COMPUTER AS A MODERN DIDACTIC TOOL OF TEACHING

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Abstract: *This article discusses video classrooms, their capabilities, and their role in the educational process, which are being established in higher education institutions of developed and developing countries today . Also, computers are considered as modern technical means of education and training.*

Key words: *video class, computer, program, educational process, technical support, electronic education.*

A lot has changed in the education system in recent years . In particular, the standards of education have changed, the range of specialists required by the country has significantly increased the requirements for the level and quality of their training, as the personnel must match the nature and modern tasks of the economic and other reforms implemented in Uzbekistan.

In such conditions, it is clear that the traditionally formed system of teacher education cannot remain unchanged. It needs modernization. This can be achieved through the use of modern media, which has a significant impact here. Therefore, there is a need for new methodological approaches in the development of the latest information technologies and information technology tools [4].

And related skills and abilities acquired as a result of training in educational institutions or as a result of self-education (self-education). Is interpreted as a set [2].

Education, like learning (learning and teaching), can be organized and directed directly or indirectly (indirectly). With direct management , the teacher (teacher) controls the implementation of the set educational goals. In the process of indirectly controlled education, the student uses textbooks, popular scientific books, articles, radio programs, television programs, educational films and other sources of knowledge to understand and enrich the world around him in his independent work. He himself can play a leading role as a result of such knowledge.his own personality. This type of training is called self-training. It involves the individual efforts of the students, is not subject to external supervision and is mainly carried out on the basis of their own independently developed program. Therefore, the main conditions for successful self-education are systematic self-control and self-evaluation [1].

Technical means of teaching (TTU) – a set of technical devices with didactic support used in the educational process in order to optimize the presentation and processing of information. They combine two concepts: technical devices (equipment) and didactic

teaching tools (information carriers), which are reproduced using these devices [3]. One of such technical tools is personal computers.

A modern computer is a universal educational tool that can be successfully used in organizing various content and educational and extracurricular activities. At the same time, it is compatible with the framework of traditional and non-traditional education with extensive use of all elements of educational tools. The computer helps the student to actively participate in the educational process, maintain interest, understand and remember the educational material. In addition, all modern computer equipment helps to use multimedia, that is, as a multi-functional tool. Most of the models produced and put into practice today are interconnected with computers, one of which is a multimedia device. The term “multimedia” refers to the ability to work with information in various forms, not in digital form, as in ordinary computers. First of all, this is audio and video data. Multimedia computers are computers with a set of software and hardware that allow playback of audio (music, speech, etc.) and video data (video, animated films, etc.) [2].

Today, in a number of schools in many developed and developing countries, so-called video classrooms have appeared, which have many conveniences and advantages compared to classrooms equipped with all the technologies available before. The video classroom is very compact and takes up minimal space in the room. Almost no darkening is required, except for direct sunlight through light curtains.

Equipment includes: a large projection TV, computer, printer, VCR, teacher’s TV, miniature homing video camera and hakazo. Videos and all processes performed on the computer are immediately transmitted to the whole class. You can create any simple teaching material on a computer screen and immediately reproduce it on a printer and distribute it to students. For example: given as an individual assignment or individual homework. Any object can be placed under the video camera: handouts, pictures, even medium objects. Everything that the students see, the teacher also sees on the TV screen. This allows all equipment to be used on site. The equipment is installed in such a way that when working with it, the teacher has the opportunity to check the whole class . Any multimedia equipment can be connected to the system, which makes the possibilities of using this class unlimited [3].

Have information centers – media libraries with audio and video books (optical disk albums), computer programs on floppy disks and mini-discs, in addition to printed materials. In media libraries, automated workplaces are being created to work on new technologies of education, creative, multi-purpose use of any information in extracurricular educational and cognitive activities of students, improvement of professional skills of teachers and their continuous can self-educate.

Computer capabilities are important: from a help system to a tool for modeling situations and activities in a virtual world.

Tasks of computer use in education:

- providing feedback during the learning process;

- ensure individualization of the educational process;
- increase the visibility of the educational process;
- search for information from the widest possible sources;
- modeling of studied processes or phenomena;
- organization of collective and collective work.

We can cite the following as the main aspects that should guide the analysis and application of educational computer software:

Psychological – how the program affects learning motivation, attitude to science, increases or decreases interest in it, students do not believe in their abilities due to difficult, incomprehensible formed or unconventional requirements imposed by the machine .

Pedagogical – how well the program corresponds to the established directions of higher education institutions and helps students develop correct perceptions of the world around them.

Methodological – does the program contribute to better mastering the material, is the choice of assignments offered to the student justified, is the material presented methodologically correctly .

Organizational – whether the lessons are planned wisely using computers and new information technologies, whether there is enough time on the computer for students to do independent work [1].

In education, it is desirable to use computers only to ensure the assimilation of knowledge that is impossible or rather difficult to obtain with the help of non-computer technologies. The training should be structured in such a way that the student should understand that he, not the machine, solves the problem himself, and that he is solely responsible for the consequences of the decision made. If the result of the students' work fails at the end of the lesson , they lose interest in the work, so it is necessary to use their work in the lesson to create software products or develop methodological materials.

The most valuable in the educational process are software tools that do not have a clear logical logic of actions, strict instructions, providing the student with the freedom to choose one or another method of learning the material, a reasonable level of complexity and form to help in difficult situations. And tools that provide independent identification.

Means of education used to date, only the computer solves the following problems:

a) adaptation of educational material (depending on individual characteristics of students);

b) multiterminality (simultaneous operation of a group of users);

v) interactivity (interaction between OTV and the student, imitation of natural communication to a certain extent);

d) control of personal affairs of students during extracurricular hours .

