



DISTANCE EDUCATION TECHNOLOGIES AND THEIR IMPLEMENTATION IN THE TRAINING SYSTEM

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Article history:	Abstract:
Received: 11 th December 2022 Accepted: 11 th January 2023 Published: 20 th February 2023	In this article, the concepts of distance education and distance education are covered in terms of content and their differences are explained. The need to apply distance education technologies to the process of qualification improvement is presented. The establishment and implementation of the distance training system for teachers in our republic has been analyzed step by step

Keywords: distance education, distance education, e-learning, professional development, system of professional development, professional development of pedagogues, system of distance professional development of teachers.

INTRODUCTION

Today, the concepts of "distance education" and "distance learning" are widely used in educational and educational regulations, educational literature, and mass media, and have become the most popular concepts among the population of all countries in the context of the pandemic that has occurred in recent years. Article 16 of the Law of the Republic of Uzbekistan "On Education" states that "Distance education is aimed at obtaining the necessary knowledge, qualifications and skills by students using information and communication technologies and the Internet global information network" [1].

Distance education, which until recently was considered complicated and incomprehensible, is now actively used in all educational systems and levels, including general secondary and higher education, retraining and advanced education.

Distance education (hereinafter - ED) is still understood by many as the joint activity of a teacher and a learner carried out at a distance. In fact, the meaning of this concept is somewhat broader. In recent years, in dangerous situations faced by humanity (pandemic, natural disasters, etc.), distance education has clearly demonstrated its necessity, importance and prospects. Distance education has a special place in ensuring the continuous professional development of a wide segment of the population, including personnel working in various sectors of the economy, based on the principle of "lifelong education", which is especially relevant today.

ANALYSIS AND METHODS

Analysis of foreign scientific literature "distance education", "electronic education", "e-learning", "education with the help of computer technologies",

"education in the network" (network of implementation of educational programs form), "virtual education" and other concepts exist.

In this scientific literature, it is emphasized that the term "distance education" is a broader concept than the English term "distance learning". The reason for expressing this term as a broader concept is that the English word "learning" basically means "learning" or "teaching", and for these English authors, the expression "distance learning" is an independent study of distance education. "learning", which differs from winter in only one aspect, means studying in cooperation with a teacher (tutor). The term "Distance education" covers all aspects of the educational process [2]. On the one hand, these concepts are similar and mean one activity - the introduction of information and communication technologies into the educational process. On the other hand, there are differences between the definitions of these concepts, and it is noted that the meanings of these concepts are not the same [3-11].

DISTANCE EDUCATION. Distance education technologies are a combination of the latest information methods and forms of development that provide the educational process at a distance. In this, distance does not prevent live communication, interaction and hands-on experience.

Distance education technologies mean educational technologies that are implemented mainly using information and telecommunication technologies in the mutual activity of the learner and the teacher in full or partial distance.

Distance education is a distance interaction of teachers and students with each other, which includes all the components of the educational process (goals,



content, methods, organizational forms, training manuals) and certain tools of Internet technologies or implemented in other tools that provide interactivity.

The California Distance Education Project (2000) uses this definition: Distance education is an instructional delivery system that connects students with educational resources.

METHODOLOGY

We use the definition of A. Andreev in forming the conceptual apparatus of distance education. A.A. Andreev understands distance education as "a purposeful process of interactive interaction of teachers and students with educational tools, a process carried out in a certain didactic system that is invariant (insensitive) to their location in space and time" [3].

According to A.A. Andreyev, distance education technologies include various special technologies from other fields of science and practice and are defined as "a system of educational methods, specific tools and forms for repeated implementation of a certain educational content."

Pedagogical technologies of distance education - a set of teaching methods and technologies that ensure the implementation of the educational process at a distance in accordance with the selected educational concept.

Distance education. The term "distance learning" has been used by the University of Wisconsin since 1892 for correspondence courses. Distance education is defined as education organized at a distance. "Correspondence education", "studying at home" and others were considered synonyms for it [2].

A number of institutions and scholars have conducted research on distance education in foreign countries, and various opinions and definitions of distance education have been presented.

