



THEORETICAL MODEL OF DISTANCE LEARNING

Sabirova U.Sh.¹, Khudoyberganov Sh.K.²

¹ *Tashkent University of Information Technology named after Muhammad al-Kharazmi, Tashkent, Uzbekistan, ullibibi1974@mail.ru*

² *Tashkent Technical University named after I. Karimov, Tashkent, Uzbekistan, shavkat66@mail.ru*

Abstract. A distance course is a training system in which both a teacher and a student are present. This is training, not self-education. The teacher in this system performs the inherent functions of managing the learning process. Each training system is built on a specific didactic concept, which determines the selection of content, methods, organizational forms, teaching aids. When designing a distance course, it is necessary to analyze the theoretical possibilities both in the form of teaching aids and in the form of the technological basis for the formation of the educational environment. This article presents possible theoretical models of distance learning.

Distance learning is an educational system that provides a complex of knowledge, skills and abilities with the help of distance learning technologies. In the transition to competency-based education, distance learning (DL) is an adequate reaction of the education system to a social order. DL is an educational system, the emphasis of which is transferred to knowledge - understanding - skills, as a result of integration of which competence is formed – the ability and readiness of the person for a particular activity.

DL is a synthetic, integral, humanistic form of training, based on the use of a wide range of traditional and new information technologies and their technical means, which are used to deliver educational material, study it independently, and organize dialogue between the teacher and students when the learning process is not critical to their location in space and in time, as well as to a specific educational institution. Distance learning, based on the use of Internet technologies, performs a number of new functions and involves the implementation of certain principles, among which the principle of distributed cooperation, integration, and entry into the global online educational community is important. Distance courses are one of the most convenient forms of training for those people who, for a number of reasons, cannot attend classes in person, for example: adults who want to change their specialty or improve their qualifications, for those who are limited in time or because of health. In distance learning, various information and communication technologies are used (most often a combination of different technologies). Moreover, the use of each technology depends on the goals and objectives facing the distance course. For example, traditional print-based learning tools are used to introduce students to new teaching material, interactive audio and video conferencing provides real-time communication, computer conferences and email are used to send messages, provide feedback to students, as well as for ongoing contacts between students of the same group. Pre-recorded video lectures will help students visualize the content of the training material [1].

One of the possible theoretical models of distance learning is a methodological training system, which consists of five interconnected components: the goals and content of training, methods, forms and means of training.

The goals of training are traditionally considered as the acquisition by a student of a system of skills and knowledge that are formed according to the model of a specialist. The model of a specialist is a certain set of requirements that a practitioner makes for a graduate and which must be adequately reflected in the educational process. Learning objectives should be presented very accurately and definitely so that it is possible to unambiguously draw a conclusion about the degree of their implementation. This not only facilitates the control, but also allows you to determine sufficient methods and forms of training to implement these goals.

The content of training is defined as pedagogically sound, logically ordered and textually recorded in the curriculum scientific information about the material to be studied, presented in a collapsed form and defining the content of the future specialist to achieve the learning objectives. In other words, the content of the training is a pedagogical model of social order, which is described by the curriculum, state curricula, educational material for each discipline.

Under the method of training a particular academic discipline in a university is understood the ordered methods of the interconnected activity of a teacher and a student, aimed at achieving the learning objectives. Closely connected with this concept is the concept of “learning technique”, which is considered as an integral part of the method, and each method is implemented as a set of techniques. On the problem of classifications of teaching methods, there are many works whose authors have adapted a number of existing teaching methods for the university. Classifications are distinguished, based on the following features:

- Sources of knowledge (verbal, visual, practical teaching methods);
- Methods of logic (analytical-synthetic, inductive, deductive teaching methods);
- Type of training (explanatory, illustrative, problem-developing teaching methods);
- Level of cognitive independence of students (reproductive, productive, heuristic teaching methods);
- Level of problematic (indicative, monological, dialogical, heuristic, research, algorithmic, programmed teaching methods);
- Didactic goal and functions (methods of stimulation, organization and control);



– Type of teacher’s activity (presentation methods and methods of organizing independent educational activities), etc.;

– Despite such a variety of approaches to the classification of teaching methods, each of them is most effective under certain conditions of the organization of the learning process, when performing certain didactic functions [2].

