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## **DISTANCE EDUCATION IN V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY IN 2030, STUDENTS' VIEW**

**Abstract.** The article examines the prospects for the introduction of distance technologies in the educational process of higher educational institutions. The scientific works of leading scientists in the field of distance education were analyzed. The research is based on the use of the Delphi method. The theoretical foundations of the introduction of distance education in universities are considered. The main tendencies in the development of the educational sphere in the world and implementation of the elements of the remote education in it were studied. The special role of students as one of the main stakeholders in education is outlined. The main experts in this study are students as one of the main stakeholders in education. During the study, it became clear that the majority of students of Karazin University, namely 75% of them, are positive about the introduction of distance education. The article places the emphasis on defining the benefits and revealing the weaknesses of the distance form of education. It should be mentioned that some of the respondents believe that distance learning alienates people from society, adversely affects cultural development of a person, can lead to deterioration of communication skills, and reduce the level of social activity. However, the overwhelming majority is convinced that distance learning will in no way affect the socialization of people in society. In accordance with the results of the survey, a convenient study schedule was developed for students who combine work and study. A range of distance learning tools were reviewed in order to specify the most convenient ones as related to the principle of clarity when acquiring new knowledge. The main trends in the development of distance education at Karazin University in 2030 are highlighted.

**Keywords:** Forsite Research; Distance Education; Higher Education; student; digital technologies; information technologies

**Introduction.** Recently, distance education has become increasingly popular due to a much higher level of information, mobility, and efficiency in use. It also has many more advantages compared to other forms of learning, as it enhances the intellectual potential of educators through self-discipline. Furthermore, it is more flexible, because each student is provided with individual learning process that is consistent with the choice of the convenient time, place, form, and pace of study. The identification of key future innovations in socio-humanitarian field is based on the European Commission survey on disruptive innovations in the EU, based on scanning (a broad automated review of the latest scientific and technical literature filtered through the panels of experts in conjunction with reviews of the important recent foresight projects around the world) of radical innovation breakthroughs (RIBs). In addition, it constitutes a part of the preparation for Horizon Europe implementation. These innovations are aligned with Sustainable Development Goals (100 Radical Innovation, 2019).

At the current stage, Life Long Learning (LLL) (including secondary education which implements new forms of education and lifelong learning concepts into life) reflects a huge diversification of educational providers, programs (applications), and learning partnerships. At the institutional level, the structures, where people acquire new knowledge, are changing, and new providers of knowledge are emerging. Another major change consists in an interdisciplinary way of teaching. More and more Massive Open Online Courses (MOOCs) are becoming available, offering a wide range of courses and certifications. The provision of formal training is complemented by new business forms. However, in this case, the question arises on how to name new degrees, define the meaning and value of the certificates, and safeguard the quality of education. (EPSC, 2017)

Let us consider in more detail the main trends in the development of the educational sphere in the world and implementation of the elements of the remote education into it (Futures for Higher Education and ICT, 2016).

*An increasing number of new educational providers.* The number of people offering new platforms or new training and learning methods has grown exponentially (from the supply side, new institutions); it is no longer limited to formal educational institutions. More than 800 universities are already offering lectures from app stores, providing an opportunity to learn anything at any time and from anywhere using your smartphone or tablet. Digital technologies are the catalyst for the personalization of education, and they make it an even more active and flexible learning experience. The P2P platforms allow people from different parts of the country and the world to get involved and to learn from one another (EPSC, 2017)

*A transition to digital information: a corporate training for work or promotion.* More and more technology and software companies are creating platforms for practical training sessions. Individuals or companies can use them to gain new valuable digital and other skills, receiving certification, which is recognized worldwide. A German multinational software company, SAP, has provided training through corporate MOOCs, that offer flexible and interactive courses on topics from procurement to data collection, data management, and analysis. Its learning center provides educational content to support electronic self-learning as well as access to the students' community through online sessions led by the experts and shared social learning rooms. The added benefit of these practical training sessions is that they offer certification programs in accordance with the specialization and levels of skills that are globally recognized by all SAP partners and clients (EPSC, 2017).

*An increasing diversity of participants and forms of learning.* The growing diversity of educational service providers opens up many new opportunities for learning and retraining at different points of one's life. New educational solutions can also help to reach individuals who would otherwise be excluded. New forms of partnership between participants in education, as well as between public and private actors, are updating curricula, experimenting with new transitions between disciplines, and are already affecting employment (EPSC, 2017).

The change in the paradigm of education in Ukraine in the past ten years has led to an increase in the role of the student community as one of the main groups of stakeholders in higher education. An increase in the role of student associations and taking into account their views on the strategic and tactical decisions aimed at reforming education institutions and their programs. Proper planning of future activities helps to improve the possible result in the future. In the context of these provisions, it is important to conduct research aimed at attracting students as full participants in planning the future activities of universities in its various areas. Foresight research with a planning horizon of 5 to 10 years can become one of such activities. Attracting students as experts in the field of education planning and reform will help to consider the future risks associated with the transformation of the educational

process and will show the connection between the vision of the student community and the future implementation of university development strategies.

**Analysis of recent research and publications.** Various aspects related to the foresight research are considered in the writings of many scholars. For instance, the problems of interdisciplinary in the foresight design are highlighted in the works (Zweck, Braun, & Rijkers-Defrasne, 2014; Martin, 1995). The problems related to the use of the open educational environment and distance learning are covered by (Bykov & Shyshkina, 2018; Hamid & Yip, 2019; Moore, Dickson-Deane & Galyen, 2011; Sánchez-Elvira Paniagua & Simpson, 2018; Opanasiuk, 2016; Ouaddah, Elkalam & Ouahman, 2017). The development of distance learning and its prospects on the example of the foresight study are outlined in a plenty of scientific works (2018 Distance Education, 2018; Futures for Higher Education and ICT, 2016; Laaroussi et al., 2017). The use of the Delphi method in foresight studies and their results are explored by (Aichholzer, 2009) and other scholars.

