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The development of distance education as a factor in the organization of an innovative form of learning

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ABSTRACT: The article is devoted to the organization of the learning process with the use of distance learning, the analysis of the main types and models of distance learning, the differences between distance learning and traditional. It is shown that the effectiveness of distance learning is determined by the use of pedagogical technologies that underlie training. It is concluded that distance learning can be considered as an independent form of learning for the implementation of continuing education.

KEY WORDS: distance learning, Internet technologies, information environment, telecommunications, synchronous and asynchronous distance learning.

I. INTRODUCTION

In connection with such transformations in society, educational institutions faced the need to increase the efficiency and quality of education, as well as to adapt it to the emerging requirements of society.

One of the most attractive advantages of distance learning is the ability to combine the effectiveness of individual learning with the economics of mass. In fact, it is a version of automated learning, in which the computer plays the role of both a teacher and an administrator - the organizer of the educational process, using local or global communication networks. This educational system allows you to start learning from any moment, depending on the training of the student. In addition, it provides an opportunity to improve the quality and intensification of training. Each student gets the opportunity to independently determine the timing of education [1].

II. RELATED WORK

In connection with the recognition of the importance of intellectual resources as a factor in the competitiveness of the state, the national education system of the Republic of Uzbekistan has set a goal to provide a competitive advantage in the world market by raising the level of higher education and developing the country's intellectual resources.

Due to increased competition and the economic situation on the market, employer requirements for graduates of educational institutions have grown. University graduates are regarded as an intellectual resource that ensures competitiveness through the implementation of the necessary working algorithms.

Increased demands from employers have affected the changing requirements of consumers of educational services, who consider getting education as the key to a professional career and personal growth.

III. SIGNIFICANCE OF THE SYSTEM

In the modern world, information technologies have penetrated all spheres of human life, and the sphere of education is no exception. The use of Internet technologies and distance learning is not something new right now. Today, distance learning allows you to look at the educational process from a different perspective. With the advent of the Internet, people have the opportunity of direct access to various resources located on the network. The potential of such technologies is very high, which is why no area of human activity now functions without information technology. The active use of such technologies in education has determined a place for distance learning.



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Distance learning - a set of information and communication technologies (ICT) that ensure the delivery of the studied material to students, the interactive interaction of students and teachers in the learning process, as well as control over the assimilation of the material in the form of passing tests, logic circuits, test trainings, tests and exams.

Thus, on the one hand, distance learning should be considered in the general system of lifelong education, assuming the continuity of its individual links. On the other hand, distance learning must be distinguished as a system and as a process.

Distance learning courses involve careful and detailed planning of the student's activities, its organization, clear statement of the objectives and goals of the training, delivery of the necessary training materials, which should ensure interactivity between the student and the teacher, feedback between the student and the teaching material, and provide the opportunity for group training. The presence of effective feedback allows the student to receive information about the correctness of his progress along the path from ignorance to knowledge. Motivation is also an essential element of any distance learning course.

O. B. Episheva [2] reveals the main elements of distance learning: the physical separation of teachers and some students, at least for most of the learning process; the use of educational multimedia tools and electronic resources both remote and in close proximity.

The sociologist F.W. Taylor [3] proposed the classification of distance learning according to five stages of development: classical correspondence education; the use of various one-way (without feedback) means of transferring educational materials: printed information materials, live broadcasts or recordings on information carriers; two-way, synchronous distance learning using audio or video conferencing; Asynchronous online learning combined with interactive multimedia intelligent flexible learning that provides a high degree of automation and control of asynchronous online student learning and interactive multimedia.

IV. METHODOLOGY

At the moment, the most common are types of distance learning, based on interactive television; computer telecommunication networks (regional, global), with various didactic capabilities, depending on the configurations used (text files, multimedia technologies, video conferencing); a combination of CD and Internet technologies [4].

The advantage of training based on interactive television is its ability to directly visually communicate with an audience located at different distances from the teacher. Its negative side is that with such training, an almost ordinary lesson is held, which is built both according to the traditional methodology and using modern pedagogical technologies. This can be permissible only when demonstrating unique techniques, laboratory experiments, when teachers and students can become witnesses and participants in the use of new knowledge, methods in their field, new information technologies, and take part in the discussion. This form of distance learning is interactive and can be considered promising in the system of advanced training and training. But at the moment, these are extremely expensive technologies.

The next way to organize distance learning involves the use of computer telecommunications in the mode of e-mail, newsgroups, information resources of regional networks and the Internet [5]. This is the most popular and not expensive way of distance learning. When it is organized, the use of the latest telecommunication technologies is envisaged.

The main components of distance learning are:

- interactive feedback between the learner and the learning tool;
 - computer visualization of educational information;
 - archival storage of large volumes of information, their transmission and processing;
- automation of processes of information retrieval activity and methodological support, as well as monitoring the results of learning material.