Organizational forms of training are ways of interaction between students and the trainer, within which the content and teaching methods are implemented. Among the many organizational forms of training, the following groups stand out:

– Training systems (lecture-practical, lecture-seminar training system);

– Training methods (individual, individual group, group training);

– Types of educational activities of students (individually-isolated, steam, group, collective forms of organization of training);

– Forms of organization of educational work (lectures, practical classes – a seminar, laboratory work, workshop, – research work, industrial practice).

Mean of training is defined as a material or ideal object that is used by the teacher and the learner to learn new knowledge. According to the didactic function, teaching aids are divided into: information tools (textbooks and teaching aids); didactic tools (educational software, demos); technical training aids (audiovisual facilities, computer, and telecommunications facilities).

With a focused, organized, interactive distance learning process, these components of the pedagogical system have features due to the specifics of this form of training, the capabilities of the Internet information environment.

The technology of modular training is better suited than others for pre-university education, since a module as a unit of training includes all the necessary components of an educational and methodical complex aimed at acquiring skills and abilities to perform any specific professional activity at a given level. The structure of the program of the discipline as an integral part of the specialist’s model and its modular construction allow you to quickly respond to market conditions and social order. This problem is solved by quickly changing (varying) the content of the module. In addition, the use of modular teaching technology is a step towards building the content of teaching disciplines not according to the subject principle, but according to the problematic one, when, using the knowledge gained as a result of studying the totality of modules from various disciplines (different subject areas), the student forms critical thinking own position on the issue under study [1].

As already noted, the methods, forms and means in distance learning are determined by the specifics of the used technological basis (in our case, network technology, in the information and educational space

of the Russian system of open education). But we can highlight the general requirements for them.

Teaching methods should promote the activation of educational and cognitive activities of students, develop the ability to exchange information and form the necessary points of view, help optimally distribute and organize their work, develop the ability to analyze and evaluate their actions and the actions of others [3].

The main form of educational and cognitive activity in distance learning is independent work with teaching materials, the main requirements of which are full provision with all necessary materials, high motivation for learning in accordance with the curriculum, constant monitoring of the learning process, ensuring students interact with each other, ensuring constant contact with the teacher through telecommunications or in person.

Educational technology is a set of didactic methods and techniques used to transfer educational information from its source to the consumer and depending on the form of its presentation [2].

A feature of educational technologies is the advanced nature of their development in relation to technical means. The fact is that the introduction of a computer in education leads to a review of all components of the learning process. In the interactive environment “student - computer - teacher” a lot of attention should be paid to enhancing imaginative thinking through the use of technologies that activate right-brain, synthetic thinking. And this means that the presentation of the educational material should reproduce the teacher’s thought in the form of images. In other words, the main point in educational technologies of preschool education is the visualization of thought, information, knowledge [3].

The educational technologies most suited for use in distance learning include:

- video lectures;
- multimedia lectures and laboratory workshops;
- electronic multimedia textbooks;
- computer training and testing systems;
- simulation models and computer simulators;
- consultations and tests using telecommunication facilities;
- video conferencing.

References

1. Karakozov S.D. The development of the content of training in the field of information and educational systems: the training of an informatics teacher in the context of education informatization / Ed. N.I. Ryzhova: Monograph. – Barnaul, 2005. – 300 p.
2. The module-rating system in profile training: guidelines / Ed. M.V. Ryzhakova. – M., SportAcademPress, 2005. – 362 p.
3. Robert I.V., Polyakov V.A. The main directions of scientific research in the field of informatization of vocational education [Electronic resource]. – Mode of access: <https://www.revistaespacios.com/a17v38n40/17384032.html>.