

## INFORMATION TECHNOLOGY IN EDUCATION

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**Annotation.** This article examines the role of information technology in education, improving the quality of classes and students' interest in promoting them through the use of information technology in educational activities, as well as the advantages of multimedia in education.

**Keywords;** information, communication, multimedia, individual, motivational, computer science, audio signal, technology.

**Introduction.** Nowadays, education is impossible to imagine without information technology, which is why we all began to use the term "new pedagogical technologies". One example is that the personal computer has completely changed learning opportunities. The Internet has provided even greater opportunities for the introduction of new pedagogical technologies into the education system.

The reform of the education system in the conditions of Uzbekistan's independence is primarily associated with the introduction of advanced information technologies into the education and upbringing system. As you know, information and communication technologies are associated with discoveries in the field of microelectronics, computer technology (hardware and software), telecommunications and antielectronics - microprocessors, semiconductors and fiber optic cables. These discoveries make it possible to develop and store huge amounts of information, as well as quickly distribute it over communication networks. Connecting computers together and configuring them to communicate with each other allows you to create network information systems using a new powerful technological protocol. They bring people together, their homes and

offices, and develop and complete a huge number of tasks in a very short time. This fundamentally changes the way information is used and the structure of communication. At the same time, computer networks allow you to communicate with all points of the globe. For the education system, this creates new opportunities for communication between teachers and students. The novelty and uniqueness of information and communication technologies lies in the fact that, from the point of view of human development, they can penetrate into almost all spheres of human activity, be used in unlimited spaces and purposes.

**The main part.** The XXI century is the century of information technology. Today, computer technologies are widely implemented in other areas of education, which plays an important role in improving the effectiveness of the educational process and comprehensively increasing intellectual potential. Today, life is unthinkable without mass media, including the Internet. Education is a multifaceted and complex process consisting of mental work, activity and creative thinking of the teacher and students. Improving the effectiveness of classes is inextricably linked with the establishment of an educational process on a scientific basis and the practical application of new pedagogical technologies. The main purpose of organizing innovative activities in higher education institutions is to ensure the consistency of interaction between teachers and the student body, as well as its purposeful establishment. This article examines both pedagogical and managerial issues. It should be noted that participants in pedagogical innovations must acquire methodological, psychological, pedagogical, and technological knowledge about the patterns of the process of emergence, manifestation, and management of innovations, otherwise pedagogical innovations will not be effective. [4]

In our opinion, the effectiveness of managing innovation processes in the education system and the quality of training specialists in higher education institutions, due to the requirements of the national training program, depend on the conditions for the development and implementation of pedagogical innovations, the purposeful application of traditional teaching methods.

There are cases of abandonment of traditional methods, which in some cases turn out to be effective. It's like contrasting innovation with learning that has been tested by experience and continues to produce positive results. That is why it would be better if the positive experience of the traditional education system were adapted to innovation. The concept of "innovative technology" covers ways to improve the acquisition of knowledge by using factors that increase the effectiveness of learning, design and practical application of various pedagogical processes.

"Innovative technologies in the higher education system" refers to the management of the process of creation, acceptance, evaluation, development and practical application of various pedagogical innovations. The fact that the conditions and opportunities created in higher education institutions are adapted for the introduction of the latest innovative models serves as an incentive to enhance the creative activity of teachers and students. [2]

Interest and attention to the application of innovative technologies in the education system is growing every day. One of the reasons for this still lies in the fact that, although educational goals are aimed only at mastering ready-made knowledge, modern technologies teach them to independently search for the knowledge they acquire, and even draw conclusions on their own. Innovative technologies are innovations, changes in the activity of a teacher and a student in the pedagogical process that require the use of interactive methods of its implementation.

