THE INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE LEARNING PROCESS OF STUDENTS IN THE CONTEXT OF COGNITIVE DEVELOPMENT

INTRODUCTION
The development of modern society, its global informatization and transformation, changes in the forms of management, the introduction of modern intensive production methods require the development of fundamentally new and time-appropriate approaches to the training of a specialist. Such approaches are closely related to information and communication technologies. In modern conditions of intensive development of information and communication technologies, there is a need to create a different educational environment. Nowadays, the issue of using software, methodological and telecommunication means in the educational process of higher education is topical. The development of information and communication technologies is proceeding so quickly that the existing pedagogical research does not have time to analyze new methods, forms and means of teaching natural-mathematical and general technical disciplines. In our country, the process of computerization of education is just beginning. This is due to the emergence of new generation computers and their massive introduction into educational institutions of various types and levels of accreditation.

The growing role of information and communication technologies in many types of human activity quite naturally causes changes in the education system aimed at reorienting the educational process from purely reproductive thinking mechanisms to encouraging students' creative activity, to develop on the basis of proper information support. And also, the inclusion of educational telecommunication projects introduces new methods of work using information technologies into the structure of the academic subject, creates operational support for teachers in the workplace and conditions for research work.

Information and communication technologies greatly change aspects of cognitive development in a child, since a student, in essence and by law, is still a child. Many children feel frustrated with the learning process as too difficult, and this is because, in fact, they do not have the proper cognitive skills to process information. That is, those specific basic skills that ensure successful learning. Additional workload in school, homework, or emphasis on their lack of these skills deepens their frustrations and further exacerbates reading difficulties and learning difficulties. Most schools do not allocate enough funds or time for the one-to-one learning needed for students with cognitive weakness.

METHODOLOGY
To achieve this goal, a number of methods were used in the study of the key aspects of the use of information and communication technologies in the process of teaching students in the context of cognitive development. The study was carried out using the following theoretical methods: systems analysis and synthesis, induction and deduction, comparison, classification, generalization and systematization, idealization and abstraction.
RESULTS AND DISCUSSIONS

A modern person should not have a system of memorized knowledge, but a system of skills and abilities associated with creativity, the ability to update, self-study, to connect to new arrays of information. The future production activity of students graduating from universities and colleges has social significance, since the solution of both technological and moral, ethical, economic, social problems in the world of globalization of the economy, politics and human consciousness becomes necessary for the modern worker. The traditional education system that exists today is not able to radically change the nature of his thinking.

Information and communication technologies of teaching are quite promising for enhancing creative activity. The student moves away from the position of the learning object, the recipient of ready-made educational information, becomes an active subject of learning, he can independently recognize information and even be able to come up with and design the necessary methods of action. At the same time, with all the positive aspects, it should be noted that at present the method of using information and communication technologies in teaching humanitarian disciplines is under development (BORGES, CORADINI, MORAES, 2020; GARBER, HOCHTRITT, SHARMA, 2018; KOKKO, RÄISÄNEN, 2019).

Let’s highlight the key advantages of using information and communication technologies in the student learning system in the context of cognitive development (Ta6н.1).

Table 1. Key benefits of using information and communication technologies in the student learning system in the context of cognitive development

| No | Advantages of Using |
|----|---------------------|
| 1  | increasing interest and general motivation for learning due to new forms of work and involvement in the priority areas of scientific and technological progress |
| 2  | individualization of training: everyone works in a mode that suits him |
| 3  | objectivity of control |
| 4  | enhancing learning through the use of attractive and rapidly changing forms of information presentation, the competition of students with the machine and with themselves, the desire to get the highest mark |
| 5  | mastering the skills of operational decision-making in a difficult situation |
| 6  | an increase in the volume of tasks completed per lesson |
| 7  | intensification of students’ independent work |

Source: Search data.

