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USE OF MODERN INFORMATION TECHNOLOGIES IN TEACHING MATHEMATICS

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ABSTRACT

This article presents scientific views on the importance of information technology in mathematics. Scientific opinions are concluded based on facts.

Keywords: math, science, technology, logic, type, gender, computer, information.

INTRODUCTION

I've heard the phrase math as a country without borders several times. Despite its prohibition, there are very good reasons for the math phrase. Mathematics has a special place in human life. Experts point out that a student who masters mathematics well will have a high level of analytical and logical thinking. It develops the ability to make quick decisions, discuss and negotiate, to do things step by step, not only in solving examples and problems, but also in different situations in life. Mathematical thinking also brings it to the level of predicting the course of events that will take place in the future, the course of events that will take place in the environment.

Mathematics plays an important role in the development of human intellect, attention, fostering determination and will to achieve the desired goal, providing algorithmic discipline and broadening thinking. Mathematics is the basis of knowledge of the universe and plays an important role in the development of production, science and technology, revealing the specific laws of events and phenomena around us. That is why mathematical culture is an integral part of universal culture. Achieving the formation and development of the student's ability to apply mathematical knowledge in everyday life, abandoning the approach to teaching mathematics in theory, increasing the focus on demonstrating and activating students' independent thinking skills is the need of the hour.

A competent approach to mathematics education involves the formation and development of practical skills that allow students to act effectively in situations encountered in professional, personal and everyday life, as well as the strengthening of practical, applied areas of mathematics education. The integration of our country into the world community, the development of science and technology requires the young generation to be competitive in the changing world labor market, to master the sciences. This will be ensured through the introduction of standards in the education system, including the teaching of mathematics, based on best national and international practices. Taking into account the unique role of mathematics in our lives, this subject has been included in school textbooks since the first grade. Much attention is paid to the introduction of information and communication technologies. In particular, it is important to connect the subject of education with life, rather

than academic knowledge, to solve practical examples and problems, to engage students in independent research, learning. During the lesson, the student should not feel forced to sit on the desk, but should participate in the lessons with great enthusiasm and strong desire.

It is important that he understands that mathematical knowledge is useful not only in questions and answers or exams, but also at home, in the work process, in sports and the arts, in trade, in trade - in every moment of life. . To do this, the teacher of the subject must connect the topics directly with life and teach to solve an example or problem, assignments using simple situations in life.

In the current era of rapid introduction of new technical means of teaching mathematics, including computer and other information technologies, the use of the achievements of computer science in order to ensure interdisciplinary integration is one of the most pressing issues.

Pedagogical, computer and information technologies are reflected in an integrated system consisting of the organization of the educational process, preparation, provision of scientific and methodological materials, implementation of the educational process, assessment of the quality of educational results.

The introduction of computer technology in educational institutions opens a wide way to optimize the learning process. In the last decade, the use of computers in the teaching of mathematics has been carried out in several main directi

These include computer-assisted assessment of knowledge, development of various types of educational programs, development of cognitive mathematical games, etc. [1]

Another aspect of the convenience of computers in teaching mathematics is the modeling of some learning situations. The purpose of using modeled programs is to ensure that materials that are difficult to visualize are understandable when other teaching methods are used. Using modeling, students can present information in graphical mode in the form of computer multimedia. Therefore, they tend to show significant independence in the in-depth study and learning process of mathematics.

In many cases, a professional mathematician is required to know a certain algorithmic language and programming at the same time as his or her profession in order to solve a mathematical problem quickly and accurately. [2] To this end, in the 90s of the twentieth century, mathematical systems were created that were much more convenient for mathematicians. With the help of these special systems it is possible to perform various numerical and analytical mathematical calculations, from simple arithmetic calculations to solving differential equations with special derivatives, as well as to create graphs.

Methods of using modern information technologies in teaching mathematics. In the current era of rapid introduction of new technical means of teaching mathematics, including computer and other information technologies, the use of the achievements of computer science in order to ensure interdisciplinary integration is one of the most pressing issues. [3]

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knowledge assessment, the design and development of various types of learning programs, the development of cognitive math games, and more.

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The need to express and transmit information is easily addressed with the help of computer technology in speech, writing, fine arts, book printing, postal communication, telegraph, telephone, radio, mirror world and other aspects of production management.

The secret is that much of the information has so far been developed on methods of storing, processing and transmitting all text, drawings, images, sounds in the form of information on computers, mainly on paper, magnetic tapes, ie without being stored outside the computer. .

In computer technology, the ability to perform text, images, sounds, shapes, and other similar work is solved very easily and quickly using special programming. Therefore, the use of computer technology in the teaching of mathematics, physics, chemistry, biology and other sciences is yielding positive results.

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