INTRODUCTION

The first decade of the XXI century is characterized by active development of information and communication technologies and their implementation in all spheres of human life, including in the educational process of Ukrainian universities. Currently higher education in Ukraine is characterized by the growing responsibility of institutions for the quality of education, the globalization of the educational space, the growing mobility of teachers and students, and the increasingly widespread use of distance learning technologies, not only in correspondence, but also in full-time education.

In this regard, one of the most important features of the modern educational process at a university is the expansion of the capabilities of the information and educational environment, which are currently being actively implemented by educational organizations. One of the important tasks the information and educational environment of the university at the present stage is the expansion of forms of communication interaction between teachers, university students, specialists of auxiliary units.

In connection with the intensification of the use of information and communication technologies in modern educational organizations, including higher educational institutions, before university teachers it becomes the task of forming at a high level of readiness for the use of distance learning technologies.

In modern conditions of the educational process of the university (reduction of classroom hours for teaching most subjects, the transition to practice-oriented learning, etc.), a high level of readiness of the university teacher to use information and communication technology determines its competitiveness in a changing reality. The process of introducing distance learning technologies affects an increasing number of higher educational institutions, however, teachers of Russian universities lag significantly behind in the development and application of distance learning technologies:

- learning from the global educational community (DERKACH, 2010).
- The analysis of the theory and practice of distance learning showed that the following difficulties in this area can be identified at the university: insufficient initial knowledge of university teachers in the field of application information and communication technologies; insufficient technical equipment of the teacher’s personal information space;
- insufficient level of readiness of university teachers to use new technologies of distance learning; insufficient motivation of university teachers to use distance learning technologies.
Analysis of the state of training of university teachers for the use of distance learning technologies allows us to assert that the problem of the formation of readiness remains insufficiently developed university teachers to the use of distance learning technologies both in full-time and part-time forms of education, and in the framework of additional education teaching staff. In particular, theoretical and methodological approaches to organizing the process of forming the readiness of university teachers to use distance learning technologies have not been sufficiently developed, as well as the composition and content of training university teachers to use distance learning technologies.

**THE INITIAL PRESUPPOSITIONS**

In the article, the following research methods were used to solve the set tasks: theoretical (study and analysis of scientific and pedagogical, psychological and pedagogical, reference, specialized literature, regulatory documentation on the topic of research, additional professional advanced training programs; analysis, comparison, classification of the information received and generalization); empirical (pedagogical experiment, observation, questionnaire survey, survey, conversation, testing); mathematical (statistical data processing).

**METHODS**

The last decades have been characterized by rapid development of information and communication technologies. Educational organizations of Ukraine, including higher educational institutions, strive to actively use modern achievements of science and technology in the field of computer technologies and introduce them into the educational process, administrative apparatus, and educational activities.

Considering information and communication technologies as a complex of various solutions (computer software, latest software products developed by manufacturers, access to a high-speed Internet channel), it should be noted that there is a huge interest of the educational community in distance learning and the use of distance learning technologies for the implementation of educational programs. Ukrainian universities are interested in introducing distance learning technologies into their practice primarily due to the following positive aspects of distance learning:

- the possibility of remote support for students of correspondence and full-time forms of education at all levels of education, implemented at the university (bachelor’s, specialty, master’s, postgraduate, doctoral studies);
- reducing the classroom load of university teachers;
- attracting students from other regions;
- organization of training for people with disabilities.

It should be noted that if an educational organization implements educational programs using distance learning technologies, then it becomes necessary to provide an appropriate level training of teachers (for a university - teachers), management and support personnel by an organization of advanced training in the use of information and communication technologies in their professional activities (POLAT, 2021).

Distance learning is an interactive interaction both between a trainer and a student (learner) or learners (learners), and between them and an interactive source of an information resource (for example, a website or a web page), reflecting all the components inherent in the educational process (goals, content, methods, organizational forms, teaching aids), carried out in the context of realizing opportunities information and communication technologies (immediate feedback between the user and the learning tool; computer visualization educational information; archival storage of large amounts of information, their transmission and processing; automation of the processes of computing, information retrieval activities, processing of the results of an educational experiment; automation of information and methodological support processes, organizational management of educational activities and control of the results of assimilation of educational material) (HARRIS, S., SUTTON, R., 1986).
E-learning is understood as the organization of educational activities using information contained in databases and used in the implementation of educational programs and providing it processing of information technologies, technical means, as well as information and telecommunication networks, ensuring the transfer of the specified information through communication lines, the interaction of students and teachers.