Experts of the United States Distance Learning Association (USDLA) define distance learning as the use of electronic tools and published materials to organize the learning process when the learner and the tutor are in different geographical locations. They understood how to teach using manuals.

One of the foreign specialists in the field of distance education, when explaining the term "distance education", indicates two main features of the distance education process: the teaching is in the form of a publication and in the video or audio-written way, at the same time, emphasizes that the organization of communication is communication at a distance with various modern technical means.

Also, the concept of distance education and other related terms by specialists such as A.A. Andreyev,

E.S. Polat, A.M. Bershadsky, V.M. Monakhov, V.A. Slastenin, B.P. Tikhomirov, I.K. Shalayev, A.B. Khutorsky, M.V. Moiseyeva from CIS countries has been extensively analyzed.

E.S. Polat defines distance education as all the educational process in which the interaction of tutors and students and students with each other is carried out remotely and is carried out through special tools specific to Internet technologies or other interactive technologies. Emphasizes as an independent form of education that reflects components (goals, content, methods, organizational forms, educational tools) [7].

Analyzing various definitions, A.A. Andreyev concluded that distance education is implemented in a special didactic system in which the activities of teachers and learners are invariant to their location in space and time. Comes to the conclusion that it is a goal-oriented process of interactive activities [4].

Specialists of the Eidos Center A.V. Khutorsky and others interpret the concept of distance education as follows: subjects of education (learners, pedagogues, tutors, etc.) are far away from each other in space and time and use telecommunication tools for general education. Performs the process.

According to MESI specialists V.P. Tikhomirov and others, distance learning means such an educational technology in which the tutor and the learner are located in different places, and case technology, TV technology and network technologies are used as teaching tools [10].

In the work of M. V. Moiseyeva, it is explained that distance education is a type of distance learning, that is, maximum use of computer telecommunications, modern new information technologies, and active information exchange among all participants of the educational process [8].

Summarizing these points, experts define distance education as the relationship between the tutor and the students that is carried out remotely and is carried out with the specific tools of Internet technologies or other tools that provide for interactivity specific to the educational process (goal, content, method, form, tools) are emphasized as a form of education.

E-learning - the information contained in the database and used in the implementation of educational programs and the processing of it, as well as the transfer of the specified information along communication lines, the interaction of learners and pedagogical staff. Is to organize educational activities using information and telecommunication networks [2].

E-learning refers to learning and teaching activities in a specific electronic information-educational



environment, the entire process of education. E-learning requires a knowledge base. In order to implement electronic education, it is necessary to create a virtual environment that helps to organize the access to electronic educational resources and the joint activities of the learners with the pedagogic staff. Therefore, the concepts of "distance learning technologies" and "e-learning" do not mean the same thing and can be used separately. Only in the implementation of electronic education, distance education technologies are a necessary condition.

Another term that has been established in this field for a long time, although not officially, is e-learning (abbreviation of electronic learning). In the educational system of foreign countries, this term appeared at the end of the 20th century and is used as a result of the integration of distance and traditional education. Currently, this term refers to teaching using modern information technologies and the Internet.

E-learning is the most promising direction of open education development. Its motto is "study anywhere, anytime". At the same time, "e-learning" is a generally accepted term, but it is nowhere to be found in official sources [6].

The education system has gradually adopted the new potential of information and communication technologies, online education and distance learning over the last decade. In addition, in the context of global events, such as the coronavirus pandemic, it is recognized that these educational tools are now very successful.

The distance form of training provides a combination of pedagogical and informational computer technologies, interactivity of communication between subjects of the educational process and its quality. Remote information exchange with the help of communication technologies is not an important component of the educational process, but serves as a technical and technological assistant for the organization of students' educational activities [12].

Like other spheres of social life, the system of teacher training requires constant development. This is due to the rapid growth of the volume of professionally relevant information, as well as the rapid reduction of the "time between changes in knowledge". From this point of view, the training system should quickly adapt to any positive socio-economic, scientific and technological innovations, rely on the achievements of psychological and pedagogical science and practice, always be future-oriented, and also maintain its positive aspects [12].

