

time, only their description changes over time. It should be noted that in this case, the motivation period increases and becomes cognitive.

This is a necessary condition for the result of learning, because imagination is essential for the creative activity of the student in order to replenish knowledge. Structural convergence of a multimedia presentation with the use of hypertext links develops consistency and the ability to analyze. Thus, the multimedia presentation effectively and effectively corresponds to the didactic purpose of the lesson. In mathematics lessons, you can consider two types of ICT applications:

- multimedia illustrations;
- use the ability of multimedia tools for interactive communication.

When analyzing the basics of the theory of information technology in mathematics lessons, of course, along with the requirements for any subject, subject features should be taken into account.

Computer technologies provide the following opportunities: to gain time in more intensive learning, to make the lesson attractive and diverse, visual, to involve all students in the learning process, to introduce innovations using computer technology, to develop creative abilities and skills of independent work of students.

Сегодня, как показывает практика, при правильно подобранном виде и умении использовать набор информационных технологий, можно достичь необходимого уровня качества обучения.

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## THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE EDUCATIONAL PROCESS

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Training, education and development of the new generation is carried out in an information-rich environment. Information technologies dictate new requirements for the professional and pedagogical qualities of a teacher, for the methodological and organizational aspects of using information and communication technologies in teaching. Today, any teacher has at his disposal numerous opportunities for using ICT tools in the learning process - this is information from the Internet, electronic textbooks, dictionaries and reference books, presentations, programs, various types of communication - chats, forums, blogs, e-mail, teleconferences, webinars and much more. Thanks to this, the content of training is updated, there is a rapid exchange of information between participants in the educational process. At the same time, the teacher not only educates, develops and educates the child, but with the introduction of new technologies, he receives a powerful incentive for self-education, professional growth and creative development. In addition, the use of ICT in teaching helps the teacher to solve such didactic tasks as:

- the formation of sustainable motivation;
- activation of mental abilities of students;
- involvement of passive students in the work;
- increasing the intensity of the educational process;
- ensuring live communication with representatives of other countries and cultures;
- providing the educational process with modern materials;
- accustoming students to independent work with various sources of information;
- implementation of a student-oriented and differentiated approach to learning;

- activation of the learning process, the possibility of involving students in research activities;
- ensuring the flexibility of the learning process.

In pedagogical practice, there is the following classification of ICT tools according to the field of methodological purpose.

In modern conditions, it is not enough for a teacher to be only a user, it is necessary to talk about increasing the competence of a teacher in the field of ICT, which is his professional characteristic, a component of pedagogical skills. In pedagogical practice, a two-level model of information and communication competence of a teacher is proposed:

1) the level of functional literacy (preparedness for activities): - possession of computer programs for processing text, numerical, graphic, sound, video information; - Ability to work on the Internet, use its services; - the ability to use equipment such as a scanner, printer, etc.

2) activity level (realized activity) - the effective and systematic use of functional ICT literacy in educational activities to achieve high results. The activity level can be divided into sublevels: - implementation - the inclusion in the educational activities of specialized media resources developed in accordance with the requirements for the content and methodology of a particular academic subject; - creative — development of own electronic means of educational purposes.

It is the activity level (realized activity) that can lead to qualitative changes in the results of the education system. How to bring a teacher from the level of functional literacy to the activity level? Increasing the information and communication competence of teachers must be implemented within the framework of a single educational institution. There are various projects, advanced training courses, thanks to which teachers can learn how to use information technology in their professional activities. An important role is played by the methodological support of the use of ICT, the generalization and dissemination of pedagogical experience in the field of the use of ICT (conducting seminars, master classes, webinars, etc.). A necessary condition for the effective and systematic use of functional literacy in the field of ICT in educational activities to achieve high results is the internal motivation, the need and readiness of the teacher to conduct lessons using ICT, the conscious transfer of the received theoretical knowledge and practical skills into practical pedagogical activity, the use of ready-made multimedia programs in the educational process, educational resources of the Internet, communication in online communities, the use of social services, the creation and use in the educational process of their own simplest and available software products, educational sites. The use of modern ICT tools in all forms of education can also lead to a number of negative consequences, including a number of negative factors of a psychological and pedagogical nature and a range of factors of the negative impact of ICT tools on the physiological state and health of the student. Most often, one of the advantages of learning using ICT tools is the individualization of learning. However, along with the advantages, there are also major disadvantages associated with total individualization. Individualization curtails the already deficient in the educational process live dialogic communication between the participants in the educational process - the teacher and students, students among themselves - and offers them a surrogate for communication in the form of a “dialogue with a computer”. In the educational process, a modern student has to deal with a huge amount of various educational information. As a result, there is information overload and emotional excitement, which is dangerous for the mental and physical health of the student. The use of information resources published on the Internet often leads to negative consequences. The use of information and communication technologies in education entails many questions that need to be addressed so that the formation of information competence of all participants in the educational process is not painful and thorny, but creative, purposeful and productive. At the same time, one should not forget that computer technology is only a tool that will never replace the living word of a teacher. Today, a modern teacher works with the younger generation, prepares him for life in a new society, which means that he himself must keep up with the times. The degree of success of teachers in mastering new technologies and methods depends to a greater extent on the devotion to the profession, the desire to learn new things, and the interest in self-education.

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## SIGNIFICANCE AND ROLE OF DISTANCE EDUCATION

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Currently, new information technologies are widely used in the education system in Kazakhstan. The use of information technologies and new methods of education through the computer network is expanding. The most important factor in the use of new information technologies in the education system is the main driving force - the person, therefore the basic principles of education must be implemented. In this regard, necessary conditions should be created for the development of the creative potential of a person. The concept of "new communication technologies in the field of education" arises from computer technology and electronic reference systems and people's constant search for new teaching methods. The method of teaching it is changing according to the requirements of time. Nowadays, innovative teaching is widely used in didactics. Innovation is the diffusion and creation of news. The main trend of modern pedagogy was to find a didactic way and means to turn teaching into an industrial-technological process. This search led to the concept of "pedagogical technology". We know that in the 21st century, information systems are flourishing and developing in space, information resources are the main means of development of industry and environment. Smart life is entering a new phase of development, which requires a gradual transition to the creation of new smart learning technology. Transitioning to new learning technology takes a long time. Computer technology, entering the educational environment, leads to the use of tools and methods to improve the teaching process. In terms of services in the area of basic basic education, distance learning opportunities are also being supported by the government. The use of this technology is helping to quickly inform rural areas as well. One of the new methods used in the learning process is the distance learning method.

Distance learning is a form of education using informational tools and scientifically based methods. Distance learning has two components: learning management and self-directed learning.

Education of students will not increase if teachers are not prepared and organized in advance, if software is not provided. Because in order to improve the student's education and progress, we need to improve the teacher's qualification. Distance education improves the qualification of the teacher, forms independent learning of the student, changes the attitude of parents towards new technology.

Advantages of distance education in improving the qualifications of teachers:

- economic, total cost of training will decrease by 40%;
- commercial, distance learning, technology and its application, the demand for which is growing day by day;
- pedagogical, teaching is motivational, interactive, technological and individual;
- ergonomic, remote students and teachers have the ability to set a schedule of time that is convenient for them to work;
- the number of professions of teachers and listeners communicating through communicative, electronic networks is increasing.