**Unresolved aspects of the problem.** In spite of a considerable number of scientific works concerning the distance form of learning and a wide variety of online platforms being developed, the matter of implementation of the distance education has not been fully explored.

**Purpose of the study.** The relevance of our research lies in the fact that the model of distance education in Ukraine is now gaining ground and is being refined with the rapid development of digital technologies.

In the course of this study, a number of tasks were put forward:

1) *to demonstrate some features of the current system of distance education in Ukraine;*

2) *to present some features of implementation of distance learning abroad for comparison;*

3) *to put forward certain ways of dealing with the existing problems related to the introduction of distance learning;*

4) *to formulate recommendations as for the development of the distance education by 2030 on the example of Karazin University.*

**Methods.** The main methods used in this study include interviewing, questionnaire, comparative analysis, and the Delphi method. Given that the Delphi method is a method of peer review, its main features are anonymity, multilayeredness, and face-to-face discussion. The basic premise is the idea that if one properly summarizes and processes individual assessments of experts concerning a particular situation, it is possible to get a general opinion that will have the maximum degree of reliability and credibility. The sense of the method is to find a way to come up with the right solution via a set of specific actions, such as brainstorming, interviews, and questionnaires. The core of the method is that a group of independent experts can much better evaluate and predict the outcome than a structured group of people. Considering the fact that independent experts may not even know about each other, it is possible to exclude the clash of different opinions, as well as the collective influence caused by teamwork and conformism. In addition, the method can be implemented anywhere, regardless of the participants' location.

The study was conducted in the context of the "Development Strategy of Karazin University for 2019-2025" as possible recommendations for the development of one of the most important areas of future educational activities - distance learning. According to the development plan of Karazin University in previous years, the next strategy will be from 2025 to 2030 and we hope that the research results will be considered.

The respondents (108) of this study are students (bachelors) from Karazin University. The survey was conducted anonymously on the basis of democracy and voluntary participation.

The primary survey consisted of the following questions:

*Your faculty?*

*Course?*

*Occupation?*

*Do you think distance learning is effective?*

*What means of modernization of distance learning is a priority for you?*

*What means of distance learning do you consider the most convenient for use?*

*What is the biggest benefit of distance learning?*

*Which of the following forms of training is most appropriate?*

*Would you choose distance learning if there is such an opportunity?*

*Do you think that the availability and the ability to independently plan the time, place and duration of classes will contribute to the interest in obtaining higher education?*

*What are the main disadvantages of distance learning?*

*What trends in distance learning do you see as those that can be implemented in the future?*

*What elements of today's distance learning be important in the future?*

There are two groups of people involved in the Delphi method:

*the first group* – the experts who present their point of view on the problem under study. The first group consisted of students (bachelors) who took part in a survey related to the development of the distance education system at Karazin University. These included student activists from various faculties who volunteered to participate in the study.

*the second group* – the analysts who bring the opinions of experts to a common denominator.

The second group consisted of students-analytics, who formulated future trends in the development of distance education at Karazin University based on the survey and open data. The group of analysts consisted of 10 students of the School of Foreign Languages, who summarized the received materials and formed recommendations. It is also important to note that the research working group included 3rd year students of School of Foreign Languages and a number of teachers (facilitators).

The study had its own algorithm in accordance with the Delphi method (Bhuasiri Wannasiri et al., 2012; Blind, 2008; Dalkey & et al., 1963; Okoli & Pawlowski, 2004; von der Gracht, 2012):

1. To form a working group to gather and summarize the opinions of experts.
2. To form an expert group of specialists who have sufficient knowledge on the topic being discussed.
3. To prepare a questionnaire, indicating the problem posed in it, and clarifying questions. The formulation must be clear and unambiguously interpreted to avoid controversial answers.
4. To interview the experts in accordance with the methodology, which requires repetition of the procedure if necessary. The answers received serve as the basis for formulating the questions for the next stage.
5. To summarize the expert conclusions and issue recommendations on the problem put forward.

In the context of these issues and the study, we highlight that in this research we consider the students as the experts because they act as stakeholders in the educational process and are directly interested in improving educational services and improving the interaction between the subjects of educational activity when using the distance learning technologies.

**Presenting main material.** Nowadays, distance learning is undoubtedly attracting more and more attention due to its convenience and numerous advantages. Every year in Ukraine, the number of HEIs introducing distance learning is increasing, and the number of students who opt for this form of education is also growing.

The vast majority of those who opt for distance learning intend to retrain or receive a second higher education. This form of obtaining new knowledge is optimal for them.

In order to apply for a distance education in Ukraine, you are to undergo the same procedure that is presupposed when enrolling in the full-time or part-time education. An applicant must pass the EIT, a master – provide the bachelor's degree; those who wish to get a second higher education must be interviewed.

The term of study is the same as on a full-time or part-time basis, that is 4.5 years for a bachelor, 1.5 years for a master's degree. The cost of education is usually two or three times cheaper than on a full-time and part-time basis.

If we consider the education system in modern conditions, then it cannot be imagined without the harmonious combination of distance and traditional education.

Such a connection is especially important in the context of the massive introduction of digital technologies and digital educational resources, also an important feature of the connection of distance and traditional education, is their adaptability to new challenges and shocks that can occur in the learning process: war, disasters, all kinds of restrictions on movement and so on.

