METHODS AND MODELS OF DISTANCE LEARNING

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ABSTRACT:
The purpose of this article is a consistent and comprehensive study of distance education methods in the modern world. In connection with the intensive development of information technologies, and especially Internet technologies, the problem of the development of distance learning is of particular importance.
KEYWORDS: online, distance education, telefax, audio conferencing, computer conference, video conferencing, priority, convective.

THE CONCEPT OF DISTANCE EDUCATION:
Distance learning is a distance learning method in which the teacher and students are physically located in different places. This is a training tool that uses audio, video equipment, the Internet and satellite communication channels. The interest that the possibilities of distance education aroused in all over the world is very paradoxical. The fact is that the very form of training, when students and teachers do not communicate with each other directly during the entire training course, is well-known in the whole world. This is a correspondence course existing in many universities. The quality and effectiveness of distance learning in its modern form is seriously criticized. Naturally, the technological features of a particular communication environment leave a certain imprint on the very communication between the teacher and the trainee, on the strategy and tactics of training, teaching methods. It is this influence on the teaching methods for specific disciplines that is the subject of many foreign literary sources and publications in periodicals.

The regulatory framework of what we habitually call “distance learning (DL)” has been and is under development over the past 10 years, and still a number of problems of the practical application of DL remain unresolved. The term “distance education” does not go back to any particular technology; rather, it describes a learning method that allows the learner and students to go beyond the narrow framework of instruction in the classroom. Let us consider in more detail the concept of distance education, as well as the spectrum of its capabilities.

Distance learning (DO) — a set of technologies that ensure that students deliver the bulk of the material studied, the interactive interaction of students and teachers in the learning process, providing students with the opportunity to work independently to master the material studied, as well as in the learning process.

Interaction is provided in various ways, such as the exchange of printed materials through mail and telex, audio conferencing, computer conference, video conferencing. Distance learning is a promising way to get education by isolated rural students, students with specific requirements or people who are unable to achieve their goals in another way.
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Interaction is provided in various ways, such as the exchange of printed materials through mail and telex, audio conferencing, computer conference, video conferencing. Distance learning is a promising way to get education by isolated rural students, students with specific requirements or people who are unable to achieve their goals in another way. It is significant that the benefit of acquiring information from outside makes distance learning preferable for working adults, those who find that the mass and routine of learning is unacceptable to him.

You can define distance education as an education characterized by five main points:
1. The existence of the teacher and student and, at a minimum, the existence of an agreement between them;
2. Spatial separation of the learner and the learner;
3. Spatial separation of the student and the educational institution;
4. Bidirectional interaction of the student and the teacher;
5. Selection of materials designed specifically for distance learning.

Thus, we can say that distance education is a process of transferring knowledge (the teacher and the school are responsible for it), and distance learning is the process of obtaining knowledge (the student is responsible for it). By the method of obtaining educational information, they distinguish: synchronous training systems (on-line systems, in real time) and asynchronous systems (off-line systems). Synchronous systems involve the simultaneous participation of students and teachers in the training process. Asynchronous systems do not require the simultaneous participation of students and the teacher. The student himself chooses the time and lesson plan. Mixed systems that use elements of both synchronous and asynchronous systems.
Scientists identify the following advantages and disadvantages of distance learning:

The benefits of distance learning:
1. The student chooses the time and place of study;
2. Access to educational materials via the Internet from anywhere in our country;
3. Study will not interfere with work;
4. Flexible training periods;
5. Helps reduce travel costs to and from the place of study;
6. You can conduct training for many people.

DISADVANTAGES OF DISTANCE EDUCATION:
1) There is no person nearby who could emotionally color knowledge, this is a significant minus for the learning process;
2) The need for a personal computer and Internet access;
3) One of the problems of training remains the problem of establishing the identity of the user in the verification of knowledge. It is impossible to predict who completed the work;
4) For distance learning self-discipline is necessary;
5) The high complexity of developing distance learning courses.

METHODOLOGICAL FEATURES OF DISTANCE LEARNING:

Distance learning should be considered as a special type of learning, which is characterized by certain goals, functions, principles, and ways of interaction of subjects of the educational process. The difference between distance learning and distance learning is that distance learning is designed to provide the maximum interactivity of the educational process, which involves interactivity between the trainee and the teacher, as well as feedback between the trainee and the teaching material, as well as the possibility of group training. The presence of feedback allows the learner to receive information about the correctness of his progress in the process of obtaining knowledge, as well as to carry out self-control, self-esteem in this process.

The main goals of distance learning today are:
1. Vocational training and retraining;
2. Advanced training of personnel in various specialties;
3. Preparing students for individual subjects for exams externally;
4. Preparing students for admission to educational institutions of a certain profile;
5. In-depth study of topics, sections of the studied disciplines;
6. Bridging the gaps in knowledge, skills, and skills of trainees in certain disciplines;
7. Basic course of the curriculum for students who are not able to attend full-time classes for various reasons;
8. Continuing education on interests.

The planned results and content of distance learning to coincide with the results and content of full-time study, the difference lies in some principles of training, as well as in the forms of presentation of educational material and in the forms of interaction between the teacher and students and students.

Of course, distance learning should be built in accordance with all didactic principles that take place in modern pedagogy: objectivity, science; the connection between theory and practice; consistency, systematic; availability with the necessary degree of difficulty; visibility and variety of methods; consciousness and activity of students; the strength of the assimilation of knowledge, skills. But there are specific principles of distance learning.

We can distinguish the following specific principles of distance learning:
1. The principle of interactivity. Distance
learning should provide interactive interaction between all its participants.

2. The principle of openness. Anyone should have access to receive distance learning of his choice.

3. The principle of flexibility. The course of the educational process can be adapted to the individual characteristics of the student, building an individual educational path and giving the opportunity to study at a convenient time.

