

THE SIGNIFICANCE OF INFORMATION TECHNOLOGIES IN THE ORGANIZATION OF THE EDUCATIONAL PROCESS

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Abstract. *Today, information technologies are especially widely used in the educational process. First of all, this is due to the informatization of education and the widespread use of electronic aids in traditional and distance learning processes. The article emphasizes the importance of using information technologies in the implementation of student-centered and developmental education, as well as in increasing the volume and quality of knowledge acquired by students.*

Keywords: *management, diagnostics, demonstration, computer, tool, project, task, laboratory, system.*

Introduction. The results of the analysis of the state of the teaching of specialized subjects, the state of the existing didactic supply in the educational process showed the existence of a number of imbalances: including:

- modern didactic means of teaching in the teaching of specialized subjects, between insufficient educational and methodological support;
- between teaching on the basis of traditional educational methods and tools and modern requirements for the level of professional competence of a specialist;
- between the need for modern didactic teaching tools in the process of teaching specialized subjects and the insufficiency of such tools.

Based on the above considerations, it can be said that although a lot of scientific and research work has been carried out on the problem of organizing and improving the educational process in higher education institutions, the problem of creating modern didactic tools for teaching specialized subjects in professional educational institutions and their improvement is a special one. not researched. This requires the need to research the technology of creating and using modern didactic teaching tools in the training of pedagogic personnel for professional educational institutions.

Analysis of literature on the topic: The theoretical and practical basis of using information technologies and modern didactic tools in education were studied by A.A. Abdugadirov, U.Sh. Begimkulov, U. Yuldashev, N.I. Taylokov, J. Khamidov, J. Turmatov and others.

Foreign scientists I.V.Robert, A.Yu.Uvarov, A.Bork, M.Clark, D.Khen and others conducted studies on the theory of using multimedia tools in the creation of pedagogical software tools.

Today, information technologies are especially widely used in the educational process. This is primarily due to the informatization of education and the widespread use of electronic manuals in traditional and distance learning processes. Information technologies allow not only to implement personalized and developmental education, but also to increase the volume and quality of knowledge received by students.

Research methodology

N.N. Gomulina considers all computer-based educational tools from the point of view of the pedagogical tasks solved with their help. The classification is based on the type of tools, the level of education, the technologies used, and the organizational forms. Thus, it defines the following classification:

1. Type of product
 - computer textbooks (courses);
 - a set of tasks on the computer;
 - practical computer training;
2. level of education
 - primary school;
 - secondary school (profile and humanitarian);
3. technologies used
 - Multimedia course on disc;
 - telecommunication technologies;
4. organizational forms
 - demonstration for the whole class;
 - individual work;
 - work in small groups.

It is not difficult to see that this classification completely excludes the highest level of education and affects only general secondary education, so the principles of classification are limited only to the needs of secondary schools [1].

The classification of information and communication technologies (ICT) tools according to the methods of their use for educational purposes is given in the work "Information technologies in science and education" [2] published by I.V.Robert and P.I.Samoylenko, in which the following classification of ICT use is proposed.

ICT can be used as:

- educational tools;
- means of improving the educational process;
- means of knowing the environment and oneself;
- means of development of student's personality;
- learning object within the mastering of the informatics course;
- management of information-methodical supply and educational process;
- means of communication;
- experimental results processing and management automation tools;
- automation of the processes of control and correction of educational activity results, test and psychodiagnostic tools;
- tools for organizing intellectual free time.

The classification of software for pedagogical purposes was given by B. S. Gershunsky [3] and reflects the principle of purpose. The author proposes to classify software content for pedagogical purposes according to:

- management;
- diagnostics;
- demonstration;

- generating;
- operational;
- control;
- modeling and others.

D.V. In his research, Chernilevsky proposes to classify computer-based educational tools as follows [4]:

- computer games;
- educational - computer didactic tools;
- course and diploma projects;
- solving problems on the computer;
- computer researcher in laboratory and practical work; didactic computer systems.