Recently, there have been significant advances in the Ukrainian education system in terms of the introduction of distance technologies and their combinations with traditional forms of education.

Distance education is offered in Ukraine by various HEIs, and we have identified the most effective ones:

Lviv Polytechnic National University (<https://lpnu.ua/idn>): the Distance Learning Institute provides the applicants with an opportunity to obtain the Bachelor's degree on 15 specialties, including the Humanities, the Social Sciences, the Mathematics and others.

National Academy for Public Administration under the President of Ukraine (<http://academy.gov.ua/?lang=eng&tip=dop&tipn=Page&page=32>): the system of video conferences provides for video-links with 16 European countries;

Ukrainian-American Concordia University (<https://www.concordia.edu.ua/distance-learning-center/>), the University allows for the distance education on undergraduate (International Economic Relations and Management) and graduate (Business Administration and Management) levels;

Sumy State University (<https://dl.sumdu.edu.ua/en/>): the University has 15 years of experience in the field of distance education and grants a Public Diploma.

Khmelnytskyi National University (<https://de.khnu.km.ua/p.aspx?l=2>): the distance education is 4 times less than the price of the daytime separation. It also provides a Public Diploma.

Distance learning services in the listed HEIs are mainly aimed either at individual educational programs with a combination of distance learning and traditional control, or aimed at individual subjects. It is important to note that today there are no universities in Ukraine that represent distance learning as their main form of education.

However, it should be noted that Ukrainian HEIs are introducing distance learning without much enthusiasm. It can be explained by the fact that in Ukraine the process of implementation of this form of education is significantly complicated due to the lack of financial, technical, and human resources. Therefore, it becomes clear that in our country, the distance form of education is today going through the formative stage, but it is a promising form of education. Moreover, we are confident that addressing problems mentioned above

will help the distance form of learning in Ukraine to reach a competitive level (Romanovskiy et al., 2019).

Also significant is the fact that we can see an increase in audiences of Ukrainian online platforms. This indicates that people in Ukraine seek to develop and improve their knowledge. Therefore, there will be an increase in demand for distance education.

It should be noted that distance learning is very popular and is now practiced in many countries around the world. The development of information technologies in the 21st century allows getting education abroad, even without leaving a home country (2018 Distance Education, 2018).

Distance education is developing most rapidly in the USA. A typical example of distance learning organization is the University of Akron, which has video and audio content, documents sharing and so on. Within the framework of the Massachusetts Institute of Technology (MIT), free distance education is available in sixty disciplines, including chemistry, engineering, history, mathematics, and management. After completing one course, a student can obtain a certificate from MIT by passing the exam, and if he or she finishes the entire course of disciplines on the chosen specialty – a diploma. Today, about 1 million students are studying at the US universities remotely (<https://www.mitsde.com/>). Distance learning is equally popular in Europe. For example, at the Open University in Hagen (Germany) you can get a higher education distantly, upgrade your skills and even get a Ph.D. In Finland, Distance Learning Centers, and Summer Universities are very popular. The National University of Distance Education (Universidad Nacional de Educación a Distancia) in Spain uses face-to-face meetings to discuss educational material at training centers and online conferences in order to maintain an ongoing dialogue with students (<https://www.uned.es/universidad/inicio.html>). The UK universities are practicing postgraduate degree programs using distance learning methods. The largest of them is The Open University, which is, by the way, the first university of distance learning in the world. About 150,000 students study there at the same time. The effectiveness of the distance learning methods is evidenced by the high level of training of the graduates from the Open University, which is actually one of the most prestigious universities in the world (<http://www.open.ac.uk/>).

The modern development of distance education can be viewed on the basis of the three key areas: 1) Massive Open Online Course (MOOC); 2) distance learning in higher education institutions, except or in combination with traditional forms; 3) distance universities.

In accordance with the results of 2018, the world's most popular online education providers are Coursera (37 million students), edX (18 million students), XuetangX (14 million students), Udacity (10 million students), FutureLearn (8.7 million students) (Dhawal, 2018).

According to the results of analytical reviews (Dhawal, 2018), the current trends of using the MOOCs are:

Providers' collaboration with the leading universities around the world, such as MIT (198 developed providers-offered courses), Stanford University (178 courses), University of Michigan (167 courses), Harvard University (153 courses), etc., in total more than 900 universities around the world. In 2018, about 2,000 new courses were added by the universities, compared to 2,500 in 2017, Coursera has more than 3,100 active courses, EdX – 2,200, FutureLearn – about 1,000; a gradual decrease in the number of new students, together with a greater rate of growth in the number of courses lead to the reduction in the number of its users. In 2018, 20 million new students enrolled in, at least, one course, compared to 23 million in 2017;

Improvement of online courses as for their convenience and flexibility. In recent years, there has been a tendency to divide 12-, 10-week courses into several (4 weeks each one), as it is easier for students to plan their studies in a shorter time. An important trend is to increase

the number of self-administered training courses that do not have a rigid start and end time, allowing students to learn at their own pace;

Increasing opportunities for bachelor's and master's degrees. In 2018, the number of educational degrees (involving the universities of England, Australia, the USA, as well as one of the Ivy League universities – the University Pennsylvania), which can be obtained through online education providers, increased to 47 compared to 15 in 2017;

Monetization and profit orientation is one of the most important trends in MOOC. According to Forbes, Coursera's expected proceeds in 2018 equal 140 million dollars, Udacity's revenue in 2018 rose up to 25% and is about 90 million dollars compared to 70 million dollars in 2017, FutureLearn had a profit of 8.2 million pounds by the end of July 2018. Income orientation is increasing: if the first MOOCs were free, now there are some paid courses. In addition, as the total number of new students decreases, the number of students ordering paid services increases, and providers expand their opportunities to obtain funds.

