancy), and, in our opinion, the most significant difference of distance learning is the interaction not only between learners and the teacher, but also an independent interaction between individuals and groups of learners as well as self-studying process supported by a specific didactic system and specially tailored materials (Kukharenko, 2018).

However, the analysis of papers devoted to the problem of distance learning has shown that a number of authors understand distance learning only as a learner's separation from the learning institution by distance (Milthorpe and others, 2018), which is definitely not enough for comprehensive contextualization of distance learning concept. The aim of this paper is to outline the main aspects of contextualization of new challenges and demands for distance education in modern conditions.

3. Results and discussions

The basic concepts in didactics are *learning* and *education*. Distance learning and distance education is a new phenomenon in pedagogy, and therefore it is important to



clarify the meaning of the concept of *learning* in conditions or remote studying as the way of teacher-student/students interaction.

It should be noted that traditional teaching is carried out taking into account a wide range of didactic principles such as consistency and systematic approach, learners' individual needs consideration, knowledge acquisition and upbringing etc. In distance teaching, it is necessary to consider the existing didactic experience for the educational process taking into account traditional principles as a basic core for goals setting and content selection.

However, it is not reasonable to accentuate the main emphasis on teaching aids and didactic principles only. The educational subject interacts with the object through the teaching aids, but does not work exclusively with the teaching aids. The subjects must select training aids that correspond with their educational needs. The teacher, for example, gives basic information that needs to be acquired, but she also provides a list of additional materials, since within the framework of modern educational process, the model of *education for life* has been reoriented to the model of *education through life*. The student definitely can refer to additional materials, which requires from the teacher to be able to navigate the network, to search for electronic texts and libraries, and to know how to use audio and video materials in teaching, whereas the student should be able to work independently. Moreover, the absence of direct contact with the teacher determines the appearance of special learning system, and results in creating a specific didactic system.

It should be mentioned that the effectiveness of teaching does not increase due to the fact that teaching employs modern information technologies. "It is quite obvious that the teaching aids are simply means for delivering knowledge to the student, but affects its acquisition no more than a truck delivering food affects products nutrition" (Milthorpe and others, 2018). The principle of delivery is not important and the emphasis should be made on the purposeful double-sided activities of the educational process participants. Learning should be regarded as a communicative process of interaction between subjects and objects of education by means of learning tools.

Distance learning is a part of general system of education, which is fully or partially carried out by means of computers and communication technologies. Distance education assumes the availability of certain means for data receiving and transmitting, and demands the development of unified protocols of its subjects' interaction, appropriate software

application, as well as an administrative group management (Milthorpe and others, 2018).

In conditions of the pandemic, the transition to distance learning suddenly became a reality, albeit a forced one. The transfer to online education has made significant changes in the working conditions of teachers, thereby exacerbating the changes in the content and amount of working hours, methods of rationing and labour control; which added to relatively low wages, etc. (UNESCO, 2020).

Most of teachers noted technical difficulties in switching to remote way of teaching. Among the main problems there was the necessity to sort out quickly new information about online educational platforms and make a choice of few suitable for educational purposes; insufficient knowledge of modern computing devices and lack or complete absence of a timely technical assistance from the educational institution; poor quality of internet connection, etc.

All these causes resulted in a range of psychological difficulties aggravated by the general condition of forced self-isolation, the flow of various information about the pandemic around the world, and concerns about their families' health and well-beings. Almost half of the teachers faced problems in organizing work from home. First of all, not all teachers' living conditions permitted to arrange a personal working space. Secondly, not everyone possesses an individual up-to-date computer and many teachers were forced to share their workplace with other family members. Thirdly, additional problems of from home arose from the presence of little children.

However, despite the devastating consequences of the pandemic, the current events should be viewed as an opportunity for the development of digital learning. After overcoming the crisis, education will no longer return to its traditional state, and this can be viewed as a step towards to a new technological reality. It will bring us to the development of new skills and professional techniques from both the teaching staff and university authorities. The level of digital skills and competencies will directly affect the quality of higher education. However the educational environment cannot be completely virtual since a person is a social being.

We have already mentioned the importance of information in the educational process. It is even more important to focus not only on the technical support of such exchange, but on the activities of the educational process participants. Both the learner and the teacher should process the acquired information. Moreover, it is also necessary to take into account the skills and abilities developed as



a result of such data exchange. For example, if the task is to read the text and complete the post-reading exercises, obviously, it is not appropriate to use video or audio materials.

After the last months of fast organization of distance learning, the teachers have faced a huge amount of problems that have significantly complicated their work. First of all it is difficult to observe students' activities even in the real classroom, saying nothing about any possibility of following them during online classes. Especially when everything becomes more complicated due to constant communication failures, and unstable Internet connection, the unsatisfactory quality of files with learning materials, or technical problems with computers. Moreover, the most of teachers suffer from overabundance of communication and necessity to be available 24/7.

