

## ASPECTS OF THE FORMATION OF INFORMATION COMPETENCE OF PRIMARY SCHOOL STUDENTS

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### ABSTRACT

The article reveals aspects of the formation of information competence of younger students, the need to use information and communication technologies in teaching younger students. It is also proposed to introduce computer literacy lessons into the educational process. The role of information and communication technologies in optimizing the educational process and improving the quality of education in primary grades is considered.

**Keywords:** Computer competence; information; primary school students; information competence; didactic materials; multimedia applications.

### INTRODUCTION

In today's world it is difficult to underestimate the importance of information computer technology. Today, the ways of searching for information, its processing, identification and transmission are very extensive. A junior school student, as a subject of the educational process, due to age-related psychological characteristics, along with the formation of educational activities, the development of intellectual abilities, socialization, the formation of theoretical reflective thinking and other important components of the educational process, must also master the skills of information competence. Information competence implies in this case the ability to use information technologies for identification, processing of information and its transmission. As world practice shows, ICT as didactic materials, elements of reflection, testing and other stages of the learning process are effective levers for the assimilation of material by students. From which it follows that it is necessary to form information competence starting from elementary school.

The current practice of teaching informatics at school is characterized by the following main factors. Firstly, in teaching computer science today, several different programs and textbooks are used, which differ significantly from each other in content and orientation of the presentation of the material, the depth of study of individual issues. It is also important to note that computer science is taught at school by teachers with different levels of professional training, different basic education and school experience. Therefore, the actual content of teaching informatics in each school and the level of requirements of individual teachers for the training of students in this subject is often significantly different.

At the same time, a number of the most important questions of the course, which have significant general educational significance, sometimes remain outside the content of teaching computer science in many schools.

Secondly, at the present time it has become obvious that it is not expedient to teach computer science only at the senior level of school; Now a new structure of teaching informatics in general secondary education is beginning to take shape, within which the basic course, which provides a mandatory general educational minimum for preparing schoolchildren in informatics, should be transferred to an incomplete secondary school. This will require the adaptation of its content and requirements for learning outcomes to the cognitive abilities of schoolchildren of this age.

Thirdly, as you know, the course of informatics was introduced into the school as a means of providing computer literacy to young people, preparing schoolchildren for practical activities, work in the information society. At the same time, the significant general educational potential of this course was not in demand.

At present, one can note a trend of gradual delimitation of the tasks of developing computer literacy and the tasks of studying the basics of computer science, and over time, this trend will apparently increase.

In the context of the mass introduction of computer technology in schools and the use of computers in teaching all academic disciplines, starting from the elementary grades, the skills that make up the "computer literacy" of schoolchildren acquire the character of general education and are formed in all school subjects, and not just in the computer science course. However, it should be borne in mind that the tasks of the informatics course cannot be limited only to the tasks of preparing schoolchildren for practical activities and work. The course of the basics of computer science, as a general educational subject, faces a set of educational tasks that go beyond the applied tasks of forming computer literacy

### **MATERIAL AND METHODS**

There are many definitions of the term "Information" in the literature. Thus, information is information about the surrounding world and the processes taking place in it, perceived by a person or a special device. Messages informing about the state of affairs, about the state of something. (Scientific-technical and newspaper information, mass media - print, radio, television, cinema).

The amount of information is constantly growing, and a modern person needs to navigate in this huge flow of information, synthesize and analyze the data received. The task of elementary school from the first grade is to initiate the development of information competence in students. In world practice, special programs already exist and are actively used, which contain a system for the development of the information culture of younger students, which provides for work on finding explicit and hidden information.

Information competence is the ways of working with information:

- The ability to independently search for information;
- Analyze information;
- Find, process and transmit the necessary information using oral and written communicative information technologies.

Information competence in a younger student can be formed by processing information. For example, working with dictionaries, encyclopedias, historical sources, that is, searching for information in primary sources where the texts are not adapted for younger students. An excellent way to form information competence is also electronic resources with educational material, various simulators and multimedia applications. Conducting lessons using computer technology makes the learning process interesting for the student. K. D. Ushinsky in his works repeatedly mentioned that “teaching, devoid of any interest and taken only by force of coercion, kills in the student the desire for learning, without which he will not go far.”

## RESULTS

Computer literacy for different categories of users and in different cognitive situations is assessed by the level of computer mastery.

According to many researchers, the best prerequisite for eliminating computer illiteracy is working on computers, and starting from a very young age. In the context of the forthcoming mass introduction of computers in schools in the coming years, starting from the elementary grades, the skills that make up the “computer literacy” of schoolchildren acquire the character of general educational tasks and therefore are formed in the course of studying all academic subjects, and not only in the course of computer science.

Computer literacy means the ability to use computers with appropriate software to their advantage in solving various problems; and the ability to make informed judgments on matters relating to information technology.

