



## **IMPROVING THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN TEACHING THE SUBJECT OF FUNCTIONS IN SECONDARY SCHOOLS**

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<b>Received:</b> February 6 <sup>th</sup> 2022 <b>Accepted:</b> March 10 <sup>th</sup> 2022 <b>Published:</b> April 26 <sup>th</sup> 2022	This article discusses the advantages of using information technology in the teaching of mathematics and how to increase the visual acuity of the topic through the use of multimedia in teaching the topic of function. One of the main tasks of education today is to enter the modern information society. Information technologies are being actively introduced into the educational process, computer training programs, tests, modeling, presentations are used in the lessons. The computer can be used as a source of educational information, a visual aid, a simulator or a diagnostic and control tool.
<b>Keywords:</b> Information Technology, training programs, tests, modeling	

The effectiveness of the use of information technology in the teaching process is reflected in the teaching of any subject, including mathematics.

Mathematics has been identified as one of the priorities in the development of science in our country. Over the past period, a number of systematic measures have been taken to bring the science and education of mathematics to a new level of quality. As an example, the state support of the President of the Republic of Uzbekistan No. PQ-4387 dated 09.07.2019 on the further development of mathematics education and science, as well as the decision of the Academy of Sciences of the Republic of Uzbekistan V.I. Decisions on measures to radically improve the activities of the Romanovsky Institute of Mathematics and on measures to improve the quality of education and research in the field of mathematics No. PQ-4708 of 07.05.2020.

The use of information and communication technologies in the teaching of mathematics also has a significant positive impact on the quality of education. The existence of an information-educational environment in an educational institution is a norm established by law, which is reflected in the state educational standards. New Generation Standards in Education provide strict and formalized requirements for the information and learning environment.

Foreign scholars Keith Weber and Juan Pablo in the Mejia-Romas Journal of Mathematical Behavior on the advantages of the use of information technology in education and the methodology of teaching mathematics. In the article "The relationship between: inverse functions, field constraints and arc function" he spoke about the methodology of teaching trigonometric functions and the requirements for a teacher of mathematics. There are also data showing that teachers

are better able to respond to pedagogical situations they may face [1]

X.A. Gerbekov, B.S. Kubekova, N.M. Chankayeva's article, "The Use of Information Technology in the Teaching of Mathematics," notes that the use of information and communication technologies in the teaching of mathematics can significantly increase the effectiveness of learning and have the potential to monitor the quality of education. This article proposes mechanisms to increase the effectiveness of teaching through the use of information technology. [2]

Scientists of the Republic are studying the advantages and problems of using information technology in the education system and in the teaching of mathematics. In particular, Umida Umarova's article "Application of information and communication technologies in the educational process" suggests that the use of computer technology in the educational process helps to improve the quality of independent learning, a creative approach to the educational process, the acquisition of new knowledge found its proof. [3]

N. Abduvaliyev in his article "Methods of teaching mathematics with the help of modern technologies" says that the use of information technology in the teaching of mathematics provides visualization of the topic. [4]

This means that the use of information technology in the educational process allows:

optimization and modernization of the educational process;

- diagnostics and management of the learning process;
- organization of various forms of independent learning and education of students;
- information analysis, development of research skills;
- Encouraging students to learn;



The computer allows you to show the change in space or plane in dynamics. This not only helps to better remember the learning material, but also to ensure that the new material is optimally introduced and adapted to the existing knowledge for students. Thus, by consistently shaping the "living thinking" of learning information, it not only uses the natural features of the student's visual apparatus, but also develops his or her cognitive interest. Information and communication technologies are used both in the classroom and in preparation for them. The existence of an information and educational environment in an educational institution is a norm reflected in state educational standards and enshrined in law.[6]

New generation standards in education provide strict and formalized requirements for the information and learning environment. Computer-assisted learning can save up to 30% of time, and the knowledge gained will be stored in memory for a long time. If students accept the given material on the basis of construction, the retention of information will increase by 25-30%. In addition, if the training materials are presented in the form of audio, video and graphics, the retention of materials will increase by 75%. [5]

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