PEDAGOGICAL POSSIBILITIES OF INFORMATION AND EDUCATIONAL TECHNOLOGIES IN THE DEVELOPMENT OF CRITICAL THINKING OF STUDENTS

Mukhlisa Dostnazarovna Omonova

researcher of Chirchik State Pedagogical University

ABSTRACT

The use of information technology significantly increases the effectiveness of education, helps to create a field of cooperation in the classroom. The use of Information Technology in the lesson increases interest in the studied material, activates the cognitive activity of students, develops creative potential, allows you to effectively organize group and independent work in the lesson, serves to improve practical skills and qualifications. Also, in the educational process, information technology allows you to activate the educational process, implement developing educational ideas, increase the speed of classes, increase the volume of independent work of students in the information education area of the University.

The article will talk about the pedagogical capabilities of information and educational technologies in the development of critical thinking of students on the basis of critical thinking of the student, information education technologies, and principles of individual education.

Keywords: Information, education, component, integrity, distributivity, flexibility.

In today's era of globalization, the role and importance of Information Technology in education, as well as in all areas, is very big. Researchers define the concept of information education in different ways. In the pedagogical dictionary edited by Zokirova, the field of information education is understood as the field of Education, which is based on the widespread use of Information Technology [1,168 p.]. The information-educational sphere is characterized as a systematically organized set of Information, Technical, Educational – methodological provisions that are inextricably linked with the individual as a subject of the educational process [2, 15 p.]. The information and educational sphere is a pedagogical system and its provision, that is, financial, economic, material and technical, regulatory and marketing, consisting of management subsystems [3, 98-113 p.].

S.A.Nazarov defines the field of information education as a pedagogical system that combines information educational

resources, computer educational tools, educational process management tools, pedagogical method, methods and technologies aimed at the formation of a creative personality with the necessary professional level of knowledge, skills and qualifications, intellectually developed social significance [4, 69-71 p.].

The analysis of the above definitions makes it possible to conclude that the information education sphere is part of the educational sphere of the HEI, which includes information, technical, educational-methodological support systems, as well as participants in the educational process, providing a variety of educational processes in a targeted manner. The sphere of information education is defined on the one hand, as a software-technical complex, on the other hand, as a pedagogical system. Therefore, when developing the field of information education, not only information-software-technical, but also pedagogical problems should be solved, including the problem of developing critical thinking of students. The information and educational sphere as a pedagogical system should be built on a traditional basis, which is its logical continuation and development.

For our research, information is of particular importance as a pedagogical system of the educational sphere, or rather, as part of the pedagogical system of the HEI, which includes the relevant goals, tasks, content, conditions for the implementation of pedagogical technologies.

The information education area of the HEI is formed on the basis of the following principles:

- multi-component, including educational-methodological materials, high-tech software, knowledge control system, technical tools, databases and information and information systems, information repositories of any type;

- integrity, which is determined by the directions of training specialists, contains all the necessary set of basic knowledge in the fields of Science and technology, must enter World Resources taking into account interdisciplinary contacts, an information and information base of additional educational materials, includes a detailed and deepening of knowledge;

- optimal distribution by information repositories (servers), taking into account the distribution, requirements and limitations of modern technical means and economic efficiency;

- flexibility, this information implies the compliance of the functions of the educational sphere with the goals and objectives of the educational system, its structure and principles.

Describing the field of information education, we believe that the developed rules are important, but not enough to form the

critical thinking of students. In our opinion, in accordance with the concepts of scientists discussed above, the principles of cultural conformity and science should be included among the principles of the 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-awareness of the student's personality on the basis of the properly structured content of Education, which provides a link between education and life and future professional activity and a humanitarian position.

The principle of science indicates 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 cognitive activity of students, the formation of scientific information seeking skills in them. Management of cognitive activity implies, on the one hand, the ability to develop initiative and independence among students, on the other hand, to provide them with pedagogical assistance in the search and processing of information, in the development of creative activity, to select and evaluate the information received using humanitarian positions. Teaching critical thinking in information education is effective if students take an active part in planning and organizing their activities to exercise self-control and self-assessment.

The formulated principles of the construction of the information education sphere make it possible to interpret the information education sphere of the HEI, on the one hand, as part of the traditional educational system, on the other hand, as an independent pedagogical system aimed at developing the cognitive activity of students using educational technologies.

The use of educational technologies in the pedagogical system ensures that students are involved in determining the purpose, content and structure of the lesson, since they have the opportunity to use various and comprehensive information using a computer.

We will clarify the concept of" Information Technology". Researchers characterize information technology as a broad class of disciplines and fields of activity related to the use of data management and processing technologies, including computer technology.

Many researchers understand information technology as computer technology because information technology uses computers and software to store, modify, protect, process, transmit and receive information [5, 67 - 69 p.].