RESULTS AND DISCUSSION

With the andragogic approach, teaching is built into the context of social and professional activity, training is conducted during the work process, and actual tasks related to professional activity are solved during the educational process [13]. At this point, it is necessary to recognize the need to create conditions for the use of distance learning in additional pedagogical educational institutions [14].

At the same time, distance education has its own advantages and disadvantages [21,18,19,20,15]. The advantages include the flexibility of the educational process, maximum access to classes regardless of geographical, temporal or social status, relatively cheap, anytime and anywhere, the ability to study without stopping work, independent planning of an individual study schedule. Also, based on the personal physiological characteristics of the learner (quick perception, biological rhythm, etc.), training can be organized remotely, because the process, availability of educational materials, mobile communication with teachers, individual approach of teachers to each student [17] is done.

At the beginning of the 21st century, there was a need to use distance education technologies in the process of teacher training in Uzbekistan.

The remote training system for teachers is implemented with the participation of the Asian Development Bank as part of the "V" component of the "Education Sector Development Program" project with the code "UZB-1961" called "Improvement and expansion of teacher education", as well as the Law of the Republic "On Education" (29.08.1997), the National Personnel Training Program and the Cabinet of Ministers of the Republic of Uzbekistan of February 19, 2003 on measures to implement the encrypted project UZB-1961 with the participation of the Asian Development Bank No. 92, July 9, 2004 "2004-2009 321 of February 16, 2006 "On Measures for the Implementation of the State Nationwide Program for the Development of School Education" No. 25 of February 16, 2006 "On Further Improvement of the System of Teacher Training and Professional Development" and the Implementation of the Program under the Cabinet of Ministers It was established on the basis of the Statements of the Coordinating Interdepartmental Council.

On January 9, 2003, the Loan Agreement between the Government of Uzbekistan and the Asian Development Bank was signed for the implementation of the project and officially entered into force on October 22, 2003. The initial deadline for the implementation of the project was set until December



31, 2007. Decision No. 134 of the Cabinet of Ministers of the Republic of Uzbekistan dated June 30, 2007 "On approval of technical and economic calculations of the project "Education Sector Development Program" with the participation of the Asian Development Bank" was adopted, and in this decision, the project period was extended until March 31, 2009. ADB has officially approved the project implementation period until June 30, 2009. However, taking into account the need to complete the works that could not be carried out due to objective reasons during the project period, the deadline was extended until September 30, 2009.

Implementation of the above-mentioned project in our republic began in March 2008 with the support of foreign and local consultants and continued until September 2009. During this period, the Center for the Development of Distance Education (MO'RM) within the Central Institute for Retraining and Advanced Qualification of Public Education Workers named after A. Avloni (now the National Research Institute named after A. Avloni) of the Ministry of Public Education of the Republic of Uzbekistan, retraining and upgrading of pedagogic personnel in the regions. The system of remote retraining and professional development of pedagogic personnel, consisting of links such as Regional Coordination Centers of Distance Learning (MOHCMM) and Distance Learning Educational Resource Centers (MOTRM) at a total of 70 selected schools across the republic, 5 in each region was established. Also, with the support of foreign and local consultants, the Ministry of Public Education

According to the order of the Ministry of Education and Culture No. 315 of November 20, 2009, to continue the project activities, to improve the educational materials of distance education courses based on the results of experiments, to organize and conduct distance education courses in regional pedagogic staff retraining and professional development institutions, and to monitor the educational process. The task of going was assigned to the National Research Institute named after A. Avloni (now the National Research Institute named after A. Avloni).

Until now, the National Research Institute named after A. Avloni has organized the training process of public education leaders and pedagogues through the special electronic platform "Continuous Professional Education".

CONCLUSION

Research shows that distance learning has been shown to be as effective as, or even superior to, traditional forms of education when positive attitudes

toward learning are present. Because in this process, the learner learns most of the educational material independently, which improves the ability to remember, and allows a better understanding of the topics covered. Also, the opportunity to immediately apply the acquired knowledge in practice, at work, helps him to strengthen his knowledge, skills and abilities. In addition, the use of the latest technologies in the educational process makes it more interesting and lively.

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