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## MODERN TECHNOLOGIES IN THE FIELD OF EDUCATION

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Digital technologies in education arise from the use of digital tools to facilitate interactions between teachers and students, to increase the efficiency of the educational process and to improve the quality of interactions and responses. Digital education creates new opportunities for personalized learning, new models of collaboration are emerging and innovative and stimulating learning strategies are more available than ever before.

Informatization of education means orientation at a new quality of education. The school is obliged to prepare graduates for a successful life and work in conditions of an abundance of information. Information and communication competence should now be available to everyone. This requires updated education standards. The use of information technologies in the educational process stimulates the training of qualified specialists in the development and application of modern technologies. In addition to the main educational function, information technologies contribute to the development of students' creative skills and broaden their horizons. They also allow you to get additional education, start learning new programming languages, use online courses, simulators and communicate on social networks. Information technologies are available regardless of place of residence and age, which makes continuous additional education a reality for everyone. A modern network and software products provide a wide range of opportunities for obtaining knowledge. Information technologies also motivate people to study, conduct scientific research, and create innovative projects and articles. The use of information technologies in the educational process is necessary to prepare students for life and work in the modern information society.

Information technologies should be used in teaching in such a way as to facilitate the teacher's presentation and students' understanding of the material. In addition, it is computer technology that provides sample opportunities to demonstrate the application of this subject in practice. Summing up, we will outline practical consequence of the introduction of information technologies in the learning process. Modern equipment is provided by the students of the training process. This means that the main task of the students is to make the learning process interesting by defining tasks and projects in specific disciplines. Information technologies erase social interaction and communication between students, and the task of the teacher is to create individual tasks that exclude copying information from other people's texts for essays, ab-

stracts and reports, as well as to form group cooperation skills through oral presentations and reports. Unequal access to the Internet and digital resources is another problem that hinders group work and resource sharing, so educators should encourage the use of learning environments with access to libraries, other organizations and technologies.

Information technologies also allow teachers to better organize the learning process, monitor the individual progress of students, and adapt the learning materials to the individual needs of students. In addition, the use of information technology in education helps students to develop computer and Internet skills, which is very important for digital technologies. Thus, information technology makes an integral part of modern education, providing students with access to knowledge and allowing them to learn more effectively.

Distance learning technologies are currently an important tool in the learning system; their role in this capacity is constantly increasing. To support distance learning, special information systems are needed that take over the management of learning. Distance education technologies are the mainstay. Today, information technology is a comprehensive means of mastering the surrounding world by a person. Information technologies in education allow using a wider range of forms and methods of teaching in order to provide a more detailed amount of information due to such an important component of the educational system as visibility, which information technology can provide in full.

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## References:

- 1. Abdeev, R.F. (1994), Filosofiya formatsionnoy tsivilizatsii [Philosophy of information civilization], Vlados, Moscow, Russia.
- 2. Aleshin, L.I. (2011), Informatsionnyie tehnologii [Information technology], Market, Moscow, Russia.
- 3. Zaharova, I.G. (2008), Informatsionnyie tehnologii v obrazovanii [Information technology in education], Moscow, Russia.
- 4. Matros, D.Sh. (2004), Informatizatsiya obschego srednego obrazovaniya, [Informatization of general secondary education], Pedagogicheskoe obschestvo Rossii, Moscow, Russia.
- 6. Sulla, R.V. and Krasovskaya, L.V. (2017), "Information technology in school education", Sbornik statey Mezhdunarodnoy nauchno-prakticheskoy konferentsii [Collection of articles of the International scientific-practical conference], Belgorod, Russia, 521-523.

- 7. Korotkov, N. K. (2008), Informatika v shkole: nastoyaschee i buduschee [Informatics in schools: present and future], Narodnoe obrazovanie, Moscow, Russia.
- 8. Salyaeva, N.S., Zubenko, A.S. and Krasovskaya, L.V. (2017), "The use of information technologies in the educational process", Sbornik statey Mezhdunarodnoy nauchno-prakticheskoy konferentsii, [Collection of articles of the International scientific-practical conference], Volgograd, Russia, 28-31.
- 9. Skakovskaya, L.N., Luchinina, N.A. and Migal, V.V. (2010), "Towards modernization of the educational process", Vyisshee obrazovanie v Rossii, 3, 61-67.