Analysis of the works of the above scientists and participation in the objects of the process of learning through electronic resources and their development made it possible to distinguish the following important criteria for the classification of electronic information educational resources:

- according to the educational system
- according to the form of education
- according to the methodological purpose
- according to the form of lesson organization
- according to the type of education
- on distribution technology
- by types of data
- for didactic educational purposes

Analysis and results: Based on these criteria, the classification of information technologies can be made as follows:

1. According to the educational system:
 -) traditional - designed for a traditional system in accordance with the programs and standards of the specific field of science;
 - 2) optional - intended for optional subjects intended for in-depth study;
 - 3) home tutors - for independent work at home;
 - 4) reference - designed for searching reference information on the subject.
2. According to the form of education:
 - 1) individual - intended for direct interaction of the teacher with the student;
 - 2) group - the rooms are designed for working in groups;
 - 3) frontal - designed to ensure that the teacher works with all students at the same pace and with common tasks at the same time;
 - 4) collective - designed to ensure work as a whole team with specific characteristics of interaction with all students at the same time;
 - 5) in pairs - designed for the work of two students.
3. According to the methodological goal:
 - 1) educational - providing new knowledge, forming new practical skills or educational activities, ensuring the necessary level of assimilation of educational material;
 - simulators - used to develop various skills, reinforce or repeat the studied material;
 - 3) controlling - used for self-control or control of the mastery of the studied material;

4) information-seeking - not only provides information, but also forms the skills and competencies of information summarization;

5) imutational - demonstrates real processes or objects to study their meaningful or functional properties;

6) demonstration - exhibits for the purpose of studying and researching the studied phenomena, objects, processes;

7) educational games - used to create game situations for educational purposes;

8) modeling - allows to model events, objects, processes for the purpose of their research and study.

4. According to the form of organization of the lesson:

1) lecture - intended for work in lectures;

2) laboratory-practical - intended for the organization of seminars, laboratory and practical work;

3) scientific research - intended for conducting scientific research;

4) independent education - designed for independent learning;

5) assessment – intended for organizing assessment classes (test, exam);

6) organization of conferences - the conference is intended for organization of education in the framework of communication.

5. By types of training:

1) explanatory - illustrative - intended for the perception of information in a form that ends with visualization;

2) problem-based - developed on the basis of the theory of problem-based education aimed at developing logical thinking, independent research and research activities;

3) developmental - aimed at the optimal development of students, work at a fast pace and at a high level, targeted and systematic training;

4) programmed - focused on creating an individual study plan depending on the student's basic knowledge and skills;

5) remote - directed remotely to the maximum extent in individual and independent work;

6) joint training. - combines different types of learning elements.

6. According to distribution technology:

1) local - intended for local use and issued in the same number of copies;

2) network - designed for network operation

- according to the class of computer networks: global - Internet network, local - for working in a local network;

- according to the presence of interaction between learners: interactive, non-interactive:

3) combined – can be used for local and network modes:

7. By type of data included:

1) textual - contains textual information;

2) graphic - includes graphic elements;

3) sound - includes sound elements;

4) animation - includes elements of animation;

5) interactive - includes interactive models and objects;

6) combined - includes various structural elements

8. According to the goals of didactic education:

- 1) formative knowledge - aimed at forming basic knowledge;
- 2) report data - informational in nature, aimed at transmitting information;
- 3) formative skills - aimed at forming skills and competencies;
- 4) strengthening knowledge - aimed at strengthening basic knowledge;
- 5) control of the level of learning - aimed at controlling the level of learning;
- 6) generalization of knowledge - focused on the process of generalization of existing knowledge;
- 7) improvement of knowledge, skills and qualifications - aimed at broadening and deepening of knowledge, skills and qualifications.

Conclusions and suggestions: The classification allows to choose information technologies that are suitable for the organization of the training, depending on the goals of the educational training, the type of training, the form of its organization, the educational system, educational methods, etc. Knowing the classification of information technologies and using them correctly allows to use these resources more effectively in the educational process and, as a result, to activate it and obtain high educational results.

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