

USE OF MULTIMEDIA TECHNOLOGIES IN TEACHING INFORMATION TECHNOLOGIES

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Abstract:

The article discusses the specific aspects of teaching information technology, the types of pedagogical technologies, and the role of their use.

Keywords: information technology, effectiveness of science teaching, microprocessor, intellectual potential, pedagogical technologies, information culture.

The role and opportunities of teaching using multimedia technologies in the process of education and training are very large.

Multimedia technologies - by increasing the activity between the teacher and the student in the educational process, serve to activate the acquisition of knowledge and develop personal qualities of students. The use of multimedia technologies in chemistry helps to increase the effectiveness of the lesson.

The main basis of multimedia technology is the ability to properly organize cooperation activities between the pedagogue and the student in order to achieve a guaranteed result in the educational process, both of them can achieve a positive result, and learn in the educational process. the student should be able to think independently, work creatively, search independently, analyze, draw correct conclusions by himself, evaluate himself and the group, and the teacher should provide opportunities for such activities and it is understood that it can create conditions (scheme 1).

Multimedia technologies are the final result of a person's intellectual activity, imagination, creative process, discovery in a new or better form than the previous ones.



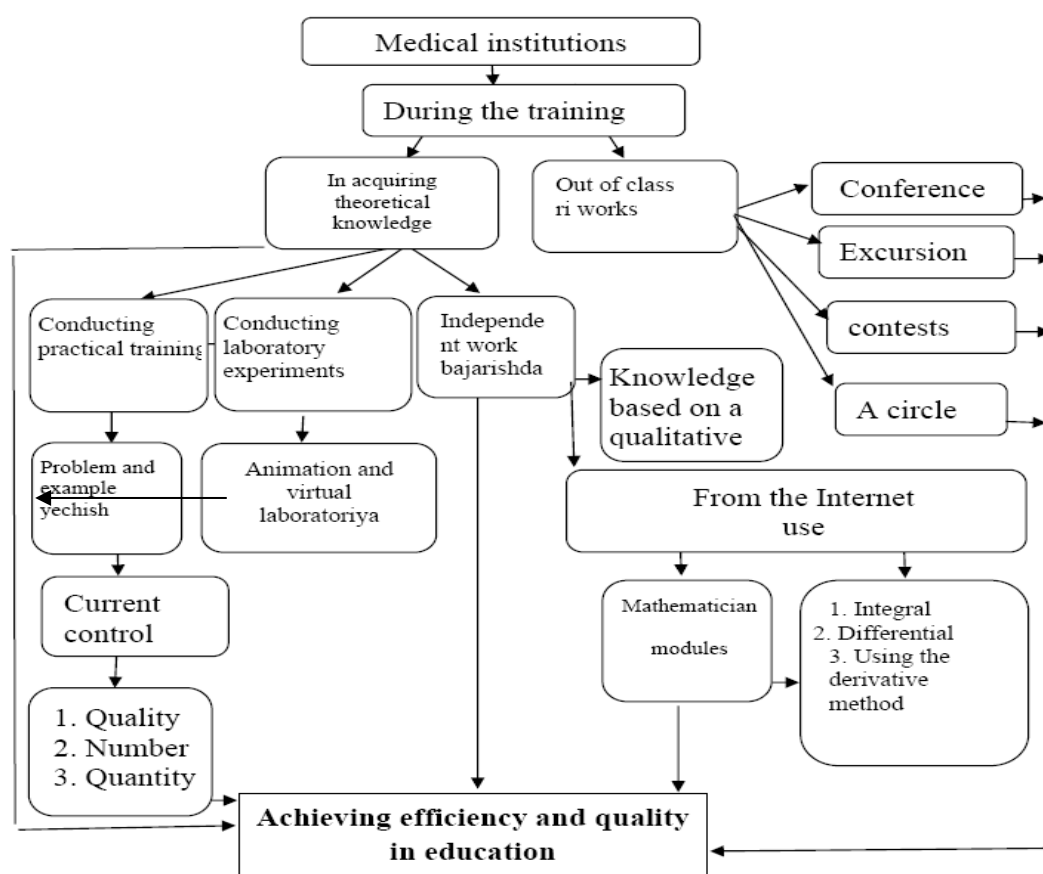
Multimedia technologies are a method based on the use of modern achievements of science and innovative technologies in education.