Distance learning technologies are understood as educational technologies implemented mainly with the use of information and telecommunication networks with indirect (on distance) interaction between students and teaching staff. As the above analysis has shown, the terminological apparatus in the field of organizing distance learning is quite extensive, different terms denote concepts that are similar in meaning.

In this paper, distance learning technologies are understood as technologies that implement interactive interaction both between a teacher and a student, and between training participants and a distance learning system. In this regard, we note that in the study we will adhere to the following terminology: distance learning and distance learning technologies (HARRIS, SUTTON, 1986). The problem of identifying the potential of distance learning technologies is impossible without a detailed analysis of the capabilities of information and communication technologies, which include distance learning technologies.

In the explanatory dictionary of terms of the conceptual apparatus of informatization of education, the following description of the capabilities of information and communication technologies is given:

- immediate feedback between the user and ICT means, which determines the implementation of an interactive dialogue, which is characterized by the fact that each user request triggers a response from the system and, conversely, a replica of the latter requires a response from the user;
- computer visualization of educational information about the studied object, process (visual representation on the screen: an object, its constituent parts or their models; a process or its model, including hidden in the real world; graphic interpretation of the studied pattern of the studied process);
- computer modeling of the studied or investigated objects, their relations, phenomena, processes occurring both realistically and "virtually" (presentation on the screen of a mathematical, information-descriptive, visual model is adequate to the original);
- archiving, storage of large volumes of information with the possibility of easy access to it, its transmission, replication;
- automation of the processes of computing, information retrieval activities, as well as processing the results of an educational experiment with the possibility of multiple repetition of a fragment or the experiment itself;
- automation of information and methodological support processes, organizational management of educational activities and control of the results of assimilation.

The potential of distance learning technologies is directly related to the positive aspects of the introduction of information and communication technologies in the practice of an educational institution, including a university:

- the ability to draw up an individual educational trajectory of training for each student remotely, which will allow adapting the educational process to the peculiarities of personality development student;
- each student can adhere to an individual schedule (for example, study at night), which allows him to improve his qualifications or receive an education on the job;
- the economic efficiency of distance learning is achieved by the low cost of such education;
• mobility, openness, accessibility, i.e. the ability to go to the distance learning website and get access to lecture materials and practical tasks from any device that has access to the Internet (computer, tablet, laptop, phone, smartphone, communicator, etc.)

• training of people with disabilities.

It should also be noted that distance learning technologies allow participants in the educational process to quickly exchange information on issues that arise during training; students in a short time, they can get advice from a teacher about certain aspects covered in the theoretical material, about the quality of the completed practical tasks; get comprehensive information about current, intermediate or final grades; get an additional opportunity correct current or intermediate results, etc. This aspect of distance learning technologies presupposes the presence of interactivity and feedback.

Distance learning technologies make it possible to visualize information on a computer using various multimedia technologies, graphical presentation of information, use of video and audio materials.

The potential of distance learning technologies is expressed in the ability to create and use educational materials with a hypertext structure. In computer terminology, hypertext is a text formed using a markup language, potentially containing hyperlinks. A hyperlink is a part of a hypertext document that refers to another element in the same document or to another object. Organization of the hypertext structure when the creation or posting of educational materials on the Internet, allows teachers of the distance course to draw up an individual trajectory for each student (to offer complicated or facilitated tasks, to determine different terms for completing certain practical works, etc.), to apply a group teaching method, to include or exclude teaching materials in the educational process (ASTREMSKA, 2016).

Distance learning technologies allow both teachers and students the opportunity to save theoretical materials and various practical works on a personal computer for further use in professional activity. Also, one cannot fail to note the possibility of archiving information about the development of a training course or discipline by students for further processing. Distance learning technologies provide teachers with the ability to quickly respond to technical and technological progress:

• add or exclude theoretical material in connection with changes in legislation or the approval of new regulatory documents, introduce newly developed practical tasks or laboratory tasks into training work, include a course or discipline developed test tasks, etc.