Information technologies carry a huge potential in the development of the educational process of the student. They give impetus to the development of new forms and methods of traditional types of children's activities, provide information, and, consequently, research and creative activities of the child, thereby carrying out the development of his personality.

Understanding by teachers that information technology at the present stage is a powerful tool for improving the effectiveness of learning and the mental development of students leads to a high rate of introduction of computers in education, including primary education.

## DISCUSSION

The globalization and informatization of society, which originated in the twentieth century, has reached the peak of the need for information adaptation and competence of trained specialists and university graduates and requires a high level of CT proficiency along with general professional skills for the greatest demand in the intellectual labor market. The relevance of this problem for pedagogical universities increases in direct proportion to the results of research in the world scientific community in the field of ICT application as a didactic material to improve the level of assimilation and quality of education. Today, a number of requirements are also set for the student, such as: The ability to select the necessary information from a huge database; to synthesize and analyze the acquired knowledge; Learn at the highest level and be able to apply this knowledge in their professional activities; Be ready to update, develop the acquired knowledge and be ready for lifelong learning, along with endless new products of scientific and technological progress in the field of computer technology, the ability to navigate the ever-increasing flow of information.

The concept of "informatization of education" in 1985 was introduced by the national academician A.P. Ershov, who in his writings emphasizes the need to introduce informatization into the education system, as well as into all spheres of society, as a set of measures and resources for the formation of a progressively developing society. So the course "Fundamentals of Informatics and Computer Engineering" is included in the program of the ninth and tenth grades, in order to get a general idea of the science of computer science, the formation of computer literacy among students. The relevance of the works of A.P. Ershov has not dried up, and today, we see the reflection of the system of "Schools of Young Programmers" developed by him in today's areas of robotics, because the same club of lovers of a young programmer founded by Ershov became the germ for a modern, so popular training system.

Practice shows how effective the use of computer technology, in combination with the existing pedagogical methods of presenting information, is in mastering the material by students, which entails the creation of a better education system and the training of qualified specialists in all areas.

Informatization of education is usually divided into three stages:

The first stage of informatization of education falls on the period from the late 50s and early 60s, when the introduction of electronic computers is widely used in the preparation of students, technical, and then humanitarian areas, where the informatics course was presented as algorithmization, programming and the introduction of elements algebra of logic.

Starting from the mid-70s and up to the 90s, it is considered to be the second stage of computerization. Computer technologies provided as an auxiliary component of pedagogical didactic materials help students to model various tasks and solve them in various scientific fields on the basis of the educational program, and more and more often the system for monitoring and evaluating students' knowledge in this period is becoming computerized.

The modern, third stage of informatization of education implies the full use of powerful personalized elements of computer technology, the use of multimedia computer technologies, the ability to search for information, get instant access to sources of various strategic importance in the world of science, which allows the learning process to become the most flexible, effective, student-oriented, differentiated and high quality at the same time.

But not everything is as positive as it seems at first glance, and there are problems in the computerization of education. Obviously, individualization also has a downside, where important components are lost for the application of pedagogical technologies in which socialization takes place. The dialogue between the student and the teacher disappears, communication disappears, and the desire for interaction within the team disappears - this system encourages interaction between the student, as a subject and a computer.

## CONCLUSION

To date, almost all research is reduced to the high efficiency of the use of computer technologies in the education system, and guided by this, TSPU is also working on the introduction and development of new methodological materials in a multimedia format for elementary school, namely the "Educational and methodological complex on the module methodology of teaching subjects in primary education" and many others.

Creation of conditions for the practical development and application in the educational process of a complex of pedagogical means for the formation of computer literacy of younger students (by using various forms of work - methodological studios, conferences, workshops, etc.).

Work with students is built in the following areas:

- 1) identifying and activating the potential of training sessions in subjects;
- 2) introduction of information technologies into the educational process;
- 3) inclusion in the content of classes of material that makes up the content of the concept of "computer literacy";
- 4) appeal to the personal experience of children;
- 5) integration of traditional pedagogical technologies and ICT;
- 6) development and implementation of school-wide, group and individual projects that contribute to the formation of computer literacy of younger students;
- 7) involvement of students in leisure activities using information technology within the leisure-developing environment of an educational institution and out-of-school educational environment, which implies the connection of the school with institutions of additional education;
- 8) involvement of parents in work with students.

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Thus, computer competence and conducting lessons using information technology makes it possible to activate students' perception, memory and development of thinking.

Analyzing the experience of using multimedia presentations, interactive whiteboards and simulators in working with younger students, which allow them to keep their attention for a long time, thanks to dynamics, sounds, colorful images, by influencing the two most important organs of perception (hearing and vision), facilitate the learning process and assimilation of material. ICTs show effectiveness in the conscious assimilation of knowledge, activate the student's cognitive activity, and with the help of multi-level tasks, organize an individual approach to the student, form research skills, which undoubtedly emphasizes the relevance and need for the development of information competence among students already at the elementary school stage.

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