



USE OF MODERN INFORMATION TECHNOLOGIES IN EDUCATION: PROBLEMS AND PROSPECTS

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ABSTRACT

The article presents an analysis of the problem of using information technologies in the field of education: the concept, purpose, types and forms, directions and prospects for use. The structure of the modern educational digital environment is given. The possibilities of information educational technologies in the design and implementation of the educational process, the features of implementation at the present stage of education development and in response to the actual challenges of the time are determined. The educational and upbringing potential of information technologies is revealed. The article is addressed to teachers of higher educational institutions, teachers of the system of additional education, graduate students, undergraduates, students of pedagogical universities, and other workers in the field of education.

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Modern science is developing at an unimaginable speed, spreading its achievements in all spheres of human life. Universal informatization was reflected in the field of education in the form of the introduction, adaptation and dissemination of numerous information technologies at all levels of education, from preschool to university, as well as additional. So, among the global trends in the labor market that determine the education system today are: freelancing, work outside the office or industrial premises; changing the means of communication between employees; changing processes, tools and methods for managing workflows; human-robot, human-artificial intelligence interaction; growth in decision-making speed and data processing technologies; multitasking.

Currently, it can be observed that educational organizations are still in a state of overcoming the traditional problems of the industrial paradigm of education. Training is mainly associated with individual work, an individual assessment system, the issuance of ready-made tasks and initial data, the lack of multitasking and a focus on the correct, the only possible solution to the problem. Learning based on competencies, including the competencies of the future, cannot be built on the educational technologies of the past, which were the most effective and expedient for training specialists in the conditions of the industrial era of the 20th century. The transition to a new educational model is possible only if the educational system is fully integrated into the digital environment.

The global changes affecting the modern educational system include the following: a change in the methods and ways of delivering information and educational content; changing the nature, methods of access to educational content; changing the nature of the interaction of subjects of the educational process; educational content. Over the past decades, educational technologies have undergone significant changes, moving from passive to active, from simply using computers for printing to replacing teachers with robots, the introduction of modern information technologies and the digitalization of information content in general.

Information technology in a general sense is interpreted as a process of accumulation, processing, presentation and use of information by electronic means. In the field of education, information technologies are studied in the context of the term "information and communication technologies" (abbreviated as ICT), since the teacher transmits information through communication (most often through computer means) with a student or pupil. We believe that the concept of "information technology" in the context of the progressive development of technology is much broader than the concept of "computer technology", since the computer is not the only means of using information technology: modern students use a variety of gadgets (phones, tablets, etc.), are included in social networks, which can also be adapted to the learning goals.

The basic goal of using information technologies in the educational sphere is to improve the quality of education, to create effective motivation for students in the educational process. With the help of information technologies, a teacher can clearly and

visually present educational information, create conditions for students to independently search and receive information, control knowledge using computer testing - the potential of such technologies is huge, depending on the teacher himself. The use of information technology contributes to the development of variability, individualization of the learning process, motivates the process of perceiving information and obtaining new knowledge of the student, develops his intellectual and creative abilities. In addition, information technologies have become an integral attribute of the life of a modern person, and therefore their use by students does not require long adaptation, addiction.

The use of modern digital and information technologies in education will improve the role of the teacher and the student in the learning process. The student becomes a more active participant in the educational process, manages it to a certain extent, sets goals for himself (for example, searching for information), learns to operate with a large amount of various information, transform it, and gets the opportunity to model processes. The position of the teacher becomes not so much passive as helping, accompanying, supervising. Together, the use of information technology in education makes the learning process more efficient.

To date, information technology has been widely used in the following areas of pedagogical activity:

1. Development and execution of pedagogical and methodological documentation.
2. Use of Internet resources for professional communication, rapid response to changes in regulatory requirements, feedback.
3. The use of ready-made intelligent learning technologies in the educational process and the creation of their own multimedia didactic materials.

The presented list can be supplemented with technologies of augmented and virtual reality, Internet platforms for the implementation of distance learning, which have recently acquired particular relevance. In general, modern realities in the form of the spread of coronavirus infection have shown the importance of mastering information technologies by both teachers and students themselves. It makes no sense to compare the effectiveness of full-time and distance learning, since each of them has its own specifics and advantages, but their combination in the educational process is definitely the most modern form of education.

Thus, the introduction of information technologies in the educational process contributes to the formation of a fundamentally new form of continuous education, the fundamental basis of which is self-analysis of the self-educational activity of the student, supported by modern ICT tools. That is, information technologies make the education process continuous - the student learns not only in an educational organization, he searches for information, analyzes it, learns the world, even builds contact with the teacher and beyond.

At the present stage of development of society in general and education in particular, information technology is not an auxiliary tool for coordinating the educational process, but

an integral part of the learning process, which has great potential. We repeat, the potential of information technologies in education can be revealed when the participants in the educational process have the appropriate competencies (ICT competencies), the aspirations of the teacher to make the learning process effective, innovative and, accordingly, apply a creative, non-trivial approach to its organization.

It should be noted that informatization and digitalization of the education system is a continuous process and an inevitable trend in the development of modern education, and therefore the teacher must follow the path of acceptance, development of information technologies, and not opposition, rejection. At the present stage of development of education, information technology is one of the basic (rather than auxiliary) methods, forms of education that have great educational and upbringing potential.

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