Based on the above opportunities and positive aspects, we can say that distance learning technologies have enormous potential for educational organizations, including for university teachers (BOGOMOLOV, 2007). Distance learning technologies mean:

• training using interactive television;

• case technologies - using CDs or other types of electronic media with educational materials, using personal computers, modern mobile phones, smartphones, tablets, DVD players in the educational process, TV;

• the use of information and communication technologies and distance learning technologies in education (for example, management systems training - eng. Learning Management System, LMS, distance learning site, specially created e-learning courses, trainee control system, channels for communication between the teacher and the trainees).

Today there are many different educational complexes and distance learning systems that use information and communication technologies to organize the educational process:

• IBM Learning Accelerator (developed by IBM);

• system "Prometheus" (developer "Virtual Technologies in Education" company);

• Remote training center "DOCENT" (developer "UNIAR" company);
• training center WebTutor (developed by WebSoft);
• LMS eLearning Server 4G (developed by Hypermethod IBS Company);
• distance learning system Competentum. Magister (developer "Competentum" Company);
• learning management system Competentum. ShareKnowledge (developed by Competentum);
• complex of software applications Learn eXact (developed by Giunti Interactive Labs);
• distance learning system iSpring Online (developed by Richmedia LLC);
• ATutor learning content management system (created by a group of Canadian developers and distributed under the GNU General Public License);
• Learning Activity Management System (LAMS) (based on the results of the work of the Open University of the Netherlands and distributed under the GNU General Public License);
• Online Learning and Training (OLAT) (developed in Zurich University, Switzerland, and is licensed under the GNU General Public License);
• Blackboard multichannel server (developed by Blackboard, Inc);
• TrainingWare Class (developed by Corporate Training Systems, licensed under the GNU General Public License);
• modular object-oriented dynamic learning environment Modular Object-Oriented Dynamic Learning Environment (Moodle) (created by a group of developers from different countries and distributed under the GNU General Public License) and others (IASECHKO, M., IASECHKO, S., SMYRNOVA, I., 2021).

Each of the above distance learning systems has its own advantages and disadvantages. We will analyze the most common distance learning systems used in Ukrainian educational organizations and educational institutions of other countries of the world.

RESULTS AND DISCUSSION
In this way:
1. The potential of distance learning technologies at the university has been determined, which consists in the possibility of creating an innovative information and educational environment; mobility, openness, accessibility, interactivity:
   • training using distance learning technologies; attracting more students from other regions; the possibility of drawing up an individual educational trajectory for students; cost-effectiveness of distance learning; visualization of educational information;
   • the use of the hypertext structure of educational resources; opportunities for organizing inclusive education; reducing the classroom load teachers.
2. An analysis of distance learning systems was carried out, as a result of which a conclusion was made about the advantage of using a distance learning system Moodle. In addition, as a result of the analysis of the activities of educational institutions in the aspect of organizing distance learning, one can state the widespread use of the Moodle system in Ukraine and others countries of the world.

CONCLUSION
Distance learning is a well-organized and controlled self-education using computer technology and communication networks. This type of education has spread around the world for a long time, but in Ukraine it has existed for 10 years. Some people think of distance learning resources as a collection of scanned textbooks posted on the Internet that you need to read and then retell. But this is far from the case. Of course, high-quality multimedia
textbooks are part of the distance learning resource, but its main aspect is constant interactive communication between the student and the teacher.

The main advantage of distance learning over full-time education is, first of all, its convenience: the student independently chooses the time and place for training, which allows him to work or study in parallel at a hospital in another city or even a country. In addition, the replacement of abstracts with electronic resources and the latest teaching methods, as well as constant consultations with the teacher, give this form of self-education additional advantages over distance learning (IASECHKO, SHELUKHIN, MARANOV, 2021).

Among the shortcomings, it is worth highlighting the psychological and "computer" unpreparedness of teachers. This is due to the traditional teaching methodology, it assumes not virtual, but "live" communication between the student and the teacher.