Massive Open Online Course in Ukrainian universities has not yet achieved international recognition, so on the MOOC-list website (<https://www.mooc-list.com>), at the request “MOOC from Ukraine”, finds only course “Introduction to programming with dependent types in Scala (Stepik)” this is a course provided by Taras Shevchenko National University of Kyiv. Although, for example, at the request “MOOC from France”, we can find dozens of courses from different universities from France. Based on this we can conclude that the MOOC system in Ukrainian higher education system passes through the stage of certification courses for its users around the world. Based on the research by V. Kukharenko (Kukharenko, 2013), we can see that MOOCs in Ukrainian universities are mainly used in the local segment of university education (developer university + several other universities).

Therefore, the development of the world distance education market is quite active. It is facilitated by the direct increase in the demand for educational services and, of course, by the development of information technologies and the growth of the Internet audience. We are sure that, building on the experience of foreign HEIs, the universities in Ukraine will be able to improve the model of distance education.

Considering the current state of implementation of distance education technologies in the educational process of Karazin University, we cannot omit to mention the underdevelopment of these technologies. For example, in 2015 via the Institute of Postgraduate Education and Part-Time (Distance) Learning (<https://dist.karazin.ua/>), a remote system of conducting rectorial tests was introduced in 2015 at V.N. Karazin Kharkiv National University. To determine the effectiveness of this type of control, we conducted a survey among students and teachers (10 teachers, 30 students) of some Schools including: School of International Economic Relations and Travel Business, School of Foreign Languages, School of Sociology, School of Ecology, School of Economics, School of Physics and School of Medicine. The respondents were given the following questions:

*Is the knowledge monitoring in a form of rectorial control practiced within your School?*

*What format does the work have?*

*Do you consider the test form to be convenient?*

*What difficulties did you encounter while completing the work?*

*What improvements would you suggest regarding the form of the work?*

It is important to note that this was a pilot survey with a small number of respondents (many potential participants refused to take the survey for unclear reasons). Further surveys with a sample of more than 300 participants showed that the main results of the study are fully confirmed.

According to the survey results, we can affirm with certainty that the introduced system of knowledge monitoring has both advantages and disadvantages, so let us address the issue in more detail.

First, it should be stressed that the system of automatic response processing greatly facilitates and accelerates the review process, which results in educators' time savings. Second, the test form, due to the opinion of the majority of the students surveyed, is one of the most convenient and easy types of work. For its part, the relative ease of the tasks makes it possible to include more materials in one test.

However, this system also has some deficiencies. For example, students of the School of International Economic Relations and Travel Business mentioned the problem they had faced during the test – loss of Internet connection. Thus, they were forced to log in with their own phones, and as a result, the time for completing the test was significantly reduced, and some students failed to accomplish the task due to lack of mobile traffic. It should be emphasized that students are given only one attempt to complete the test work, and the time is clearly regulated (40-45 minutes) and provides for the automatic completion of the test. At the same time, the students of the Sociology, Ecology, and Economics Schools claimed not to have met any difficulties in completing the tasks, so they hold the contrary view regarding the rectorial control works.

It would also be important to add that students of the School of Physics consider this form of knowledge assessment to be inappropriate as they are given multiple-choice answers for the tasks they have to solve in writing on the separate sheets of paper, and it is not considered in the assessment process. Therefore, if needed, the educator will not be able to explain to the students what mistakes they made while solving the problems, and the students, in turn, will not score extra points even if the task is completed correctly with an insignificant mistake in the final calculation.

Students of the School of Foreign Languages acknowledged to have encountered a number of difficulties during the rectorial control because the specificity of the work format is not taken into account, as it requires translation of the text in contrast to the standard multiple-choice tasks. Firstly, low level of technical base is one of the causes of typographical errors in the students' works. In particular, there are problems with the information input means (some keys on the keyboard do not always work). Moreover, the lack of technical support is also an important issue to be solved, as there are not enough computers to provide students with. Secondly, typing speed is an important factor in the quality of electronic form of translation. Many students lack typing practice, which makes the work more difficult because, as mentioned earlier, time is limited. Thirdly, teachers have noted that it is difficult to grade translation papers in the provided format. Difficulties arise in marking syntax errors: it is impossible to correct the wrong word order in a sentence. However, on the other hand, the distance learning format simplifies the process of grading translation papers, as a printed text is easier to read than a handwritten one.

It is important to note that at the School of Medicine, unlike others, rectorial control is conducted not in electronic, but in written form.

Therefore, we can conclude that the distance format of rectorial control is quite convenient and innovative, but it is necessary to consider the types of tasks that students of different schools are given, as well as provide the university with the necessary material and technical equipment.

**Findings.** In the course of our research, we carried out a survey among students of Karazin Kharkiv National University to establish the main implementation strategies and prospects for the development of distance learning. We would like to emphasize that the survey received responses from students of different courses (the total number is 108 persons) of all the Schools of Karazin University.



We note that not only the academic personnel, but also students were selected as experts in foresight studies, that is, those entities that can be attributed to potential consumers of educational services within the distance learning. The possibility of university students participating as experts on the problems of functioning of the higher education system is noted by V. Babaev and V. Sadkovyj (Moroz et. al., 2018). We support the viewpoint of scientists, and we would like to draw attention to the fact that the Standards and Recommendations on quality assurance in the European Higher Education Area adopted on May 14-15, 2015 based on the results of the Ministerial Conference in Yerevan, identify students as one of the main stakeholders in the process of ensuring the quality of university education. Therefore, the survey organizers' restriction of the circle of respondents to higher education recipients is quite justified, and it ensures the achievement of the survey purpose (Romanovski et al., 2019).

