## PEDAGOGICAL IN THE DEVELOPMENT OF THEIR KNOWLEDGE TECHNOLOGY AND THE PLACE OF METHODS

Siddiqov Ilhomjon Meliqo`ziyevich Docent of the Kokan State Pedagogical Institute

Shirinov Feruzjon Shuhratovich Senior Teacher of Kokan State Pedagogical Institute

## ANNOTATION

This article provides guidance and suggestions on the role of pedagogical technologies and methods in constantly developing students' knowledge of project creation.

**Keywords:** project, pedagogical technology, computer science, method, design, dynamic system, educational technology.

Studying of various scientific literature , we can say that **the educational project** – A specific plan is a product of efforts to develop the content of pedagogical activity based on a goal and guarantee its result, while **planning** is a practical effort aimed at developing the content of an activity or process by estimating, predicting, and planning the expected result based on initial data .

Designing in the work of a computer science teacher is mainly in two forms. *The first* is the teacher's design of his activities, *and the second* is the use of project-based educational technologies in the course of the lesson.

Why is educational design relevant? This encourages the teacher of informatics to deliver appropriate content to his students in each lesson, to achieve a guaranteed result in the educational process.

The application of the educational method of design in the educational process is very complex, that is, it can be considered as a multi-faceted and multi-variant, multi-choice *dynamic system*. Therefore, the design of educational activities requires a unique innovative approach. In some literature, the instructional design process has been viewed in the same stages as technological process design. For example, in the article "Main stages of project education" by JB Orishev, the stages of project education are conditionally expressed as follows.

- research-selection stage;
- ➤ construction phase;
- $\blacktriangleright$  educational construction phase;
- ➤ technological stage;
- didactic technological stage;
- project implementation stage;
- ➤ concluding phase, conclusions and recommendations phases.

Several literatures indicate that the phases of educational design consist of *modeling*, *designing*, *and constructing* phases.

Activation of educational and cognitive activity in computer science is a process that takes place in the educational process, is aimed at achieving the goal, and takes into account the goaloriented planning of the activities of the learners. Concepts such as activity, activity and educational activity form the basis of activation of educational activities. In addition to the activation of educational activity - the effective acquisition of knowledge and methods of activity, the educational material is transformed into a product of the active mental activity of each student.

Today, in a number of developed countries, great experience is used in the use of pedagogical technologies that increase the educational and creative activities of students and guarantee the effectiveness of the educational process, and the methods that form the basis of this experience are called interactive methods. is being conducted.

Psychological and didactic requirements for activation of educational activities in computer science include:

- ensuring the unity of educational, educational and developmental tasks in the process of teaching IT ;

- didactic principles of education: achieving scientificity, systematicity, consistency, awareness, activity, differentiation, practical, professional orientation in teaching, strengthening the communication of academic activity, teamwork and others;

- formation of momentum and emotional atmosphere in the teaching process;

- to establish the use of various methods and tools of education, which direct the students to activate their educational and cognitive activities, creative activity;

- to guide students to systematic independent education, to establish constant, ongoing control, monitoring, and knowledge evaluation of the educational process;

- encouraging students' educational and creative activities;

- introducing students to the composition, sequence and content of tasks that activate learning and cognitive activity, etc.

The main task of the teacher in activating the educational activity of the students during the educational process is to create a tool that activates the students. If it is possible to create an activator of students, then it requires the following basic rules to be taken into account:

- selection of means of activation that ensure students' activity in the component of educational goals (educational, educational, developmental) at each stage of the educational process;

- ensuring the integrity of the educational system;

- determining the relationship between the elements of the educational system (purpose, content, form, method, means and control of education) (the purpose with the content, the content with the means, the means with the form, or education) tools: technical, didactic aids, etc.) and make them active;

- each component of the educational system should take on a certain task in the activation of students' activities: creating motivation, quick delivery of content, orientation, volition and evaluation;

- taking into account that the content, methods of education in the component of the educational system, the forms of organizing educational activities contribute more to the activation of student activities, etc.

A. Abdukadirov brought technologies such as playful, problem-based, communicative teaching, necessary concepts to the technologies of student activity activation, and O. Yu Glukhova in her

researches active (interactive) teaching, playful, cites imitation, non-traditional and projectbased learning technologies.

*Game educational technology*. The game is a type of human activity, and the educational process is used for the purpose of forming skills and competencies by performing various actions by the object in different situations. The game can be divided into types such as computer, simulation, sports, economic, military, business entrepreneurship and can be used directly in the educational process.

The game is the freest, most natural way for a person to indulge in real (or imaginary) reality in order to learn, to show his "I", creativity, activity, independence, self-realization.

intelligent technologies in the training of computer science teachers leads to effective results.

*Problem-based educational technology*. Education that serves to form skills and competencies in students, such as creative research, conducting small research, putting forward certain hypotheses, justifying results, coming to certain conclusions, is called problem-based education.

*Communicative teaching* - it is a teaching method based on communicative (verbal communication, accessibility) communication in students. This includes "Brainstorming", "Debate", "Talk-show" and other technologies for the formation of speaking skills in students.

**Requirements for the use of technologies aimed at activation.** As a result of the analysis of technologies for the activation of students' educational and cognitive activities in the process of teaching computer science, we found it necessary to take into account the following requirements when using these technologies:

- formation of motivational activity in students:
- formation of cognitive activity of students, development of individual abilities;
- ensuring the participation of every student in the group in the active learning process;
- to ensure students' activity in performing independent tasks, etc

In conclusion, we can say that the organization of the educational process based on the activation of students' educational and cognitive activities solves the problem of personal activity and brings student activity closer to the level of teacher activity.

## REFERENCES

1. S.S.G'ulomov va boshqalar «Axborot tizimlari va texnologiyalari» T. –«Sharq» - 2000 yil.

2. M.M.Aripov, T. Imomov va boshqalar «Informatika, axborot texnologiyalari» T. TDTU, Oʻquv qoʻllanma, 1-2 qism, 2002, 2003 y.

3. A.A.Abduqodirov, A.G'.Hayitov, R.R.Shodiev<br/>«Axborot texnologiyalari» T. – "Oʻqituvchi" – 2002 yil.

4. N.Taylaqov, A.Axmedov «IBM-PC kompyuteri» T.:«O'zbekiston», 2001 y.

5. S.P.Allayorov, S.T.Raxmonov, S.I.Qulmamatov, D.E.Toshtemirov «Informatika va axborot texnologiyalarifanidan laboratoriya ishlari», Guliston.

6. Shirinov, F., and A. Mamasoliyev. "A GENERAL DESCRIPTION OF THE HARDWARE AND SOFTWARE ENVIRONMENT USED TO ORGANIZE COMPUTER-BASED LEARNING PROCESSES." Euro-Asia Conferences. Vol. 3. No. 1. 2021.

7. Ikromovich, Honboboyev Xakimjon, et al. "MATHEMATICAL MODEL OF CHECKING THE BEHAVIOR OF AN INDUSTRIAL ROBOT IN THE STRUCTURE OF A TECHNOLOGICAL

MODULE FOR STAGNATION." International Journal of Early Childhood Special Education 14.7 (2022).

8. Marufovich, Aripov Masud, and Shirinov Feruzjon Shuxratovich. "DEVELOPING THE COMPETENCE OF FUTURE INFORMATICS TEACHERS TO WORK WITH GRAPHICAL INFORMATION." ONLINE SCIENTIFIC JOURNAL OF EDUCATION AND DEVELOPMENT ANALYSIS 2 (2022): 183-187.