Another problem is significant financial expenses for the university because it is necessary to update the material base, computer equipment, allocate premises, provide access to the Internet for teachers, etc (ASTREMSKA, 2014).

In addition, in Ukraine there are still no clear technological possibilities for student authentication. They perform a number of tests and tasks for self-control remotely, but they have to make the final exams "in person". In general, for learning "at a distance" you need to have strong motivation and self-organization, because, as it was said, distance learning is, first of all, self-education, that is, the student's ability to work independently. For some, this is an advantage, but for others, on the contrary, it is a disadvantage - it all depends on the person and his character.

In the future, it is planned to develop and introduce individual specialties with a full range of disciplines, upon completion of which distance students will receive state diplomas as graduates of a variety of correspondence courses.

So what are the advantages and disadvantages of distance learning?

The advantages include: accessibility to all segments of the population, convenience, no need to attend face-to-face classes, no time limits for mastering the material, democratic teacher-student communication, comprehensive software of resources and control methods based on the latest psychological, pedagogical and methodological developments, the possibility of simultaneous use of a large amount of educational information by any number of students, leading educational technologies, an individual learning process based on taking into account the peculiarities of teaching students of different levels of training or with different physical capabilities, lack of psychological control, flexible consultations.

The main disadvantages should be considered: limited direct communication between teacher and student, technical support of distance learning in certain regions of Ukraine's regions (lack of modern PCs, low standard of living), the possibility of a negative impact of electromagnetic fields on human health during distance learning.

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Training of teachers of higher education institutions for the use of distance learning technologies in the context of digitalization

Formação de docentes de instituições de ensino superior para a utilização de tecnologias de ensino a distância no contexto da digitalização

Formación de profesores de instituciones de educación superior para el uso de tecnologías de educación a distancia en el contexto de la digitalización

Resumo
Este estudo reflexivo, desenvolvido por meio de pesquisa exploratória, parte da hipótese de que a formação de professores universitários no uso de tecnologias de educação a distância será efetiva se: o potencial das tecnologias de educação a distância na universidade tiver sido determinado; É divulgada a essência e o conteúdo da noção “preparação do professor universitário para a utilização das tecnologias da educação a distância”, determinados indicadores e níveis de formação dos componentes da preparação do professor universitário para este tipo de atividade; as condições pedagógicas anteriores foram identificadas teoricamente e fundamentadas experimentalmente. O estudo mostrou que quando as condições, meios e esforços são bem direcionados, há resultados consistentemente satisfatórios no uso de tecnologias de educação a distância no contexto da digitalização.

Palavras-chave: Ensino à distância. Ensino inovador. Ensino superior. Tecnologia de ensino.

Abstract
This reflective study using exploratory research is based on a hypothesis because that the training of university teachers in the use of distance learning technologies will be effective if: the potential of distance learning technologies at the university has been determined; the essence and content of the notion "readiness of a university teacher to use distance learning technologies" are disclosed, indicators and levels of formation of the components of teacher readiness are determined university to this type of activity; the previous pedagogical conditions have been theoretically identified and experimentally substantiate. The study showed that, when conditions, means and efforts are well oriented, there are consistently satisfactory results in the use of distance learning technologies in the context of digitalization.

Keywords: Distance learning. Innovative teaching. Higher education. Teaching technology.

Resumen
Este estudio reflexivo mediante investigación exploratoria parte de una hipótesis porque la formación de profesores universitarios en el uso de tecnologías de educación a distancia será efectiva si: se ha determinado el potencial de las tecnologías de educación a distancia en la universidad; se divulga la esencia y contenido de la noción "preparación de un docente universitario para utilizar tecnologías de educación a distancia", se determinan indicadores y niveles de formación de los componentes de la preparación docente universitaria para este tipo de actividad; las condiciones pedagógicas anteriores han sido identificadas teóricamente y fundamentadas experimentalmente. El estudio mostró que, cuando las condiciones, los medios y los esfuerzos están bien orientados, hay resultados consistentemente satisfactorios en el uso de tecnologías de educación a distancia en el contexto de la digitalización.

Palabras-clave: Educación a distancia. Enseñanza innovadora. Educación superior. Enseñanza de la tecnología.