The study found out that 75% of those surveyed consider distance learning to be effective and 36.1% believe that this form of education is the most appropriate. The overwhelming majority of students (55.6%) prefer full-time education, but it should be noted that the part-time form is hardly in demand (8.3%)

Moreover, more than half of the respondents indicated that they would inevitably choose distance learning if available (Fig. 1).

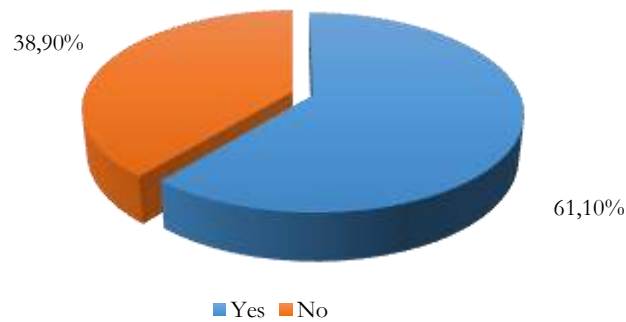


Fig. 1. Distance learning preference

According to the results of the survey (Fig. 2), the main advantage of distance learning is the reduction of study time (44.4%).

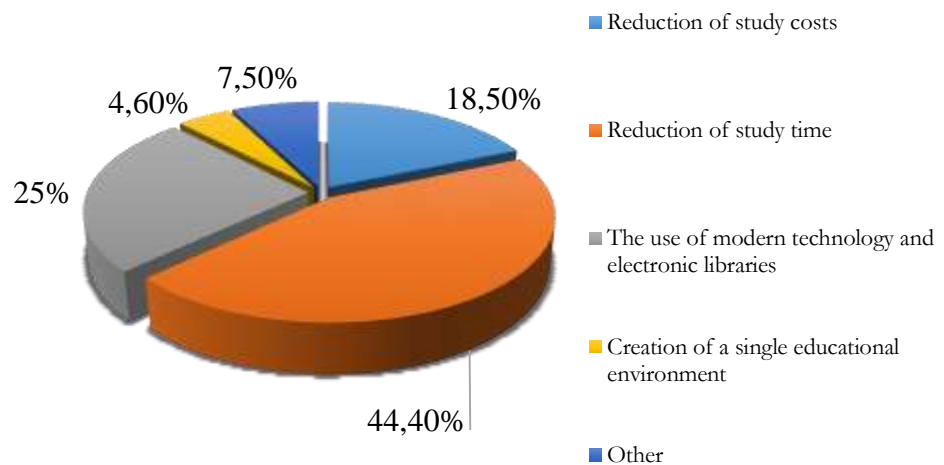


Fig. 2. Advantages of distance learning

Indeed, students have the opportunity to combine studies with work and other activities, which encourages many to choose the distant form of learning. 25% of respondents believe that the use of modern technology and electronic libraries will improve the quality of learning because it will provide access to educational materials that the student can use at a convenient time. In addition, 18.5% prefer the reduction of study costs, and 4.6% of respondents consider it effective to create a single educational environment. It should be mentioned that some students also noted such benefits of distance learning as being able to study certain topics more thoroughly with the use of additional materials, more favorable learning conditions. Many respondents emphasized that, given that distance learning is much cheaper, many more people will be able to afford higher education.

One of the main advantages of distance learning is the ability to plan the day by yourself. The flexibility of the schedule provides an opportunity to get education at a convenient time and in a convenient place. Taking into account that each student's biological hours may differ, distance learning provides the student with the opportunity to study in the most productive hours of his or her workday.

Planning skills are urgently needed in order to succeed when studying within the distance learning program. Although the schedule may vary, it is important to follow the learning plan to discipline yourself in completing the necessary tasks.

Distance learning allows the student to combine education with work and other various activities. You do not need to cancel the planned trip to your relatives because of the need to take a test on a particular day. It is not a problem to attend a concert or an exhibition as the schedule is adjusted to your individual interests (Table 1; Table 1.1.).

Provided that the distance form of education will have been fully implemented in Karazin Kharkiv National University by 2030, we elaborated a recommended model of a schedule for its future students who would combine both distance education and work.

If a student has a job that takes time from 11 am to 5 pm, their schedule can look like this:

Table 1.  
An indicative daily schedule for distance-learning students

<b>Day/ time</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
9 a.m. – 10 a.m.	Lecture	Online seminar	Teleconference	Chat session	Online class
11 a.m. – 5 p.m.	Work	Work	Work	Work	Work
6 p.m. – 7 p.m.	Written work	Attending exhibitions	Chat session	Family hour	Hobby
8 p.m. – 9 p.m.	Chat session	Completing tasks	Family hour	Meeting friends	Teleconference
9 p.m. – 10 p.m.	Reading scientific literature	Lecture	Online seminar	Group chat session	Reading scientific literature

Table 1.1.

An indicative daily schedule for distance-learning students

Day/time	Saturday	Sunday
11 a.m. – 3 p.m.	Various forms of studying	Various forms of studying
3 p.m. – 6 p.m.	Break time/hobby	Break time/hobby
6 p.m. – 8 p.m.	Completing tasks	Completing tasks
8 p.m.	Free time/ various forms of studying	Free time/various forms of studying

We would also like to highlight the process of passing the exams and obtaining a diploma after graduating from distance learning course. Like the entire learning process, the exam session can take place remotely. Examination in the form of test work or video interview is considered appropriate. However, a student has the opportunity to come to the school and take exams there.

Upon graduation, a student receives a diploma of the state sample, which is no different from a diploma obtained by studying in other forms.

