

Modern Methodology of Informatics Teaching

Kutlimuratov Kamaladdin Allabaevich
graduate student of TATU Nukus branch

ABSTRACT

The use of modern information and communications is one of the important conditions for the development of every country. Uzbekistan is no exception. ICT development has a targeted trend towards intensification and diversification, covering all sectors of the economy and public administration. The events of recent years have shown several proofs of the importance of ICT.

KEYWORDS: *informatics, ICT, technology, pedagogical education, methodology.*

The state leadership understands that ICT itself is not the main means of solving many issues of development in Uzbekistan. However, the decisions made in recent years show that the development of information structures and the support of education, the creation of a legal and regulatory environment aimed at the application of knowledge and information can significantly contribute to the development of the country. In this sense, the use of ICT is considered to be a driving factor of development, which was accepted in the report approved by PROON and Uzbekistan in 2000-2004.

The development of ICT is the main factor of improving the life of the population and raising the economic level, and has become one of the main priority directions of the policy of the state of Uzbekistan.

Significant research has shown two trends:

- as a result of isolation, countries do not pay attention to the issues of the new category of "knowledge society".
- the countries that support and use the new policy, that is, ICT, have an important place in development. The speed of integration of Uzbekistan in the developing world economy depends on the rapid modernization of political institutions and management mechanisms, getting rid of the legacy of socialism. In this plan, ICT is the main driving force of the modernization reforms and provides new great opportunities for the economic development of our country.

General use of new pedagogical and information technologies is envisaged in the teaching of science. It is possible to gain deep knowledge only when theoretical information is strengthened by practice and demonstration. That is why the program focuses on practical and laboratory work. It is important to use advanced and modern methods of teaching, to apply new information-communication and pedagogical technologies for students to master the subject of "Modern programming languages". Pedagogical technologies such as "Attack of ideas", "Cluster" method, "Boomerang", "Skorobey", "Tarozi", "Elpigich" technology and others are used in the teaching of science. Textbooks, educational and methodical manuals, electronic materials, handouts, and virtual stents are used in mastering the subject. Theoretical information should be reinforced with practice and demonstration. Practical and laboratory training is conducted with the help of computer technologies.

The beginning of the 21st century is characterized by informatization, globalization and technicalization of all spheres of society's life, which, in turn, determines the principles of further development of science, education, production and management on a global scale. The development of the economy in all countries, the expansion of the work of companies in various fields, the

<https://cejsr.academicjournal.io>

demand for improving the systems of information collection, transmission, and protection, efforts to increase the efficiency of production - all this is the student of the implementation of the processes of informatization of various fields and the application of information and communication technologies in each country. are determining factors.

It is known that there is no other alternative way to solve the issue of development of technical civilization than carrying out informatization on the basis of computer and communication technologies. In the information society, where information is the most important and invaluable resource, the level of development of the country is evaluated by the level of its informatization. It can be noted that today information is considered as the main product of the driving force, and information technologies are an important means of activating and effectively using the information resources of society. Therefore, the issue of rapid development and improvement of ICT has become a strategically important issue at the national and global level.

In the current conditions, the ability of every society and its institutions to collect, process, analyze, and systematize information with the help of modern ICT tools is an important evidence of social and technological progress. As a result of active use of information technologies and communication tools, the concept of information and communication technologies is being used.

The global process of forming an automated information society creates opportunities for human development and effective solutions to many economic and social problems. However, only members of society who have the necessary knowledge and skills in this information field can use this opportunity. Therefore, one of the main tasks of secondary education is to enable the young generation to comprehensively improve the information culture and its ideological level. In solving this problem, the direction of computer science of the school plays an important role. Therefore, it is important to study and analyze the priority problems of the computer science course and its future prospects. Before talking about the problems and prospects of teaching computer science in schools, we need to consider the main problem. That is, to develop students' understanding of the role of informatics as a science and the goals and tasks of its other branches.

By introducing the Internet, social networks, blogs, electronic libraries, electronic books and digital audio-video-photo, mobile phones, instant messengers, IP telephony, PDAs and communicators, in the imagination of modern readers, 20 years ago we were in an information vacuum. we create that we lived, that nothing existed except social, geographical, political barriers.

Informatics is a subject of general education and it should be viewed from a systematic point of view, which is determined by the specific characteristics and tasks of secondary education. The difficulty of accepting computer science as a science is that the problems in it are related to the sciences of physics, mathematics, and astronomy, and computer science is interdisciplinary. Today, children should not be limited only to knowing the existence of a computer, not only to have an idea about it, but also to work freely, to know how to use this technology. Informatics is not about objects or processes, but about the methods, tools and technologies of their automation, creation and operation. This subject provides not only its in-depth study, but also practical application of knowledge and skills for modernization of one's knowledge and optimization of the acquired knowledge.

In informatics lessons, ideas of systematic perception of the world, reform of the general connection of phenomena in nature and social spheres are developed. Its level is mainly determined by the ability to quickly process information and make decisions based on it, which requires additional opportunities for students.

The content of school computer science must meet the development level of the science and the requirements of society to a certain extent. The development of computing technology, first of all, personal computers and their software, is the reason for its spread to all spheres of human activity.

<https://cejsr.academicjournal.io>

This, in turn, shows the need for training and retraining of specialists who are able to deliver computer science to children perfectly, who are able to teach with high-quality information technologies. The emergence of new computer technologies also has a significant impact on the expansion of educational topics within computer science education. Computer technology is developing at such a fast rate that no matter how hard we try, education is always one step behind.

In particular, according to the final conclusions of committees such as ACM and Computer Science, the following topics were considered important in the teaching of computer science, and technical changes made in recent years were taken into account.

Network technologies

Graphics

Database

Use of additional software interfaces

Functionality of the software

Security and cryptography

At the same time, there is another problem in this regard, which is the lack of a clear boundary between the subjects of computer science courses in secondary schools and higher education. For example, if we take the course of learning technologies for working with office programs, the use of these technologies is important not only for universities, but also for educational institutions.

Informatics is increasingly affecting the processes of further development of society. They are becoming the factors that determine the general potential of society and its development prospects. Informatization of society is the most important component of modern civilization. Informatics is becoming the main technically fundamental science of information and information processes in nature and society. From now on, the general educational and practical importance of the school informatics course will continue to grow. This course has great humanitarian potential. It is important in preparing the young generation for effective work in the information society.

References:

1. Muradova N.K., Majidov R.R., Khayitmatov U.T., Makhmudova B.A. Vocational education methodology: Study guide. - T.: TDIU, 2006. - 360b.
2. Novosardova S.A., Gaynutdinova F.Kh., Otajhonov U.A. Methodology of prepodavaniyakursa "Informatics": Uchebnoe posobi e. - T.: TGEU, 2003.
3. Farberman V.L., Musina R.G., Jumaboeva F.A. Modern methods of teaching in higher educational institutions. - T., 2002. p. 118-157.