Interactive methods are based on the activity of each student participating in the educational process, free and independent thinking. Gaining knowledge using these methods becomes an exciting activity for the student. Through the use of interactive methods, students acquire the skills and competencies of independent work and in collaboration with teachers. Students acquire new knowledge based on scientific research, research, and experiments. They follow the principle of gaining knowledge through science. Participants in the educational process work in small groups. Study assignments are given not to an individual student, but to all members of the subgroup. Each member of the microgroup tries to contribute to the task. This condition creates a sense of

community among students and increases their initiative. The main form of organization of the educational process is an occupation. Currently, various non-traditional forms of classes are being introduced. Such classes contain skills and abilities to develop the student's creative abilities, strengthen his mental potential, expand his scientific horizons, and the ability to quickly and fully perceive every innovation. The use of innovative technologies in the classroom awakens students' interest in scientific research, develops creativity and creativity. As a result, the acquired knowledge, skills and abilities are applied in practice, and the quality of learning is improved. To do this, the teacher must be able to competently and correctly plan the lesson, depending on the content of the topics, to achieve active and conscious work of all students during the lesson. [1]

Thus, innovative activity turns the student and the teacher into partners in the educational process and ensures that the lesson will be interesting and productive. When determining the effectiveness of innovations, it is necessary to focus on the results of students' assimilation of the basics of science.

Currently, information communication tools are widely used in the acquisition of knowledge by students. Working at a computer, searching for and assimilating necessary information from various networks becomes a particularly interesting activity for students. Only in this case perfection of computer literacy is required. It is also an innovative activity that requires students to acquire special knowledge, skills and abilities. It would be nice if, along with teaching students, computer skills were also included in this area. The orientation of innovations in computer networks towards education and upbringing should be the focus of attention of the teaching staff of the higher education system. Pedagogical innovations will be aimed at solving a certain number of tasks. If, along with solid knowledge, the student develops skills and abilities to apply them in practice, effectiveness is achieved when tested by experience, existing circumstances change in a positive way, work is underway on new ideas, a solution to any problem is planned in detail, innovation is thought out on a global scale and will give a guaranteed result. In a similar way, pedagogical innovations solve the task of educating a

comprehensively developed, harmonious generation. Each of the above problems has a global scale and is partially reflected in modern didactics.

Thus, with the help of new information technologies, the lesson should be designed taking into account certain didactic conditions and scientific and methodological circumstances, which are complemented by traditional didactics and information technologies. The most important thing in them is the condition of consistency, which can be solved using a macro - and micro-approach to the problem. In macroanalysis, the projected activity should be considered as part of general education. It is from this that its goals and objectives are determined, that is, the main tasks of science come to the fore. On the other hand, microanalysis requires that the projected lesson be perceived as a single whole consisting of many components of the educational process (teacher, student, educational environment) and the diversity connecting these components (that is why we say "designing" and not "planning" the lesson). At the same time, these dependencies become more complex in comparison with those in traditional education. It should not be forgotten that the lesson, according to its purpose and didactic structure, is a very mobile and flexible type of educational organization, which is in constant development and changing depending on external (availability of material resources, new means) and internal (the state of the main components of the educational process) conditions. Therefore, taking into account the development, the projected occupation should be able to expand and update. [2]

**Conclusion.** It should be noted that the relevance of the principle of informativeness is explained by several factors. Considering from the point of view of computer science the science that studies the principles of search, collection, storage, processing, transformation, distribution and use of information, its patterns, we can liken voluntary pedagogical technology to information technology, because it has a source (teacher), and there is a recipient of information (student). The use of new information technologies in the educational process has radically changed the teacher assessment system, which until recently was measured only by their ability to convey information to the student. Today, the education of a teacher is determined not only by his

communicative abilities, but also by the ability to use a computer as a source of information. In this regard, it is very important to form analytical, projective and predictive abilities of a teacher aimed at assessing the quality of educational electronic resources and the effectiveness of their use in the educational process.

The information presented in the stream should be evaluated on the basis of general didactic principles, such as scientific and simple presentation, ease of learning for the student, etc. The use of modern information and pedagogical technologies in education develops students' curiosity, morality, creativity, communicative and aesthetic abilities to think independently based on hearing, vision, and what they see. In our opinion, the effectiveness of managing innovation processes in the education system, as well as the quality of training specialists in higher education institutions, due to the requirements of the national training program, depend on the conditions for the development and implementation of pedagogical innovations, the purposeful application of traditional teaching methods

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