Information technology in education: opportunities and current issues.

Information and telecommunication technologies are penetrating deeper into all areas of education. This is due to external factors related to the daily information society and the need for training, as well as internal factors associated with the widespread use of modern computer hardware and software in educational institutions, the adoption of state and interstate education informatization programs, increasing the number of teachers. In some cases, the use of information tools not only has a positive effect on the motivation of school teachers, but also helps to increase the learning effectiveness of schoolchildren.
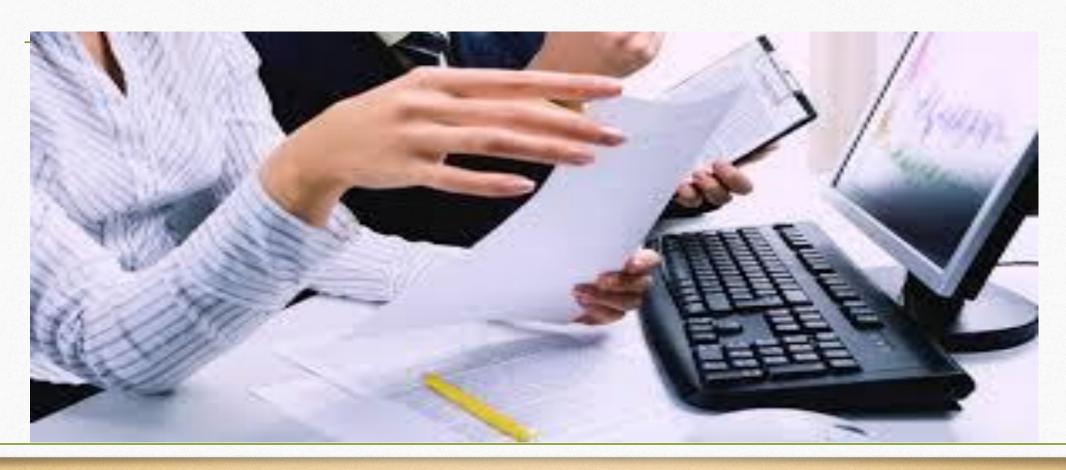
Information and communication technology (ICT is a general concept that describes the algorithm for collecting, storing, processing, transmitting, transporting information and various methods and approaches. that is, the technology of application of information and telecommunication technologies in education, medicine, the military and other areas of human activity. Each of these areas has its own limitations and features of information technology.

- **System programs** include operating systems that interact with computer hardware and the user, as well as various utility or service programs.

- **Application software** includes information technology tools - text, graphics, tabular data, etc. working technologies.

- **With the advent of computer networks, schoolchildren and teachers have a new opportunity to quickly receive information from anywhere in the world. The level of access to global information resources through the main telecommunications network of the internet has become possible. Several billion multimedia documents have been published on a popular internet resource-the World Wide Web.**

- **Telecommunication network The Internet is available and other popular services that allow a person to exchange and communicate information, especially e-mail, ICQ, mailing lists, newsgroups, chat. There are special programs for real-time communication, which also allow you to transfer texts, sounds and videos after the connection is established. These programs allow users to organize individual work with programs installed on a personal computer.**

1.2 Informatization of knowledge as a human activity

Before describing the features of informatization of modern society and its education, it is necessary to focus on the historical background of informatization. The historical process of informatization of society is accurately characterized by a series of information revolutions associated with the emergence of new technologies that emerged in their time.

The information revolution consists of changes in the methods and tools of collecting, processing, storing and disseminating information, which leads to an increase in the amount of information open to the active part of the population. There are six such revolutions.

•

- The first information revolution consisted of the emergence of language and clear human speech

- The second information revolution was associated with the invention of writing. This invention not only ensured the preservation of information collected by human society, but also increased its authenticity and created a wider range of information dissemination.

- The third information revolution arose in the XV century from the invention of book publishing, which was one of the first information technologies. The emergence and development of print media, such as newspapers and magazines, is the result of this third information revolution.

- The fourth information revolution began in the XIX century. At that time, he invented the means of transmitting and transmitting information, such as the telegraph, telephone, radio, and television.

- The fifth information revolution took place in the middle of the XX century, when mankind began to actively use computer technology. The use of computers in the processing of scientific information has radically changed the ability of man to actively and efficiently process information, and for the first time in the history of civilization, man has a highly effective tool to increase the productivity of intellectual labor.

- Today we are witnessing the sixth information revolution due to the emergence of large-scale telecommunications computer networks and their integration with multimedia technologies and virtual reality.