Also, within the framework of the distance learning the opportunity to take additional courses offered by Karazin University will be given. It is not necessary to be a student of the university to participate. After completing the courses, the applicant receives a state certificate.

In the course of the survey, it was found that 69.4% of students consider video lectures to be the most convenient means of distance learning; 54.6% prefer web-based studies (Figure 3). We believe that this priority is due to the importance of the principle of clarity when acquiring new knowledge. Almost a third of respondents (35.2% and 34.3% respectively) preferred electronic libraries because of the ability to independently process new information and chat sessions for communication and discussion purposes. The smallest number of students voted for teleconferences (25%) and e-mail (25.9%).

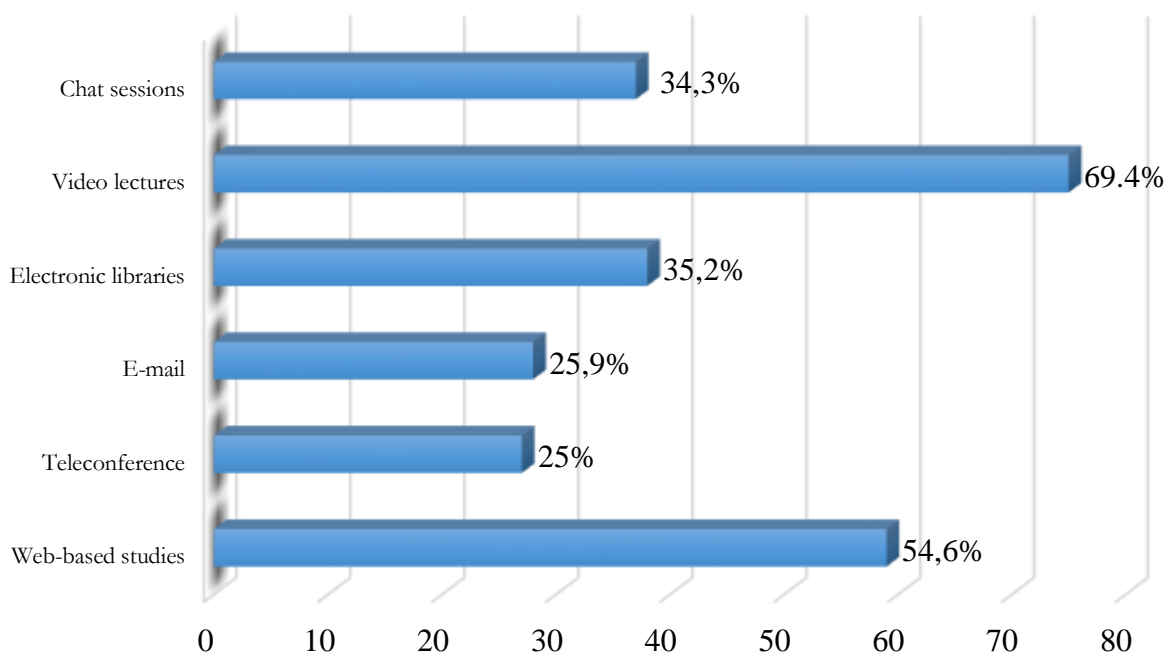


Fig. 3. Tools of distance learning

Distance learning is closely related to new information resources and to the World Wide Web as a whole. There are four main ways to upgrade distance learning with the latest technologies. In the future, they may be used actively in distance learning.

Firstly, we can use social networks to connect with teachers. This is a very convenient, fast and reliable way to deal with organizational issues. Secondly, the video conferences can be used to evaluate the gained knowledge. This form of assessment has many advantages. The most important thing is to save time because, for example, an oral examination implies the need for a student to attend the university. Nevertheless, with such applications as WhatsApp, Viber, Skype or Zoom it can be done much faster.

However, there is a drawback. The educators cannot fully guarantee the objective assessment of the student's level of knowledge because they do not see what is happening around the student.

Thirdly, a significant improvement can be achieved with the new form of presentation of the material through the recording of lectures. It is gaining popularity on the YouTube platform as well-known teachers record their video lectures. Using this method, the information is easy to perceive and is more interesting than conventional reading of non-fiction.

The fourth way is to create a system of faster evaluation of students' papers on the basis of electronic devices. There is currently a problem with reviewing the written papers of part-time students. When using special sites or programs, the assessment will be faster, allowing the students to work on their mistakes.

All these enhancements require a certain level of the technology skills and knowledge of the Internet from educators. But since we live in the age of the latest technologies, and we learn to use them every day, this should not be a hindrance to the development of distance learning.

The survey clearly shows that the need for strong motivation is the most significant disadvantage of distance learning, as it is evidenced by the point of view of 41.7% of respondents (Fig. 4). After all, in order to work independently, we undoubtedly need to have a high level of self-awareness, responsibility, and organizational skills. 29.6% of respondents consider the issue of minimal contact with educators a problem, however, distance learning provides video lectures and web-lessons, and that is why we assume that some of the respondents do not fully understand the essence of distance learning. 13.9% see a lack of practical knowledge as a major drawback of the distance learning, and 9.3% of respondents believe that the need to attend university for taking exams may be inconvenient. However, we do allow for the possibility of taking exams remotely. Also, a small percentage of those surveyed (0.9%) consider the lack of computer literacy among students to be a major drawback.