Computers are able to solve many of the same methodological problems as traditional OTV. But in the context of computer training, this is done in a more powerful,

sophisticated and high-speed technique. The training is carried out in an interactive (TV – student) mode. Computerized educational materials (educational computer programs) can be more fully and deeply adapted to the individual characteristics of students.

Choosing how to use a computer in the pedagogical process directly depends on the didactic task [2].

Goals and tasks, educational computer programs are divided into illustrative, consulting, simulator programs, training management programs, and operating environments. Some of them are designed to strengthen knowledge and skills, others are aimed at mastering new concepts. There are educational programs that allow students to become direct participants in discoveries, composers or artists.

Programs that implement problem-based learning have great potential. In work and vocational education, programs that model and analyze specific situations are particularly useful because they help build decision-making skills in different situations.

Educational game programs help to form educational motivation, stimulate initiative and creative thinking, develop the ability to act together, subordinate one's interests to common goals. The game allows you to go beyond a specific academic subject, encourages students to acquire knowledge in related fields and practical activities.

Often, several modes are combined in one program (teaching, training, monitoring). When working in learning mode, the program shows learning information on the display screen, asks questions to understand it. If the answer is wrong, the machine will tell you how to find the right answer or give you the answer and ask a new question. In the simulator mode, only the texts of the questions are displayed, a comment is sent with an incorrect answer – the results of the answers are not remembered, and the time to think them over is not limited. In the control mode, the options of the tasks are selected by the computer, the time for thinking is limited, the results are recorded, and in case of mistakes, the correct answer and comment are given. At the end, a list of topics that made an error and are worth repeating is indicated, marked [2].

Thus, the computer performs several functions in the educational process: it serves as a means of communication, a creator of problem situations, a partner, a tool, a source of information, controls the student's actions and gives him new cognitive opportunities.

The methods of using the computer as a learning tool are different: it is the whole class, groups and individually. They are determined not only by the availability or lack of sufficient hardware, but also by didactic goals. If there is only a teacher's computer in the classroom , or if the teacher sets himself the task of finding solutions to problems, formulating problems, etc., he organizes class work on the basis of the computer. In some cases, this approach is more effective than individual student work.

Computer graphic capabilities can be widely used in the education and training process. Computer generated images and animations are used in movies, television shows, commercials, and games. Computer graphics are not limited by their possibilities: graphic objects can appear and disappear, change colors, change direction, turn into other objects,

etc. Any object can be simulated on the screen and tested for realism of operation. Tables, graphs, diagrams, etc. are drawn with the help of graphic programs . With the emergence of the possibility of broadcasting video information through a computer, excerpts from documentary and feature films, music excerpts began to be included in software and methodological tools. There are many different modeling programs. In the classroom and outside of the classroom, you can create educational games on the computer. Events can be tracked through international servers [4].

All these possibilities of computer technology do not reduce the role of the teacher in the learning process. All programs are developed with mandatory active participation of teachers, which predetermines the indirect influence of the teacher on students' independent work with the computer. It is the teacher who, based on the student's individual characteristics, decides what program is appropriate to use at a certain stage of education, determines all the pedagogical , psychological and methodological aspects of the1176tudentt's interaction with the computer .

Teleprojects, teleconferences, distance education are widely used types of computer telecommunications in the educational process. The most popular and most powerful telecommunication network is the Internet.

An exchange of ideas by e-mail on specific topics with the participation of one or more means of telecommunications (telephone, television, videophone, computer telecommunications, etc.).

Form of distance education – education without going to an educational institution with the help of modern information and educational technologies and telecommunication systems. Distance education is part-time education, independent education and independent education, distance education and retraining, mass "open" education [3] .

High in education _ publisher organize to do for computer , multimedia and helper technical from equipment use can , electronic library , cultural information center Create can _ Forms of technology-based extracurricular activities include computer and information technology clubs or associations, photo and film clubs. Modern multimedia equipment is high can be widely used in any public events in education – from lectures to theater performances and festivals, film screenings and competitions .

can be used in all subjects and all age groups of students.

4. Information technologies are used as a means of a holistic pedagogical process to achieve the following pedagogical goals:

Development of the student's personality, preparing him for independent production activities in the conditions of the information society, including (in addition to the transfer of information and knowledge included in it):

- development of constructive, algorithmic thinking based on the specific features of communicating with a computer;

- development of creative thinking by reducing the share of reproductive activity;

- development of communication skills through implementation of joint projects;

- formation of the ability to make optimal decisions in a difficult situation (when working with computer business games and simulator programs);

- development of research skills (in working with modeling programs and intelligent educational systems);

- formation of information culture, ability to process information (using text, graphic and spreadsheet editors, local and network databases).

2. Realization of social order at the expense of informatization of modern society:

• training of specialists in the field of information technologies;

• preparing students for independent cognitive activities with the help of pedagogical and information technologies.

5. Activation of all stages of the educational process:

and quality of education through the use of information technologies ;

and using stimulation tools to activate cognitive activity (most of the listed technologies can be used – depending on the student's personality type);

- deepening of interdisciplinary relations as a result of the use of modern means of information processing in solving problems on various topics (computer modeling, local and network databases).

The same pedagogical goals determine the main directions of information technology development. Today, special attention is paid to the improvement of the following technologies:

- the technology of increasing the efficiency and quality of the educational process due to additional opportunities for learning about the surrounding reality and self-knowledge, for the development of the student's personality;

- educational process management technology, educational institutions, system of educational institutions;

- supervised monitoring technology (supervision, correction of educational activity results, computer pedagogical test and psychodiagnostics);

- communication technology that provides dissemination of scientific and methodical experience;

- technology of organizing intellectual free time, development of educational games.

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