Scientific and technological progress, the informatization of society in the XXI century necessitated the innovative activity of the teacher. Now society is interested in citizens being able to independently, actively act, make decisions, flexibly adapt to living conditions that are rapidly changing. The preparation of the future teacher will also change. The problem of improving the professional and methodological competence of teachers is relevant not only at the regional, but also at the global level. The change in the paradigm of education in recent years puts before the higher school the requirement to improve the training of future teachers, to develop them as professionals, pedagogically competent, capable of using innovative forms, means and methods of teaching. Continuous improvement of qualifications and the growth of professional skills are of particular relevance in the modern conditions of education reform (VARTIAINEN, PÖLLÄNEN, LILJESTRÖM, VANNINEN, ENKENBERG, 2016; KRYSHTANOVYCH, BILYK, SHAYNER, BARABASH, BONDARENKO, 2021; BORGES, FERRARI, ARAÚJO, MACÊDO, 2020; ). The processes taking place in society, in education, have led to a gap between information and innovative transformations and the level of use of scientific and technological achievements in education, the need to ensure the continuous development of the professional competence of teachers, the lack of systematic postgraduate education and professional development. Every year, the work of teachers is more complex: the content of academic disciplines changes, new means and methods of teaching appear, the flows of information that the teacher must take into account in his work are growing.

The student body is a special social category, a specific community of people, organizationally united by the institution of higher education. Historically, this social and professional category has developed since the emergence of the first universities. The student body includes purposeful people, systematically acquire knowledge and professional skills, who are supposed to be engaged in executive educational work. As a social group, it is characterized
by a professional orientation, the formation of an attitude towards the future profession, is a consequence of the correctness of professional choice, the adequacy and completeness of the student’s vision of the chosen profession. The latter includes knowledge of the requirements of the profession, as well as the conditions of professional activity. The research results indicate that the level of a student’s understanding of the profession (adequately, inadequately) directly correlates with the level of his attitude to learning: the less a student knows about the profession, the lower his positive attitude towards learning. At the same time, it is shown that the majority of students have a positive attitude towards learning (RONKKO, MOMMO, AERILA, 2016; VEEBER, SYRJÄLÄİNEN, LIND, 2015; KULYK, KUZMENKO, TYTARENKO, TSYNA, KHLOPOV, 2021).

Information and communication technologies have become an integral part of the modern existence of man and the world as a whole. They are the basis that largely determines the prospects for social and economic development. Trends in the rapid development of scientific and technological progress encourage teachers to introduce innovative teaching methods and use and adapt these technologies to modern conditions in the educational process.

Informatization of society is a global social process, the peculiarity of which is that the dominant type of activity in the sphere of social production is the collection, accumulation, production, processing, storage, transmission and use of information.

Informatization of society, as noted in modern literature, provides: active use of intellectual potential, constantly expanding, concentrated in the printed fund, in the scientific, industrial and other activities of its representatives; integration of information technology with scientific, industrial, initiating development of all spheres of social production, intellectualization of labor activity; a high level of information services, the availability of any member of society to sources of reliable information, visualization of the information provided, the veracity of the data used (KRYSHTANOVYCH, KOTYK, TIURINA, KOVREI, DZHANDA, 2020). The emergence and development of the information society presupposes the widespread use of information and communication technologies in education, which is determined by many factors.

Any pedagogical technology is information technology, since the basis of the technological learning process is the receipt and transformation of information. Modern information technologies cannot be imagined without the World Wide Web; its services such as e-mail, social networks provide ample opportunities for communication. Live communication is inseparable from information technologies, therefore, at the present stage of development of technical and software tools, information technologies are moving into information and communication technologies (KRYSHTANOVYCH, KRYSHTANOVYCH, STECHKEVYCH, IVANYTSKA, HUZII, 2020; SAMOILENKO, KALIÚZHKA, ONYSHCHENKO, OPACHKO, PUSTOVALOV, ZHUKOV, 2020).