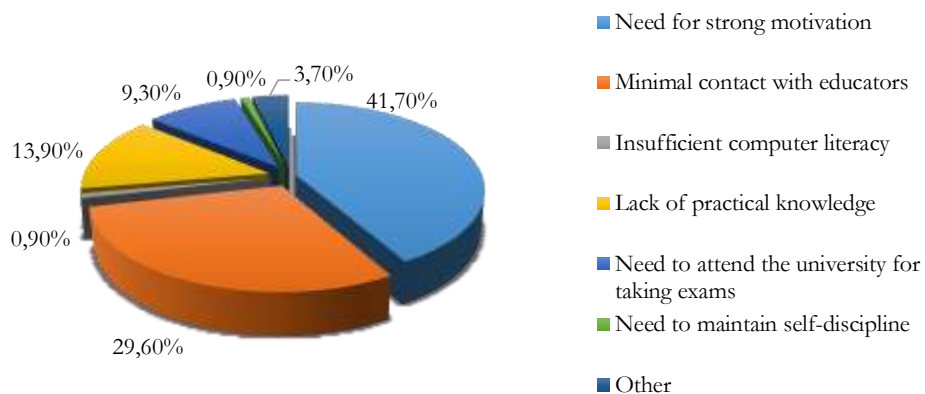


Fig. 4. Disadvantages of distance learning

It should be mentioned that some of the respondents believe that distance learning alienates people from society, adversely affects cultural development, can lead to deterioration of communication skills and reduce the level of social activity. However, the overwhelming majority is convinced that distance learning will in no way affect the socialization of people in society. Analyzing the given answers, we became convinced that not all students fully understand the concept of distance learning, since we promote one of the main advantages of such form of studying – the opportunity to combine work with studying, that is, a person will be able to socialize directly in the working team.

In the course of our research, we also conducted interviews, asking the Karazin University educators about their attitude to distance learning.

Summarizing their answers, we can say with certainty that the educators deem distance learning appropriate, because it is a great opportunity to get education (both first and second, retraining, etc.) while maintaining the usual rhythm of life and work, and save time and resources.

Undoubtedly, absolutely all courses and subjects cannot be adapted for distance learning course, as some of them require direct attendance at classes, laboratory work, conducting experiments, etc. However, most of them can be implemented using all possible modern electronic means (databases, libraries, chats, social networks, audio, video lectures).

We also found out that a course on the Moodle platform, which contains many techniques that make it easy to use for both student and educator is currently being developed on the basis of Karazin University. This resource allows you to upload enough learning materials, download them at any time, and give students tasks. So of course, distance learning may not be fully equivalent to full-time education, but it is still quite effective and has many advantages.

The most important result of the study was that students determine their time, which they spend on the learning process, as the most important parameter of future learning. As the main trend of the future, they highlight the correct distribution of time through the preparation of a flexible and comfortable schedule of classes and independent work.

Recommendations as for the development of distance education by 2030:

To develop electronic communication networks and web-based courses, to elaborate digital libraries, to use internet videoconferencing, email and other effective modes of communication in order to facilitate the process of distance education and make it efficient and productive.

Also, it is desirable that an online course involve interaction between students and a teacher in an interactive form using the modern digital learning tools.

**Results and Discussions.** As a result of our research, we have concluded that the demand for distance learning is constantly increasing. This urgency can be explained by its versatility, accessibility, increasing demands of society and employers for the quality of professional education, the lack of effectiveness of current models of distance education, which need further improvement, and variability in the globalization of information technologies. The world is evolving, and so we can be sure that the popularity of the distance form of learning will grow rapidly every year. New, even more interactive and productive teaching and communication methods will emerge, improving the existing distance learning base by reducing its shortcomings, and by introducing new ideas and potential tools. Therefore, within the framework of the analysis of the distance learning concept at Karazin University in 2030, it should be noted that this form of education will have more advantages, namely it will increase the number of people willing to get education becoming even more flexible and convenient due to the development of new technologies. Thus, some new platforms and programs will be developed, encouraging not only Ukrainians but also foreign

citizens to get education in our country, and it will help to develop a comprehensively competent person.

In further scientific exploration, it is planned to study the problem of implementation of the distance form of education in greater detail by giving further consideration to the specific distance learning tools and methods.

## REFERENCES

100 Radical Innovation Breakthroughs for the future (2019). The Radical Innovation Breakthrough Inquirer. European Commission, 338 p.

EPSC (2017). European Political Strategy Centre. [Online]. July 05, 2020. [http://ec.europa.eu/epsc/sites/epsc/files/epsc\\_\\_10\\_trends\\_transforming\\_education\\_as\\_we\\_know\\_it.pdf](http://ec.europa.eu/epsc/sites/epsc/files/epsc__10_trends_transforming_education_as_we_know_it.pdf)

Futures for Higher Education and ICT: Changes Due to the Use of Open Content (2016). UNESCO Institute for Information Technologies in Education. Moscow : UNESCO. [Online]. July 05, 2020. <https://iite.unesco.org/pics/publications/en/files/3214745.pdf>

Zweck, A., Braun, A. & Rijkers-Defrasne, S. (2014) International Foresight of the 2000s: Comparative Analysis. *Foresight-Russia*, 8(2), 6-15.

Martin, B. (1995). *Foresight in Science and Technology. Technology Analysis & Strategic Management*, 7(2), 139-168.

Bykov, V. & Shyshkina, M. (2018) The conceptual basis of the university cloud-based learning and research environment formation and development in view of the open science priorities. *Technologies and Learning Tools*. 68(6), 1-18.

Hamid, F. & Yip, N. (2019) Comparing service quality in public vs private distance education institutions: evidence based on Malaysia. *Turkish Online Journal of Distance Education*. 20(1), 17-34.

Moore, J., Dickson-Deane, C., & Galyen, K. (2011). E-learning, online learning, and distance learning environments: Are they the same? *Internet Higher Educ.* 14(2), 129-135.

Sánchez-Elvira Paniagua, A & Simpson, O. (2018) Developing Student Support for Open and Distance Learning: The EMPOWER Project. *Journal of Interactive Media in Education*. 1(9), 1-10.