Nowadays there is a range of opportunities for virtual communication such as social networks, different messengers, and more traditional emails. Difficulties have frequently arisen with any of those means of communication as both chats and email might quickly become overloaded with messages, which resulted in problematic navigation among the flow of messages and letters. The only solution for the teacher in such situation is to organize communication with students and establish clear rules for such communication. For example, to set the mandatory requirements for the format of letters with homework: what to write in the subject of the letter, how to structure its body, and to name the attached files, etc. It is obvious that we should not hope for full rules compliance, but it will be possible to lessen or even avoid uncontrolled communication chaos.

However, remote learning has a great number of benefits. It's well known what a great challenge for teachers might be to conduct video lessons in traditional classrooms. On the one hand, the advantages of remote learning technologies are obvious as it is favourable for creating a situation as close as possible to the real one and even record your own video lesson: along with watching a video students are able to establish eye contact with the teacher and receive a visual representation of what is happening. On the other hand, not many teachers can work live, or they may feel uncomfortable and not confident. They might get proper training, of course, but it takes some time and needs to be fitted in the busy teachers' schedule in the current extreme situation. An alternative to live broadcast is a preliminary recording of a video lesson, which could be available at any time, and the student can always review it and repeat the learned material.

For most teachers, the transition to distance learning did not come as a surprise. And if it were not for technical problems (instability of the Internet, the lack of computers for many students, which they tend to replace with a smartphone), the majority of teachers managed to build an efficient learning system in a new format, especially those who used the techniques of reverse mentoring, when the teacher provided an educational process and the student also help the teacher to adjust to the digital world.

Sooner or later, students and teachers will return to the classroom, and distance learning technologies will develop in normal conditions. In this regard, let us speculate about some of the obvious and less obvious consequences of digitalization. First of all the process of searching for information on the Internet facilitates the students' abilities to read fluently and quickly without going into the depth, which leads to the loss of the ability to perceive large texts. As a result, the ability to think, analyze, and process information decreases while students tend to focus on searching for ready-made answers. Digital technologies deprive student from their main activity – development of mental abilities and creativity. The analysis of students' individual works also indicated that screen addiction contributes to illiteracy and inability to express own ideas clearly and correctly. The habit of relying on a gadget everywhere and in every situation is formed now from early childhood, which causes its use even automatically and without any special need.

Students nowadays tend to prefer typing on the keyboard instead of handwriting. Meanwhile, without the developed writing skill, it is harder to formulate own thoughts. Students writing by hand usually possess better ideas as even before their pen touches the paper, they have to formulate a sentence in their mind. For computer typewriting students don't need to precise their thoughts beforehand, because everything can be changed and corrected any time. Therefore, a person who cannot write by hand would most likely not be able to formulate their thoughts and ideas correctly. Handwriting requires a higher level of abstract thinking.

Perhaps, in the future, the teacher might be excluded from the educational process. With the availability of readymade textbooks, students can stop communicating with each other, won't need to study in a group, and even to be physically present in some educational institution. But that will bring us to inability to develop communicative competencies and inability to work in a team. Technical devices and technologies are designed



to make people's life easier, whereas their excessive use can influence personal mental and physical health, especially in a young age.

The overall situation with digital educational environment forced teachers to give a new format to traditional professional skills and competencies and to adept methodological techniques and lecture material quickly, without testing it checking and correcting, beforehand. Most of the teaching staff had to work in front of the computer for more than six hours a day and as a result, extra hours for preparation of teaching material changed into endless working time. And these are by no means all the problems and difficulties faced by the teaching staff in the current conditions.

There is also an urgent need for creating and developing a unified system of distance education on the state level as a complex of educational services provided to every individual and based on a specially tailored information and technical means. It should be noted that at the national level, the process of development of a state distance learning system is rather slow, and distance learning remains without a legitimate regulatory support. In our country distance education legislation is still in the process of developing and coordination of main terminology and technology for distance learning application. As a result, participants in the distance learning process are left without theoretical, methodological and organizational support. This, in our opinion, is the main reason for the differentiating of the concepts of distance learning and distance education still being relevant (Distance learning regulations, 2020).

Conclusions

In conclusion it should be noted that the adjustment to new technologies takes time for developing a proper educational system and tools for remote or blended learning, we need incentives, and the most important, we need to train specialists who can teach a teacher to work in a new technological environment. Otherwise, at best, we can expect a more or less successful imitation of traditional teaching activities from a teacher suddenly forced to switch to online teaching and left alone. In this case, all discussions about any possibility of a professional development or teaching efficiency will be in vain.

The range of negative outcomes of distance education in current crisis has caused many negative judgements from the higher education teachers as they often believe that it is not efficient and destroys the traditional system of education. Meanwhile, distance education contributes to the appearance of a new system of education and attributes to its new quality. Among other things, it will contribute

to the creation of a unified system of education and does not reject the traditional learning; it will organically integrate various types and technologies of learning.

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