4. The principle of adaptability. It is ensured through the use of modern information and telecommunication technologies that allow you to adapt the distance learning process to the characteristics of students.

5. The principle of transmissibility. It consists in the possibility of transmitting educational texts, audio and video recordings, and television and computer programs for educational purposes around the world.

6. Customer focus. Distance learning expands access to education for people who, for various reasons, cannot receive full-time education.

7. The principle of basic knowledge. To start distance learning, the user needs to have some basic knowledge. For this, input control is used in various distance courses.

8. The principle of identification. Student identification is part of the overall security activities. Each user of a distance course has their own username and password to access the training on the course. The student is also identified using video conferencing.

9. The principle of individualization. You can study on a distance learning course in accordance with the individual pace and individual educational trajectory.

10. The principle of regulatory training. Distance learning should be subject to certain time schedules, for example, the deadline for students to pass tests, control tasks, etc.

11. The principle of pedagogical expediency of using the means of new information technologies. The means of information and communication technologies used in the process of distance learning should correspond to the learning objectives and contribute to their most effective achievement.

**FORMS OF DISTANCE LEARNING:**

Distance learning, carried out using computer telecommunications, has the following forms of classes. Chat classes - training sessions carried out using chat technologies. These classes 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 these 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.

Web forums differ from the first form of classes by the possibility of longer (multi-day) work and the asynchronous nature of the interaction of students and teachers. Teleconference - conducted, as a rule, 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. Distance learning is a democratic, simple and free learning system. It was invented in the UK and is now actively used by residents of Europe to receive additional education. The student, constantly performing practical tasks, acquires
stable automated skills. Theoretical knowledge is acquired without additional effort, organically interwoven with training exercises. The formation of theoretical and practical skills is achieved through a systematic study of materials and listening to and repeating exercises on the audio and video media for the speaker (if any).

METHODS OF DISTANCE EDUCATION:

Depending on the method of communication between teachers and students, distance learning methods are distinguished:

- A teaching method through the interaction of a learner, consulted or rehearsed with educational resources with the minimum participation of teachers, tutors, consultants, scientific and technical leaders (self-training). To implement this method, teachers and tutors create and select various educational resources: printed, audio and video materials, as well as textbooks delivered via telecommunication networks (interactive databases, electronic publications and computer training systems).

A method of individualized teaching and learning, which is characterized by the relationship of one student, a consulted student or a schoolboy, a client who needs scientific and technical services, an applicant for a scientific degree with one teacher, tutor, consultant or scientific and technical supervisor (one-to-one training). This method can be implemented in distance learning mainly through technologies such as telephone, voice mail, fax, e-mail, Skype.

- The method based on the presentation of the teaching material by the teacher, while the trainees do not play an active role in communication (one-to-many training). This method is used by a teacher, tutor, consultant, when the trainees and consultants are a whole group, they are approximately equally prepared and the result is the same for everyone. For example, this happens when a student is trained as a tutor when entering a university, or when counseling students in various disciplines. This method, which is characteristic of the traditional educational system, is gaining new development on the basis of modern information technologies. Thus, lectures recorded on audio or video tapes, read on radio or television, are supplemented in modern distance learning by so-called electronic lectures, distributed on computer networks using bulletin board systems. An electronic lecture, which is prepared and selected by teachers, tutors, consultants, can be a selection of articles or excerpts from them, as well as educational materials that prepare students for future discussions.

A method that is characterized by active interaction between all participants in the educational process (many-to-many training). This method is focused on group work of students and is of most interest for distance learning. It provides for the widespread use of research and problematic teaching methods. The role of the teacher in such training is reduced to the fact that he sets the topic for students, schoolchildren or for applicants for scientific degrees (poses a learning task), and then he must create and maintain such a favorable communication environment and psychological climate in which students can work in cooperation. The teacher is responsible for coordinating, managing the course of discussions, as well as preparing materials, developing a work plan, discussed issues and topics. The project method involves an integrated learning process that allows the learner to show independence in the planning, organization and control of their educational and cognitive activities, the result of which is the creation of a product or phenomenon. The project method is based on the development of
cognitive, creative interests of trainees and the ability to independently shape their knowledge.

The method of problem-based learning is based on the consideration of complex cognitive tasks, the solution of which is of substantial practical or theoretical interest. In the process of problem-based learning, students’ attention is focused on important problems, they stimulate cognitive activity, and contribute to the development of skills to solve these problems. The role of the teacher comes down to observation and support, but no more. The research teaching method is characterized by the presence of clearly defined goals that are relevant and significant for participants, a well-thought-out and well-grounded structure, widespread use of an arsenal of research methods, the use of scientific methods of processing and presentation of results.

CONCLUSION:

Distance learning is a special type of training, the main feature of which is the interactivity of the interaction of all participants in the educational process.

The presence of a teacher is not necessary, since distance learning is a process of independent study of the material. With distance learning, a personality-oriented approach to learning is implemented, the maximum individualization of learning occurs. Distance learning is characterized by both general pedagogical didactic principles of teaching and specific principles. The use of new information and telecommunication technologies allows the interaction of distance learning participants regardless of their location using e-mail, chat, forum, video conferencing, webinar, online seminar.

The methodological feature of distance learning is that the assimilation of knowledge, skills and abilities provided by the curriculum is not carried out in traditional forms of training (lecture, lessons, seminars, etc.), but through the student’s independent work using various means - information carriers. At the center of the distance learning process is not teaching, but teaching, that is, the learner’s independent cognitive activity in mastering knowledge, skills. At the same time, the student must not only possess computer skills, but also the methods of working with the educational information that he encounters in the process of distance learning.

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