

**THE USE OF INFORMATION AND NETWORK TECHNOLOGIES IN  
COMPUTER SCIENCE TRAINING ACCODRING TO THE MODERN  
EDUCATION SYSTEM**

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**Annotation:** In this paper, theoretical foundations of the methodology of teaching informatics and information technologies in higher education are presented. Here are the content of informatics and information technology courses, the analysis of the methodology of teaching informatics and information technologies in higher education, and the specific features of training courses in informatics and information technologies.

**Key words:** computer, methodology, teaching, education, students, informatics and information technologies.

Modern education require the widespread adoption of information and network technologies, which become not just a trend of the times, but a vital necessity, which is why their relevance is caused . The educational process using information and network technologies in the teaching of computer science and ICT is both a means of increasing the effectiveness of lessons and their effectiveness.

Therefore, the choice of relevance of the pedagogical concept is dictated both by the needs of society and the needs of children, who want to acquire new knowledge and apply them in the changing conditions of modern reality.

Most students find it difficult to maintain attention throughout the lesson process, which makes it difficult to remember.

Computer science and ICT - a subject where the traditional component - a textbook and an electronic component - a computer, which is a powerful means

of helping people to comprehend many knowledge and laws, is inextricably linked.

The course of computer science and ICT is designed to:

- provide basic knowledge of students;
- develop logical thinking, which is a necessary part of the scientific worldview;
- to form ideas about the nature of information and information processes;
  - introduce students to modern information technology; seek, analyze, critically evaluate, select and transmit information; design objects and processes, plan your actions. The teacher faces the problem of developing information literacy and thinking of students through the introduction of information and network technologies.

The purpose of pedagogical activity is the formation of an informational culture of students, the development of skills in organizing independent educational and cognitive activities, focused work with information, the education of an active, creative person who owns modern information and communication technologies; understanding of the nature of information processes and relationships.

To successfully achieve this goal, you must create the following tasks:

1. Create conditions for students to obtain strong knowledge of the subject, using modern educational technologies and effective organizational forms of educational activity.
2. Promote the development of information literacy, visual-figurative and logical thinking, attention and memory.
3. To nurture an information culture, instill a steady cognitive interest in the objects and processes of the world.

In computer science lessons, non-traditional forms should be used as widely as possible. Lessons using a computer network (not only local, but also global) are not traditional, which means they are interesting for children. In students' training, network interaction is manifested in such forms of training organization as testing, creation and participation in quests, game technologies in teaching computer science in elementary school via the network, receiving tasks in practical lessons, collecting information when working with groups on projects, network competitions, contests, quizzes. Very effective participation of children in modeling objects, creating project activities. In computer science lessons, telecommunications act as a subject of study, a learning tool, a form of control, a way of communication. The local network in the computer class allows all students to individually work with electronic tasks, to perform the proposed tasks.

First, basic theoretical knowledge is needed that aims at a common perception and understanding. For this, children can use electronic textbooks, which contain theoretical material on all topics, assignments for practical work and assignments for organizing the final testing.

Given the characteristics of students, with unstable attention, I present all the information of the theoretical lesson in the form of a media presentation. Using a multimedia projector and an interactive whiteboard, I demonstrate to students various educational elements of the content of the lesson, I introduce new technological methods. Using educational media presentations that add new colors to the story, dialogue, solution of problem situations. Presentations have clarity and expressiveness, it is an excellent didactic and motivational tool that contributes to better memorization of educational material. With their systematic use, the productivity of training increases.

The use of ICT tools makes it possible to change activities, which helps to relieve fatigue and stress, since the middle classes are characterized by disorganization and mobility. In addition, ICT allows you to expand the horizons of students, teaches you to think, increases interest in the subject, shows the importance of the science of computer science and ICT.

The use of an explanatory and illustrative method in teaching with visual support on slides gives the effect of better perception, memorization and logical alignment of educational material. Schemes and supporting notes contribute to the assimilation, understanding and systematization of the lesson material, which further helps in solving practical problems.

Of course, it is necessary to forget about the health-saving technologies of the Federal State Educational Standard, which includes the inclusion in the content of a healthy lifestyle of a child of the ability to regulate their leading activities - learning, communication, cognition, social practice - and formulates the requirements for the formation of students' means of its conscious self-regulation. The task of the modern educational is to develop students' self-learning, self-education, self-development skills as a tool for students to design individual learning paths. The students are expected to develop universal educational actions as a means of self-acquisition throughout life of knowledge about a healthy lifestyle, their updating and application in non-standard life situations.

It is very important to rely on the existing knowledge of students from their life experience, and the opportunity to show them their level and erudition in other subjects. This is how one of the didactic principles of teaching is realized - communication with life and establishes continuity in learning.

### **Literature**

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