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Means of DO are all types of information technologies, the means of which are computers, computer networks, multimedia systems, etc.

Distance learning, carried out using computer telecommunications, has the following forms of classes.

Chat classes - training sessions carried out using chat technologies are held synchronously, that is, all participants have simultaneous access to the chat. Within the framework of many distance learning institutions, there is a chat school in which, using chat rooms, the activities of distance teachers and students are organized.

Web-based classes - distance learning, conferences, seminars, business games, laboratory work, workshops and other forms of training conducted using telecommunications and other Internet features. For web classes, specialized educational web forums are used - a form of user work on a specific topic or problem using entries left on one of the sites with the corresponding program installed on it.

Teleconferences are usually conducted on the basis of mailing lists using e-mail. Educational teleconferences are characterized by the achievement of educational objectives. There are also forms of distance learning, in which training materials are sent by mail to the regions. Such a system is based on a teaching method called the Natural Learning Manner.

Telepresence implies remote presence, which is carried out, for example, using the robot R.Bot 100.

The third method involves the use of CDs as a basic electronic textbook. It contains great didactic opportunities for high school and school education and for further training of specialists. The advantage of a compact disc is that it combines the following properties: interactivity, multimedia, contains a large amount of information and, due to this, significantly optimizes the distance learning process.

V. EXPERIMENTAL RESULTS

The most popular recently gaining a diploma through the Internet as a source of distance education. To find out the degree of trust in such distance learning technology and the reasons for the popularity growth, a pilot sociological survey was conducted, in which 147 people aged 17 to 30 years participated.

According to the results of the survey, it was found that 41% of respondents do not yet use Internet technologies as a source of education, 16% of respondents watch video tutorials and online lectures, 21% regularly use educational Internet portals, and the remaining 10% download educational computer programs.

When asked about the purpose of using a computer and the Internet for learning, the most popular answer was "for personal development and self-education" (59%); 25% of the respondents used the Internet resources to receive additional education, and 16% answered "as an assistant in obtaining higher education".

The choice of the educational resource among the respondents depended to the greatest extent on the following criteria: the content of the material (26%), the reputation of a trainer or teacher (20%), the opportunity to receive a document on education, as well as getting education for free or for a small fee (29%).

The survey revealed that distance education is seen as an additional source of knowledge and skills. The choice in favor of obtaining this type of education is made due to its accessibility, ease of use. In a professional environment, this format is common.

In general, the use of distance learning technologies allows you to expand the learning opportunities by many criteria: it becomes possible to organize training simultaneously for students of different profiles, specializations and areas; increases the professionalism and competence of students through the use of information within the discipline in the "home" environment; a single information space is being formed; there is the possibility of learning on the job (for working students), the cost of material resources is reduced - renting a room, electricity, paying for a teacher's hours.



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The emergence of online university courses on popular educational platforms is, on the one hand, a marketing move, the purpose of which is to promote the university in the global market for educational services, which allows solving several problems in parallel. The first task is to search for “your” student. The globalization processes taking place in the world have affected the field of higher education. A potential student today can choose any university in the world, the language barrier does not bother him, since most large universities offer training programs in English.

The communication technologies of the teacher with the students (for example, the ability to ask a question in the chat), various forms of communication between students (forums, interest groups, for example, to solve a specific task) provide feedback from the teacher and help in the implementation of design training methods. Therefore, we can say that in online courses there is a serious pedagogical potential that allows you to construct content and in various ways to achieve clearly defined learning goals.

The main characteristics of distance learning can be considered the mass audience, short videos, intermediate and final tests, deadlines, the possibility of free communication between teachers and students, as well as students among themselves. The mass audience involves not only the implementation of the educational function (the opportunity for everyone to take courses of outstanding professors, leaving the same opportunity for future generations of students), but also an effective pedagogical component - complementing the material studied in the traditional form with online courses that affect all channels of perception information by a person (for example, visual, auditory) and taking into account the psychological features of a modern student (for example, the so-called “clip” ness "of consciousness, enthusiasm for new technologies).

Thus, as a result of the use of massive open online courses, the university more widely realizes the opportunity to participate in the transfer of the cultural heritage of mankind, receives a powerful pedagogical resource, increases competitiveness, recognition in the world educational community. All these factors help the university to take its rightful place in the dynamically developing system of higher education.

In conclusion, it should be noted that lifelong education can be implemented in a system where the subject of education can be in it, being in different age stages. A means of educational navigation in this system is distance learning, an important aspect of which is communication between participants in the educational process, and mandatory teacher consultation. At the same time, communication between the student and teacher occurs remotely, by means of telecommunications, computer and Internet technologies, as well as by means of interactive television. The effectiveness of each of the considered distance learning models depends on the organization and methodological quality of the materials used, as well as the skill of the teachers involved in this process.

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