In the socio-psychological aspect, students, in comparison with other groups of the population, are distinguished by the highest educational level, the most active consumption of culture and a high level of cognitive motivation. At the same time, the student body is a social community characterized by high social activity and a fairly harmonious combination of intellectual and social maturity. Taking into account this peculiarity of the student body underlies the teacher’s attitude to each student as a partner in pedagogical communication, an interesting personality for the teacher. The task of cognitive learning is to form in the student such intellectual abilities that will be aimed at active cognitive actions in the process of selecting material for the formation, expression and communication of thoughts in a particular situation. The task of taking into account the individual characteristics of the assimilation of information is transformed into the task of forming a personal cognitive style. Personal style consists in the measure of a person’s intellectual development: the higher the level of intellectual maturity of a person, the more vividly the personal cognitive style manifests itself, it is directly related to cognitive activity. The new reality requires the teacher to help students in the processes of learning and acquiring new knowledge and consciously self-practicing the necessary skills and abilities. This can be achieved through information and communication technologies.
CONCLUSIONS

The modern period of the development of society is characterized by a strong influence of information and communication technologies on it, which penetrate into all spheres of human activity, ensure the spread of information flows in society and form a global information space. An integral and important part of these processes is the computerization of education. Now there is a formation of a new education system focused on entering the world information and educational space. This process is accompanied by significant changes in the pedagogical theory and practice of the educational process associated with making adjustments to the content of learning technologies, should be adequate to modern technical capabilities and contribute to the child’s harmonious entry into the information society. Computer technologies are designed to become an integral part of a holistic educational process, to significantly increase its effectiveness. Therefore, the level of computerization, together with the personnel and methodological support of the educational process, is a decisive indicator for assessing the capacity of not only a modern school, but also a preschool institution.

The use of information and communication technologies in the educational process is one of the newest and most pressing problems in pedagogy. For teachers, a computer can become a powerful technical teaching tool. Using a computer will expand the teacher’s capabilities, create a base for attracting children to computerized curricula. Today, computer programs, games, tasks in their work can be used by all pedagogical workers: educators, music directors, psychologist, educator - methodologist. In many games and programs, there are elements of novelty, unusualness, they use incentives, so children love. The use of computers, multimedia and information technology as didactic tools is used to increase the motivation and individualization of education, develop the creative abilities of children and to create a prosperous emotional background. The use of multimedia in teaching not only increases the speed of information transmission to children and increases the level of its assimilation, but also contributes to the development of such processes as attention, memory, thinking, imagination, speech, develops a sense of color, composition, participates in the intellectual, emotional and moral development of children. The novelty of the computer and interactive equipment is reflected in the expansion and enrichment of the content of knowledge, skills and abilities of the child, in the intensification of the creation of structural complexes of an intellectual and motivational-emotional nature, in the change in the dynamics of the process of mental development. It is important to note that information and communication technologies can be successfully used both in the educational activities of teachers and in managerial, methodological work, the work of a psychologist, storekeeper, caretaker, nurse and for cognitive development.

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The information and communication technologies in the learning process of students in the context of cognitive development

Abstract
The main purpose of the research is to analyze information and communication technologies in the process of teaching students in the context of cognitive development. Every year the issue of ensuring an appropriate level of information services for the educational process becomes more and more urgent. Expanding the influence of information and communication technologies on the learning system is an ongoing and ongoing process. Information and communication technologies are a set of methods, tools and techniques used for the selection, processing, storage, presentation, transmission of various data and materials necessary to improve the efficiency of various activities. The result of our research is to identify the main aspects of information and communication technologies in the process of teaching students in the context of cognitive development.

Keywords: Pedagogy. Students. Learning process. Information technology. Communication.

Resumen
El objetivo principal de la investigación es analizar las tecnologías de la información y la comunicación en el proceso de enseñanza de los estudiantes en el contexto del desarrollo cognitivo. Cada año el tema de asegurar un nivel adecuado de servicios de información para el proceso educativo se vuelve cada vez más urgente. Ampliar la influencia de las tecnologías de la información y la comunicación en el sistema de aprendizaje es un proceso continuo y continuo. Las tecnologías de la información y la comunicación son un conjunto de métodos, herramientas y técnicas que se utilizan para la selección, procesamiento, almacenamiento, presentación, transmisión de diversos datos y materiales necesarios para mejorar la eficiencia de diversas actividades. El resultado de nuestra investigación es identificar los principales aspectos de las tecnologías de la información y la comunicación en el proceso de enseñanza de los estudiantes en el contexto del desarrollo cognitivo.

Keywords: Pedagogía. Estudiantes. Proceso de aprendizaje. Tecnología de la información. Comunicación.