Opanasiuk, Yu. (2016) Distance learning as a consequence of the evolution of the traditional education system. *Vyscha osvita Ukrainy*. 1, 49-53.

Ouaddah, A. Elkalam, A. & Ouahman, A. (2017). *Towards a novel privacy-preserving access control model based on blockchain technology in IoT*. In *Europe and MENA Cooperation Advances in Information and Communication Technologies*; Springer: Berlin, Germany, 2017. E-learning Foresight.

2018 Distance Education: Past, Present and Future – Overview and Foresight (2018). [Online]. July 05, 2020. [http://www.eden-online.org/eden\\_conference/distance-education-past-present-and-future-overview-and-foresight/](http://www.eden-online.org/eden_conference/distance-education-past-present-and-future-overview-and-foresight/)

Laaroussi, A., Ajana S., Bakkali, S., Faraj, K. & Cherkaoui, O. (2017) E-learning Foresight for Renewable Energy Technology in Higher Education in Morocco. In: Rocha Á., Serrhini M., Felgueiras C. (eds) *Europe and MENA Cooperation Advances in Information and Communication Technologies. Advances in Intelligent Systems and Computing*, vol 520. Springer, Cham DOI: [https://doi.org/10.1007/978-3-319-46568-5\\_2](https://doi.org/10.1007/978-3-319-46568-5_2)

Aichholzer, G. (2009). *The Delphi Method: Eliciting Experts' Knowledge in Technology Foresight*. In: Bogner A., Littig B., Menz W. (eds) *Interviewing Experts*. Research Methods Series. Palgrave Macmillan, London.

Bhuasiri Wannasiri, Xaymoungkhoun Oudone, Zo Hangjung, Jeung Rho Jae, P. Ciganek Andrew (2012). Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty, *Computers & Education*, 58(2), 843-855.

Blind, K. (2008). Regulatory foresight: Methodologies and selected applications. *Technological Forecasting and Social Change*, 75(4), 496-516.

Dalkey, Norman; Helmer, Olaf (1963). "An Experimental Application of the Delphi Method to the use of experts". *Management Science*. 9(3), 458-467. doi:10.1287/mnsc.9.3.458ми.

Okoli, C. & Pawlowski, S. (2004). The Delphi method as a research tool: an example, design considerations and applications. *Information & Management*, 42, 15-29.

Von der Gracht, H. (2012). Consensus Measurement in Delphi Studies - Review and Implications for Future Quality Assurance. *Technological Forecasting and Social Change*. 79 (8), 1525-1536. doi:10.1016/j.techfore.2012.04.013

Romanovsky O. and others (2019). Factors of development and directions of improvement of the distance form of education in the system of higher education of Ukraine. *Information Technology and Learning Tools*, 74 (6). 20-42.

Dhawal, S. "By the numbers: MOOCs in 2018". [Online]. <https://www.classcentral.com/report/mooc-stats-2018/>

Kukhareenko, V. (2013). Massive open online courses in Ukraine, 2013 IEEE 7th International Conference on Intelligent Data Acquisition and Advanced Computing Systems (IDAACS), Berlin, 2013, 760-763, doi: 10.1109/IDAACS.2013.6663027.

Moroz, V., Sadkovyj, V., Babaiev, V. & Moroz, S. (2018) Online Student Surveys in Higher Education Quality Assurance. *Information Technology and Learning Tools*. 68(6). [Online].

<https://journal.iitta.gov.ua/index.php/itlt/article/view/2415>

## ДИСТАНЦІЙНА ОСВІТА В КАРАЗІНСЬКОМУ УНІВЕРСИТЕТІ У 2030 РОЦІ ОЧИМА СТУДЕНТІВ

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**Анотація.** У статті було розглянуто перспективи впровадження дистанційних технологій у навчальний процес закладів вищої освіти. Було проаналізовано наукові праці провідних учених у галузі дистанційної освіти. В основу дослідження покладено метод Дельфі. Розглянуто теоретичні основи запровадження дистанційної освіти в університетах. Досліджено основні тенденції розвитку освітньої сфери у світі та впровадження в неї елементів дистанційної освіти. Окреслено особливу роль студентів як однієї з основних зацікавлених сторін в освіті. Головними експертами цього дослідження виступають

студенти, адже саме вони являють собою одну з основних зацікавлених сторін освітнього процесу. У ході дослідження було з'ясовано, що більшість студентів Каразінського університету, а саме 75%, є прибічниками впровадження дистанційної освіти. Особливу увагу у статті було приділено встановленню переваг та виявленню слабких сторін дистанційної форми навчання. Слід також зазначити, що, згідно з думкою деяких респондентів, дистанційне навчання відчужує людей від суспільства, і в такий спосіб негативно впливає на культурний розвиток особистості людини, що може у свою чергу призвести до погіршення комунікативних навичок та зниження рівня соціальної активності студентів. Утім, тим не менш, переважна більшість респондентів дотримуються думки, що дистанційна форма навчання жодним чином не вплине на соціалізацію людини в суспільстві. Відповідно до результатів опитування було розроблено зручний графік навчання для студентів, які поєднують роботу та навчання. У статті також було проаналізовано цілу низку засобів дистанційної форми навчання з метою виокремлення серед них найбільш зручних, які є безпосередньо пов'язаними з утіленням принципу наочності при набутті студентами нових знань. У статті також висвітлено основні напрями розвитку дистанційної освіти в Каразінському університеті в 2030 році.

**Ключові слова:** форсайт дослідження; дистанційна освіта; вища освіта; студент; цифрові технології; інформаційні технології.