

POSSIBILITIES OF INFORMATION AND COMPUTER TECHNOLOGIES IN EDUCATION

Gulmatova Hurriyat Sodikovna

Teacher of the Department of "Methods of Exact and Natural Sciences" of the Bukhara Regional Center for Retraining and Advanced Training of Public Education

Today, the development and widespread use of information and communication technologies is a global direction of global development. With the development of new technologies and the rapid growth of the informatization process in the country, special attention is paid to the organization of information resources in the field of education.

For this reason, it is necessary to make certain changes in the organization of teaching process, including the principles of improving the presentation of teaching materials. At the same time, the introduction of modern information technologies in the educational process and their use are the most effective ways to achieve this goal.

In this era of globalization, it is very important that every educational institution, first of all, higher education institutions that train teachers, develop new educational programs and choose the right path in the training of quality teachers. By the way, today in the 21st century there have been great changes in the means of education.

In the traditional model of education, humanity is moving from the concept of "teaching aids" to the concept of "learning environment" in pedagogical practice, and then to the concept of "educational base" and finally the "single information education base" introduced during the development of information and communication processes. The global development of information and communication technologies has led to a sharp interdependence in various aspects of human life, including economic, political, cultural and educational.[1-8]

The possibilities of modern information and computer technology have increased dramatically with the advent of the global Internet and the penetration of humanity's multifaceted activities.

Strategic direction of education system development in modern society – it is the intellectual and moral development of man based on purposeful independent activity in various fields (Fig. 1).

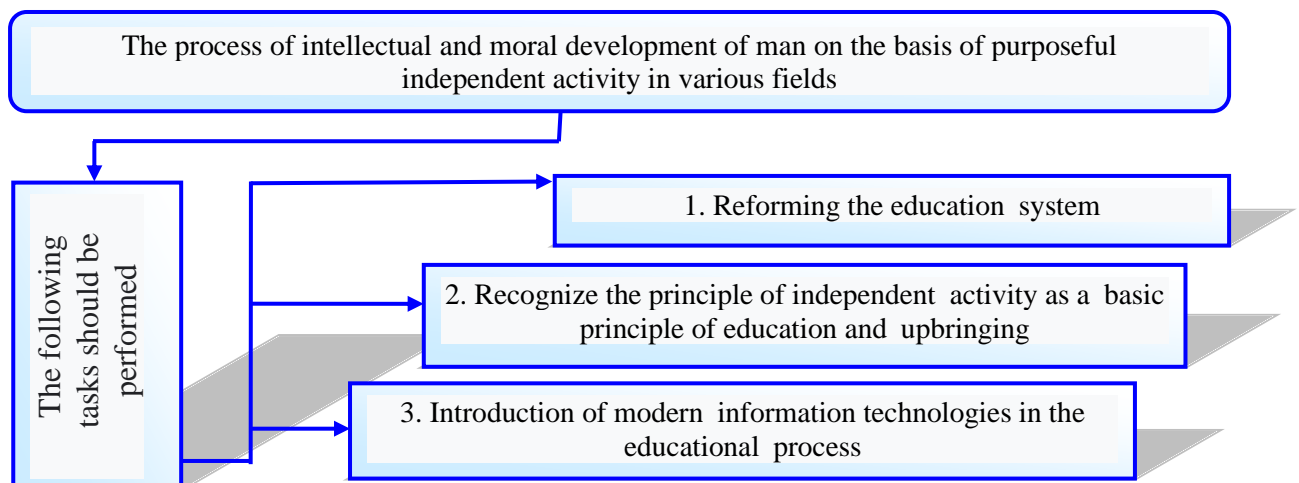


Figure 1. Tasks that are important to be accomplished in the intellectual and moral development of man

The educational process of modern man does not end with a kindergarten, school, lyceum or college, university. A person must be educated throughout his life, that is, education must be continuous. So, continuing education is a requirement of life. That is why the need for modern information technologies is growing.

Development of basic mechanisms for integration of education with science and industry, its implementation, individualization of reading, independent learning, development and mastering of technologies and tools of distance education, acceleration of student learning using a modular system based on new pedagogical and information technologies is one of the urgent tasks.

In today's world, where the demand for highly qualified pedagogical staff is growing, it is necessary to form creative pedagogical staff capable of educating a harmoniously developed young generation in the spirit of universal and national values that have been formed over the centuries.

Fulfillment of such tasks requires the improvement of the existing education system, its development in accordance with modern requirements, in particular, the paradigm of higher education to master modern pedagogical and information technologies, to train teachers capable of acquiring fundamental knowledge of higher education. Indeed, it is no secret that in the implementation of the updated education system, each teacher can organize the educational process at the level of modern requirements only through the constant study of information about their subject and the education of a harmoniously developed generation and the ability to apply them consistently in their work.[9-18]

The formation and development of professional training in students of higher education requires a systematic, comprehensive approach to this process. The future teacher's in-depth knowledge and ability to work effectively depends on the degree to which he has sufficient theoretical and practical knowledge of the basics of science, the ability to effectively use new pedagogical and information technologies in the educational process. Accordingly, the creation of methodological and practical bases for the development and effective use of new pedagogical and information technologies in the educational process determines the basis of our research.

In a modern information technology environment, didactics offers a wide range of educational activities aimed at the independent acquisition of knowledge through the active use of modern information technology. Didactics in this environment develops thinking, individual potential and opportunities, aesthetic education, education of information culture in it, independent acquisition of knowledge, skills and abilities in educational and information activities. Taking into account the above, the pedagogical goals of the introduction of modern information technologies are stated. Information technology improves student in terms of :

- thinking;
- intelligence;
- aesthetic education;
- communicative ability;
- optimal decision-making skills;
- the development of information culture.

The use of modern information technology tools depends on the skills and abilities of users in communicating with them. Therefore, it is important to first know what modern telecommunications means.

The possibilities of modern telecommunications are a very wide system, which includes a number of new concepts in addition to the known computer, multimedia tools, computer networks, the Internet. Examples include information systems, information systems management, data transmission systems, databases, database management systems, knowledge bases, and so on.[19-24]

Today, the development and widespread use of information and communication technologies is a global direction of global development. At a time when new technologies are developing and the process of informatization in the country is growing rapidly, special attention is paid to the organization of information resources in the field of education.

For this reason, it is necessary to make certain changes in the organization of the teaching process, including the principles of improving the presentation of teaching materials. At the same time, the possibilities of information and computer technologies in education, the introduction of modern information technologies in the educational process and their use are the most effective ways to achieve this goal.

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