PSYCHOLOGICAL AND PEDAGOGICAL ASPECTS OF MODERN PEDAGOGY AND THE USE OF INFORMATION TECHNOLOGY

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Abstract. *The article is devoted to the modern pedagogy and information technology have broad didactic opportunities for improving the educational process and the education system as a whole, and the implementation of these didactic opportunities is directly related to solving the important task of changing the existing education system in accordance with the requirements of the electronic educational environment that is emerging in society.*

Keywords: *distance learning, internet information resources, information and communication technologies, E- learning.*

Modern pedagogy and information technologies have wide didactic possibilities for improving the educational process and the educational system as a whole. The realization of these didactic opportunities is directly related to solving the important task of changing the existing educational system in accordance with the requirements of the emerging electronic learning environment in society.

The main requirements for modern pedagogy and information technologies are as follows:

- organization of available resources to ensure the greatest effectiveness of the educational process;
- cooperation with other participants of the educational process;
- continuous collection of information, quick assessment and active use;
- to have the ability to understand and use the relationships between the components of complex pedagogical systems at different levels;
- mastering the skills of modern pedagogy and the use of information technologies, which are increasingly expanding in training.

All these demands are structural means of higher education reform. At the same time, the use of modern pedagogy and information technology in the educational process leads to the following changes:

First, modern pedagogy and information technologies play an important role in forming new content of education, changing organizational forms and methods of teaching:

- intensive use of computers as a means of daily educational work of students and teachers;
- change the content of teaching from traditional subjects and integrate them in the implementation of educational projects;
- development of methods of independent research and research work of students;
- training in collective decision-making methods;
- preparing teachers to work with new content, methods and organizational forms of teaching.

Secondly, the possibilities of global computer networks used within the framework of modern pedagogy and information technologies open up the prospects of daily cooperation between teachers and educational institutions in their own countries and in other countries of the world, and raise the issues of global consciousness formation among students. They encourage the implementation of project work methods, contribute to the development of effective teamwork skills to achieve a common goal, create the necessary conditions for combining the study of computer science with the development of the subject content of other general education subjects.

Thirdly, modern pedagogy and information technologies allow access to an almost unlimited amount of information stored in central databases. This allows teachers to rely on all the stock of knowledge available to the population of the information society when organizing the educational process.

Fourthly, today, most experts believe that teachers' use of modern pedagogy and information technology contributes to fundamental changes in terms of the development of new modern educational subjects and programs. However, their creation takes a lot of time, because it is associated with a change in the traditional way of organizing the educational process.

Fifth, modern pedagogy and information technologies give any educational institutions the opportunity to use previously unavailable information resources: public, public and commercial databases;

specialists working in computer networks in various fields of knowledge;

work in different cultural environments;

electronic conferences where the latest works in the field of science and technology are discussed and these works are carried out in practice;

electronic archives of computer programs;

can work in computer networks, organize and support pedagogues in regular working relationships with other colleagues, learn new things about the peculiarities of teaching relevant academic subjects in other educational institutions;

familiarization with new and alternative author educational programs and textbooks; monitoring new theoretical and practical developments in the field of teaching theory, methodology, pedagogical psychology, pedagogical informatics, etc., etc.

However, the main advantage of modern pedagogy and information technologies as modern information technologies for an educational institution is that they allow you to create a closed electronic information environment at the university, allow teachers and students to work with a computer as a universal means of information processing. The use of modern pedagogy and information technologies is combined with intensive use of regular adaptive automated educational systems, information retrieval systems, multimedia and hypermedia systems, professional text and graphic editors, spreadsheets, databases, etc. The use of a global computer network is naturally combined with the creation of a local network within an educational institution.

Modern pedagogy and information technologies are considered a means to change the forms and methods of interaction between teachers and students, and tools for working with information, and impose on them the acquisition of the following methodological knowledge:

1) Effective use of modern pedagogy and information technologies (preparation of texts; collection, processing and presentation of data obtained during experiments; search for information necessary for research;

2) independent acquisition and use of tools necessary for themselves (preparation for self-learning);

3) they can independently learn the necessary information and tools and be with their colleagues at any time;

4) exchange of skills and experience with pedagogues;

5) better understand the problems that may arise in the process of working with the team;

6) to understand the nature and structure of very complex processes and systems and explain to another listener;

7) collecting and presenting information in various forms (tables, graphs, reports, hypertext, video sequences, etc.);

8) look to the future with optimism, continuous education and self-improvement.

The problem of changing the intellectual and motivational skills of students as individuals from a pedagogical point of view is reflected in the research of E.A. Perevalova, in her research, she emphasizes that the use of computers in the educational process has a significant impact on the nature of students' activities and thus forms their personal competence. E. Bzozovskaya's dissertation work is devoted to solving the problems of determining the interrelationship and efficiency of knowledge acquisition with the help of audio-visual and technical means, the optimal learning strategy with individual characteristics of students [1].

Problems of improving the effectiveness of the educational process with the help of modern pedagogy and information technology were studied by O. B. Hook [2]. Along with the criteria for evaluating the effectiveness of the use of information technology, he developed a methodology for the comprehensive use of computer and telecommunication tools in the management of the educational process during various lessons.

A.A. Voevodin [3] studied pedagogical approaches to creating a knowledge base for IT with elements of artificial intelligence as a prototype of a classic expert system, whose intellectual interface should ensure the involvement of teachers and students in the processes of solving knowledge retention problems. justifying the structure of hypertext and adequately reflecting changes in the field of knowledge.

The analysis of foreign studies on the didactic effectiveness of the computerization of classes conducted by G.A. Kozlova showed that computer educational programs provide each student with successful educational activities in accordance with his level of preparation, capabilities and abilities [4].

Thus, it is impossible to increase the level of individualization of teaching with the help of an electronic educational environment without a deep understanding of the nature of informatization of education by teachers.

The methodology and program of teacher training based on teaching comprehensive knowledge in the field of information technologies proposed by I.V. Maruseva [5], E.M. Leshchenko [6] and other scientists deserve great attention. At the same time, it should be noted that the whole process of teaching and learning involves a systematic way of creating, applying and identifying knowledge from the latest computer and telecommunication tools and taking into account the interaction of human resources.

With this approach to creating an effective e-learning environment, on the one hand, it is appropriate for the pedagogue to develop the scenario and information support for the e-learning

course, relying on computer literacy, psychological and pedagogical foundations, and professional programmers to perform all other work that requires special knowledge and skills[7] .

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