

INFORMATION EDUCATION AS A TOOL FOR DEVELOPING CRITICAL THINKING

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Abstract. *It means that the direction of mutual pedagogical cooperation in the field of information education is aimed at the development of cognitive activity of students, the formation of their skills of searching for scientific information, and the development of critical thinking.*

The article covers the issues of cognitive activity management, development of initiative and independence among students, as well as information search and processing in the field of information education, development of creative activity, development of the ability to select and evaluate the received information.

Keywords: *method, program, tool, information, projector, electronic board, computer, Internet, multimedia, video, sound, text.*

Today, students receive information not only from traditional educational materials, but also through information technologies. An important condition for the effective use of information technologies in the development of critical thinking among students is the creation of the field of information education in higher education institutions.

Local scholars define the concept of information education in different ways. In the pedagogical dictionary edited by V. I. Zagvyazinsky and A. F. Zokirova, the field of information education means the field of education based on the wide use of information technologies (1, 168 p.). The information-education field is defined as a set of systematically organized information, technical, educational-methodological support that is integrally connected with the person as a subject of the educational process (2, 15 p.). The field of information and education is a pedagogical system and its support, that is, it consists of financial-economic, material-technical, regulatory-legal and marketing, management subsystems (3, 113 p.).

S.A. Nazarov defines the field of information education as a pedagogical system that combines information education resources, computer education tools, educational process management tools, pedagogical methods, methods and technologies aimed at forming an intellectually developed socially significant creative person with the necessary professional knowledge, skills and qualifications. determines (4, p. 69).

The analysis of the above definitions allows us to conclude that the field of information education is a part of the educational field of the university, which includes information, technical, educational and methodical support systems, as well as participants of the educational process, which provide various educational processes in a targeted manner. The field of information education is defined as a software-technical complex on the one hand, and a pedagogical system on the other. Therefore, in the development of the field of information education, it is necessary to solve not only information-software-technical problems, but also pedagogical problems, including the problem of developing students' critical thinking. The field of information and education should be built on the traditional basis, which is its logical continuation and development as a pedagogical system.

For our research, the field of information education is of particular importance as a pedagogical system, more precisely, as a part of the pedagogical system of the university, which includes the relevant goals, tasks, content, pedagogical technologies and conditions for the implementation of goals and tasks.

The field of information education of a higher educational institution is formed on the basis of the following principles (5, 34 p.):

- **multi-component**, including teaching-methodical materials, high-tech software, knowledge control system, technical tools, databases and information-reference systems, any type of information warehouses;

- **integrity**, includes the detailed and deepening of knowledge, which is determined by the directions of training of specialists, includes all the necessary sets of basic knowledge in the fields of science and technology, takes into account interdisciplinary relations, the information base of additional educational materials;

- **distribution**, optimal distribution of data warehouses (servers), taking into account the requirements and limitations of modern technical tools and economic efficiency;

- **flexibility**, this information implies the compliance of the functions of the educational sector with the goals and tasks of the educational system, its structure and principles.

Describing the field of information education, we believe that the developed rules are important, but not sufficient for the formation of students' critical thinking. In our opinion, in accordance with the concepts of local scientists discussed above, the principles of cultural compatibility and scientificity should be included among the principles of formation of the field of information education. Based on the rules developed by these scientists, we consider culture as a source and means of self-realization of the student personality based on the properly structured content of education, which ensures the connection between education and life and future professional activity and humanitarian position.

The principle of scientificity means that the content of information corresponds to the level of development of science and technology, the direction of mutual pedagogical cooperation in the field of information education is aimed at developing the cognitive activity of students, forming their skills of searching for scientific information. Management of cognitive activities, on the one hand, implies the development of initiative and independence among students, on the other hand, providing them with pedagogical assistance in searching and processing information, developing creative activity, and the ability to select and evaluate information obtained with the help of humanitarian positions. Teaching critical thinking in information education is effective if students are actively involved in planning and organizing their activities, self-monitoring and self-evaluation.

The developed principles of building the information education field allow to interpret the information education field of the university, on the one hand, as a part of the traditional education system, and on the other hand, as an independent pedagogical system aimed at developing the cognitive activity of students using information technologies.

The use of information technology in the pedagogical system ensures that students participate in determining the purpose, content and structure of the lesson, because they have the opportunity to access various and comprehensive information with the help of computers.

We clarify the concept of "information technologies". Researchers describe information technology as a broad class of disciplines and fields of activity related to the use of computer

technology, including information management and processing technologies (6). Information technology is also interpreted as a system of intellectual and scientific knowledge, methods and tools used to create, collect, transmit, store and process information in the field of science. In addition, information technology is considered as a process that uses a set of means and methods of data collection, processing and transmission to obtain new qualitative information about the state of an object, process or event (7, 45 p.).

Information technologies in education are designed to work with information using special methods, software and technical tools. Information technologies such as multimedia using projector, electronic board, computer and Internet technologies are often used in the university education process. Thus, in the process of learning new material, an ordinary blackboard is replaced by an electronic screen, the teacher organizes and manages the educational process, and the computer and projector provide the presentation of the material using video, sound or text. The use of multimedia technologies allows to increase the role of visualization, provides students with more complete and reliable information about the studied processes and involves them in active work.

During the consolidation phase, the level of mastery of the educational material by students can be monitored using a computer. For this, students are usually divided into groups, each of which works in its own mode.

The computer's graphic capabilities, simulator programs help to determine the level of students' mastery of the educational material and correct errors in repeating, summarizing and systematizing knowledge (8, 45 p.).

Therefore, information technology significantly expands the possibilities of the educational process in the transfer of knowledge (teacher activity) and knowledge perception (student activity). At the same time, in order for information technology to become an effective means of developing critical thinking in students, it is important to implement not only educational, but also developmental, educational and creative functions of information technology in the educational process.

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