In the Republic of Uzbekistan since 2010, economic and organizational conditions have been created for the development of educational information, national programs of reconstruction, and the development of telecommunication network development and information resources. The number of computers per capita in Uzbekistan is higher than India, China, and second only to Russia.

The strategic direction of the development of the educational system based on multimedia technologies in modern society includes 3 main tasks:

1. Reforming the education system.

Processes of using multimedia programs in the teaching of information technologies (scheme No. 1)



Scheme 2.1. Processes of using multimedia software in teaching information technology

2. Recognition of the principle of independent activity as the main principle of education and training.

3. Introducing modern information technologies to the educational process.

A person needs to learn throughout his life, that is, education should be continuous. That is why the need for modern information technologies was formed.

Informatization of the field of education of the 21st century is called: teaching process;

it is understood to inform the management of the educational institution and the activities of the educational institution.

In the history of the development of teaching with the help of multimedia programs, two systems can be distinguished: traditional and intellectual teaching.

The main feature of the intellectual education system is that it involves the management of educational activities taking into account the characteristics of all stages in solving educational issues. In the system of intellectual education, individualized education is carried out on the basis of a dynamic model of the student. Such systems provide stability and regularity in the formation of the student's educational activity by providing the opportunity to distribute management tasks between the student and the computer, that is, the transition to independent teaching and learning is carried out optimally.

The rapid introduction of multimedia technologies in the educational system of teaching information technology expands the fields of application of modern technologies. At the moment, in the process of teaching the science of information technology, it is possible to highlight the developing directions of modern multimedia technologies in education:

1. Introducing the capabilities of software tools for educational purposes in the science of information technology as a teaching tool, learning object and information processing tool.

2. Integration of the capabilities of teaching and demonstration tools and multimedia tools in the creation of educational-methodical complexes in the science of information technologies.

The use of such complexes helps the student to gather and store information about the process being studied in the science of information technology, and to reveal the



essence of the laws of processes. The use of training-demonstration complexes based on modern technologies creates a basis for the organization of individual experiment activities. This creates an opportunity for the student to develop intellectual and creative potential in the field of Information Technology and to gain independent knowledge.

3. Achieving the integration of the capabilities of computers and audio-video media in the creation of multimedia systems. Such systems embody a set of hardware and software tools and tools, combine various forms of information and organize interactive communication with the user. The use of multimedia systems ensures the introduction of active teaching methods and forms of information technologies, increases the level of information acceptance.

4. Using the capabilities of the artificial intelligence system to create intelligent training systems. Such educational systems create a basis for organizing the process of independent knowledge acquisition in chemistry, independent assimilation of knowledge, and development of intellectualization of educational activities. All this accelerates the process of student personality development.

5. Use of telecommunication tools that provide information exchange from the science of information technology through global and local computer networks. Telecommunication communication helps to spread advanced pedagogical technologies and general development of students in a short period of time.

6. A new technology of information exchange is a real-time stereoscopic vision system, i.e. "Virtual Reality". The use of such a system in the teaching of subjects such as stereometry, drawing, and engineering graphics will further increase the level of professional training of specialists. The introduction of modern multimedia technologies in the process of teaching chemistry in the educational system includes:

- the student's acquisition of worldly knowledge from the science of information technologies;
- deep mastery of the field of science by modeling the studied phenomena and processes;
- expansion of the field of independent activity of the student due to the diversity of the organization of educational activities;



- to individualize and differentiate the teaching process based on the introduction of interactive communication opportunities;

- shows that the presentation of the studied processes and events by means of multimedia technologies is of great importance as a means of increasing students' interest and activity in the science of information technologies. Modern multimedia technologies develop the student's thinking in terms of information technologies, personal potential and opportunities, aesthetic education, education of information culture, independent assimilation of knowledge, qualifications and skills in educational and information activities.

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