In education, information technology is designed to work with information using special methods, software and technical means. Information technologies such as multimedia using

projectors, electronic whiteboards, computers and Internet technologies are often used in the HEI (higher education institution) education process. Consequently, information technology significantly expands the possibilities of the educational process in the transfer of knowledge (teacher activity) and in the perception of knowledge (student activity). At the same time, in order for information technology to become an effective tool for the development of critical thinking in students, it is important in the educational process to carry out not only educational, but also developmental, educational and creative tasks of Information Technology.

As practice shows, modern students are well versed in Information Technology. The use of a computer in the lesson has a positive effect on their success: motivation for educational activities increases, skills for working in a team are formed, cognitive activity is activated, the opportunity to show one's abilities expands.

The classic and integrated classes, along with multimedia presentations, on-line tests and software products, allow students to fully master the knowledge they have acquired before. The use of Information Technology in education creates favorable conditions for the formation of a student's personality [6, 56 p.]. This means the ability to competently use information sources, the ability to properly organize the information process.

S.A.Atanasyan, S.A.Nazarov, T.S.Petrovskaya, V.V.Sered, Ye.N.Based on the theoretical principles formulated in the works of the shiyanov, we tried to define the pedagogical tasks of Information Technology in the context of teaching students to critical thinking. Among these functions, we included: educational, developmental, educational and creative. The educational function of Information Technology, in our opinion, in the process of working with information, consists in explaining concepts that illuminate the essence and features of critical thinking, explaining logic, synthesis, analysis, rules of abstraction, communication, methods of forming critical thinking, similarities and differences between critical and creative thinking, the concept of criticality of consciousness, criticism and self-criticism based on additional sources of information, The developing function of information technology implies the development of students ' perception, memory, mental activity, speech, imagination on the basis of electronic resources.

The educational function is expressed in the upbringing of positive motives of education in students, making sure that it is necessary to analyze facts and phenomena from different points of view, respecting the opposite opinion, assessing the information received, assessing cultural values perceived in society, taking into account moral and

spiritual characteristics. Creative function is aimed at developing creative thinking, realizing oneself as a creative person, forms a willingness to model and build new knowledge and experience in professional activities through information technology.

The described functional components of Information Technology correspond to the goals of the field of information education, it consists of:

- formation of professional knowledge, skills and qualifications;
- decision making, error analysis skills;
- formation of volatility and criticality of thinking;
- skills to solve educational problems;
- formation of Information Culture of future specialists;
- realization of creative potential and personal development;
- formation of a modern scientific and professional worldview;
-Formation of self-awareness and self-development of HEI students.

We think that the implementation of these goals of the information education sphere will help to pedagogy of Information Technology, ensure a successful solution to the problems of the educational process, including the development of critical thinking of students. In information education, educational technologies should be applied in the context of educational situations, including those with a significant level of uncertainty, which include assessments that force the student to "burn" the mechanisms of self-development.

Relevant pedagogical conditions must be observed in order to make the most of information technology as an integral component of the sphere of information education. Among such cases, researchers distinguish:

- high level of Information Culture of teachers and students;
- introduction of Information Technologies based on Subject-subject relations into the educational process;
- reflexive activity of subjects of the educational process, capable of assessing their own personality.

From the above, the need arises, firstly, to create motivation for the use of Information Technology in cognitive activities, secondly, to teach students to quickly and competently select the necessary information using educational technologies, thirdly, to provide pedagogical assistance in the ability to identify the most important from relevant information, and fourth, to provide conditions for the formation of the ability

In addition to software products, educational technologies can also be used in the lesson in order to activate the cognitive activity of students.

To develop critical thinking of students, information technology has great effect when applied in the following cases:

- for a deeper perception of learning material;
- in design activities;
- in Presentation Activities;
- when creating multimedia reports, abstracts, essays;
- when working on the local and global network;
- in the observation and evaluation of the studied material.

Pedagogical support of their cognitive activity in the context of the humanistic paradigm of education is of great importance in the development of critical thinking in students through educational technologies.

REFERENCS

1. Pedagogical dictionary: textbook. handbook for students of higher educational institutions / V.I.Zagvyazinsky, A.F.Zakirova, T.A.Stropova; edited by V.I.Zagvyazinsky, A.F.Zakirova. M. : Academy, 2008. - 352 p.

2. Ilchenko O.A. Organizational and pedagogical conditions for the development and application of online courses in the educational process: (using the example of the training. specialists with higher education. education).: abstract. dis. . Candidate of Pedagogical Sciences O.A. Ilchenko. The Center for Creativity, Pedagogy of Moscow State Technical University. akad. — M., 2002. 22 p.

3. Andreev A.A. Some problems of pedagogy in modern information and educational environments. / A.A.Andreev // Innovations in education. 2004. - No.6. - pp. 98-113.

4. Nazarov S.A. Pedagogical modeling of the personality-developing information and educational environment of the university / S.A.Nazarov // Scientific thought of the Caucasus. Special issue. - 2006. - No.2. - pp. 69-71.

5. Robert I.V. Modern information technologies in education; prospects of use / I.V.Robert. M., 1994. - 205 p.

6. Selevko T.V. Modern educational technologies. / T.V.Selevko. M., 1998. – 256 p.