

## APPLICATION OF INFORMATION TECHNOLOGY IN CHILDREN'S EDUCATION

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### *Анотація*

*В статті розглянуто інноваційні підходи до процесу навчання на основі впровадженні інформаційних технологій в навчальний процес. Показуються переваги використання нових технологій в процесі навчання дітей.*

**Ключові слова:** навчання, інформаційні технології, інформатизація, навчальний процес, навчальні програми.

### *Abstract*

*The article reviews innovative approaches to the learning process based on the introduction of information technologies into the educational process. The advantages of using new technologies in the process of teaching children are shown.*

**Keywords:** education, information technology, informatization, educational process, educational programs.

Currently, the role of information technology in people's lives has significantly increased. Modern society is involved in a general historical process called informatization. This process includes the accessibility of any citizen to information sources, the penetration of information technology into scientific, industrial, public spheres and a high level of information services. The processes taking place in connection with the informatization of society contribute not only to the acceleration of scientific and technological progress, the intellectualization of all types of human activity, but also to the creation of a qualitatively new information environment for society, which ensures the development of human creative potential.

One of the priorities in the process of informatization of modern society is the informatization of education, which is a system of methods, processes and software and hardware integrated with the aim of collecting, processing, storage, dissemination and use of information in the interests of its consumers. The goal of informatization is the global intensification of intellectual activity through the use of new information technologies: computer and telecommunication.

Information technology provides an opportunity to:

- rationally organize the cognitive activities of students during the educational process;
- make learning more effective, involving all kinds of sensory perception of the student in a multimedia context and equipping the intellect with new conceptual tools;
- build an open education system that provides each individual with their own learning path;
- involve in the process of active learning categories of children with different abilities and learning styles;
- use the specific properties of the computer, allowing to individualize the educational process and turn to a fundamentally new cognitive means;
- intensify all levels of the educational process [1].

All the advantages that information technology gives us undeniably facilitate the learning process. The main pedagogical goals of information technology in the lessons develop the personality of the student, which includes: the development of communicative abilities, the development of creative thinking, the ability to make unusual decisions in complex role-playing situations; improving knowledge in experimental activities.

Also, information technology makes it possible to develop game methods and organize training as a collective activity of students. The place and role of information technology in modern society is high, because the role of information is high. Information technologies in education make it possible to diversify the palette of forms and teaching methods for a more detailed amount of information due to such an important component of the educational system as visibility, which information technologies can fully provide.

Thus, the informatization of education leads to the transformation of certain aspects of the learning process. The activities of the student and teacher are being converted to informatization. The student can use a large amount of various information, collect it, process it. The teacher is freed from routine activities and gets the opportunity to explore the learning process, track the development of the student. Basically, teachers are not ready for the transition from established teaching methods to the use of information technology in the educational process. Computers are used mainly as an

additional means of learning.

The use of information technology helps to improve educational activities, increases the quality of the learning process and enhances the effectiveness of students' individual activities. Also, the use of information technologies in the educational process trains qualified specialists in the development and application of modern technologies and means of informatization of education [2].

Today, information technology significantly expands the capabilities of parents, teachers and specialists in the field of early learning. The possibilities of using a modern computer allow to most fully and successfully implement the development of the child's abilities.

Unlike conventional technical teaching aids, information and communication technologies allow not only saturating a child with a large number of ready-made, strictly selected, appropriately organized knowledge, but also develop intellectual, creative abilities, and what is very important in early childhood is the ability to independently acquire new knowledge. The computer is actively entering our lives, becoming a necessary and important attribute not only of adult life, but also a means of teaching children. The use of modern computers in work with preschool children is just beginning. Currently, this is due to the need for significant changes in the system of preschool education. The success of these changes is associated with updating the scientific, methodological and material base of the preschool institution. One of the important conditions for updating is the use of new information technologies.

The computer's ability to reproduce information simultaneously in the form of text, graphics, sound, speech, video, memorize and process data at a tremendous speed allows specialists to create new means of activity for children that are fundamentally different from all existing games and toys. All this makes qualitatively new demands on preschool education, the first link in lifelong education, one of the main tasks of which is to lay the potential for enriched development of the child's personality. Therefore, in the system of preschool education and training, it is necessary to introduce information technology. Practice shows that at the same time, children's interest in classes increases significantly, and the level of cognitive opportunities increases. The use of new unusual methods of explanation and reinforcement, especially in a playful way, increases the involuntary attention of children, helps to develop voluntary attention. Information technology provides a personality-oriented approach. Computer capabilities allow to increase the volume of material offered for review. In addition, among preschoolers, the same program material should be repeated many times, and the variety of presentation forms is of great importance.

Computer programs accustom themselves to independence, develop the skill of self-control. Young children require more help in completing assignments and step-by-step confirmation of their actions, and automated correctness control frees up the teacher's time for parallel work with other children. The use of computer-aided learning tools also helps to develop composure, concentration, perseverance in preschoolers, and empathy. Computer capabilities allow to increase the volume of material offered for review. The bright luminous screen attracts attention, makes it possible to switch the children's perception of audio to visual, animated characters are of interest, as a result, tension is relieved. But today, unfortunately, there is an insufficient number of good computer programs that are designed for children of this age. Specialists identify a number of requirements that educational programs for children must satisfy:

- research character;
- ease for independent occupations of the child;
- development of a wide range of skills and ideas;
- high technical level;
- age compliance;
- entertaining.

The use of multimedia presentations makes it possible to present educational and developing material as a system of bright reference images filled with exhaustive structured information in an algorithmic order. In this case, various channels of perception are involved, which allows you to put information not only in factual, but also in associative form into the memory of children. The presentation of material in the form of a multimedia presentation reduces learning time, frees up children's health resources. The use of multimedia presentations in the classroom allows you to build the educational process on the basis of psychologically correct modes of functioning of attention, memory, mental activity, humanization of the learning content and pedagogical interactions, reconstruction of the learning process and development from the perspective of integrity.

Thus, the use of computer technology allows to optimize the correctional and pedagogical process, individualize the education of children with developmental disabilities and significantly increase the effectiveness of any activity. In addition, in the process of designing, creating new tasks for correctional and developing classes using a computer and a multimedia projector, the teacher's creative qualities are developed and improved, and his professional competence is growing. The desire of an adult to diversify the activities of children, to make classes even more interesting and informative, takes them to a new round of communication, mutual understanding, develops the personal qualities of children, and contributes to the excellent automation of skills acquired in the classroom at the new communicative stage of pedagogical and correctional impact. Thus, the informatization of education opens up new ways and means of pedagogical work for educators and teachers [3].

## СПИСОК ВИКОРИСТАНОЇ ЛІТЕРАТУРИ

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