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USING OF MODERN INFORMATION AND COMMUNICATION TECHNOLOGIES IN MATHEMATICS LESSONS

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Abstract:
In this article is discussed about the use of modern information and communication technologies in mathematics classes.

Key words: video, audio, computer, multimedia, radio, television, and innovative form, method, tools, information system, mediatization, information dissemination (cluster) method.

Аннотация:
В данной статье высказываются мнения об использовании современных информационных и коммуникационных технологий на уроках математики.

Ключевые слова: видео, аудио, компьютер, мультимедиа, радио, телевидение, инновационная форма, метод, инструменты, информационная система, медиатизация, метод распространения информации (кластерный).

Since the first days of independence in our republic, the most important part of the process of reforming and renewing the society, the policy of reforming the education sector as a necessary and mandatory condition for democratic changes in society, sustainable development of the economy, and the integration of the republic into the world community has been consistently implemented. Today, the National Personnel Training Program is the only educational system that covers the process of continuous education and upbringing of the young generation. Each part of the education system has a special place.

It is known that the implementation of modern information technologies in education is aimed at organizing the form and means of education, as well as methods, which help to enter the system and quickly adapt to it. Information technologies of education should take a leading place in the social and economic conditions that have arisen. In the speech of the President of the Republic of Uzbekistan at the joint session of the Legislative Chamber and the Senate of the Oliy Majlis of Uzbekistan held on

November 12, 2010, dedicated to "Concerning the deepening of democratic reforms and development of civil society in our country" - "Relying on the experience of the world's leading countries, the improvement of the national system of personnel training and retraining is of decisive importance in the system of measures aimed at increasing the quality and level of activity in the information sector."

The main goal of sequential and step-by-step informatization of the educational system is as follows:

• development of a mechanism for introducing modern information and communication technologies into the educational system;

• creation of an information system of the teaching process, organization of its management system based on modern technologies.

The main tasks in the implementation of advanced pedagogical and information technologies in the educational system, critical evaluation and improvement of the material and technical base of educational institutions are as follows:

• creation of the necessary material and technical base for the implementation of new information technologies in the educational process;

• creation and application of new informational educational technologies for the educational process;

• formation of students' knowledge and skills in the field of modern information and communication technologies;

• increase the efficiency of the education and training process.

Informatization of education is part of the process of informatization of society. This is explained by the importance of information storage, delivery, processing, production and use of information in all spheres of society. Informatization of education is a change of the educational process based on the inclusion of modern information products, tools, and technologies through complex measures in pedagogical processes. Informatization of education means not only the use of computers in the educational process, but also the use of modern methods along with ICT in the educational process, a scientific approach to the educational process and the organization of this process is a direction of science.

At present, in our Republic, the concerted foundations of educational informatization have been developed. It defines the main directions of the work to be carried out in the field of educational informatization:

- wide introduction of information technologies in the implementation of education and training process;

- formation of information culture in students;

- changing the methodology of the educational process by introducing information technologies into the educational system;

- training teachers to organize and conduct the educational process using electronic means, etc.

At the same time, it is planned to raise the use of ICT to a new level in the educational institutions of our republic and further expand the use of digital resources.

The pedagogues of the new generation should have the necessary skills and abilities to use information technologies in accordance with the content of specific subjects. These technologies should be selected based on the individual characteristics of students in accordance with the goals of teaching each subject. At the same time, one should not overestimate the capabilities of computers.

Therefore, the provision of information does not mean the provision of knowledge and culture. Therefore, information technology is considered primarily as an auxiliary tool for pedagogues.

Information technology education is a pedagogical technology of working with information in special directions through software and technical (cinema, audio, video, computers and telecommunication network) means.

Information technology education is an educational process that includes new opportunities for imparting knowledge, receiving knowledge, evaluating it, and forming a student as a person. Remedial education reflects the general development trend of the field of education, deepens the process of integration, broadens the fundamental base of science, increases the importance of universal and universal values, ensures the full development of the student and shows the differentiation of the educational process. Modern information technologies, which are widely involved in the educational process, help in achieving such a goal. The task of organizing and developing the educational system on the basis of information technologies also sets specific requirements for improving the process of teaching mathematics. The effective use of electronic educational resources, the use and transfer of multimedia tools in the teaching of mathematics ensures the fulfillment of the requirements for the modernization of the educational system.

Information Technology:

- creates an open education system that provides each student with a personal education path;
- fundamentally changes the teaching process, forms the systematic thinking of students;
- effective organization of students' cognitive activities in the educational process is achieved;
- the use of a computer for the purpose of individualizing the educational process requires the use of new knowledge tools;
-provides the study of phenomena and processes specific to the micro and macro worlds, internal complex technical and mathematical systems based on the use of computer graphics and modeling tools;
- provides an opportunity to present various physical, chemical, biological, mathematical processes in a size convenient for learning, very accurately at a high or slow speed.

The use of information and communication technologies in the teaching of mathematics provides the following opportunities:

- the use of multimedia opportunities in the teaching of mathematics significantly expands the educational environment, makes the educational process more interesting and enjoyable;
- working with a virtual laboratory helps students acquire practical skills;
- lessons organized using software tools have a significant impact on the mental development of students. The reason is that according to the teacher's task, they learn to independently consider natural objects and create imagination. Based on them, the ability to form mathematical expressions and apply them in practice is formed.

During the use of software tools, students acquire the skills of creative research, analysis of events and processes, as well as independent activity.

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