Xudayberdieva Xusnobad Urmonovna

Department of biological physics, informatics, medical technologies

Andijan State Medical Institute

ESSENCE AND CHARACTERISTIC FEATURES OF PEDAGOGICAL TECHNOLOGY

Abstract: *This article discusses the nature and characteristics of pedagogical technology. The author analyzed the factors of effectiveness of pedagogical technologies.*

Key words: *pedagogy, pedagogical technology, method, methodology, education, innovation*

Currently, scientists and practicing teachers pay great attention to improving teaching technologies. A special direction and a new discipline appeared in science - pedagogical technologies.

The term "technology" itself is borrowed from the production sphere of activity and, of course, is used conditionally in education, and pedagogical technology itself, as a kind of social technology, is not as rigid, predetermined as production technology, and is based on the theory of psychodidactics, social psychology, cybernetics and control.

Traditionally to pedagogical technology related to the ability to use teaching and laboratory equipment in the educational process. The semantic content of the concept of "pedagogical technology" has been actively explored and discussed in the pedagogical press and at international conferences since the mid-60s. The result of such a close study was a multifunctional interpretation of the concept of "pedagogical technology":

educational technology for the use of technical means and means of programmed learning;

_____

educational technology as a means of improving the organization of the educational process and as a means of overcoming the backlog of pedagogical ideas from the rapid development of technology.

For the first time, Ya.A. Comenius. He saw the ability to correctly determine the goal, choose the means to achieve it and form the rules for the use of these means. A.S. Makarenko wrote in his "Pedagogical Poem" that our "pedagogical production" was never built using technological logic, but only according to the logic of moral responsibility ... That is why we simply do not have all the important production departments: the technological process, accounting operations, design work, use of conductors and devices, rationing, control, tolerances, culling.

The process of development of pedagogical technologies in the world educational space E.N. The infantry conditionally divides into three stages, each of which is characterized mainly by one or another trend. Thus, the main trend of the first stage (1920–1960) was to improve the quality of teaching, which was seen as the only direction for more effective learning. Attempts were also made to increase the effectiveness of education through the use of mass media in the educational process. The second stage (1960–1970) is characterized by the expansion of the base of pedagogical technology. In addition to audiovisual education and programmed learning, the foundation of pedagogical technology was built on computer science, the theory of telecommunications, pedagogical qualimetry, system analysis and pedagogical science; the emergence of the methodological foundations of pedagogical technology, the transition from verbal to audiovisual learning, the active implementation of the training of professional technologists. During this period, the technology of the educational process is developed on the basis of a systematic approach, and researchers understand pedagogical technology as the study, development and use of the principles of optimizing the educational process based on the latest achievements of science and technology. The third, modern, stage is

_____

characterized by the expansion of the sphere of pedagogical technology. If earlier its functions were actually reduced to servicing the learning process, today pedagogical technology claims a leading role in planning and organizing the educational process, in developing methods and teaching aids. This stage is characterized by the active creation of computer laboratories and display classrooms; an increase in the quantity and quality of pedagogical software [27, p. 17-18].

A characteristic trend in the development of modern pedagogical technology, according to E.N. Infantry is the use of system analysis in solving practical issues related to the creation and use of training equipment and technological training aids. The main criterion for system analysis at all levels (from planning teaching aids to introducing them into the learning process) is the criterion of optimality. The use of system analysis in the creation and use of learning tools is, of course, a positive and promising matter. First, pedagogical technology, as E.N. The infantry was associated only with the use in training of technical means and means of programmed training ("technical means of training"). Recently, pedagogical technology has been understood as new scientific approaches to the analysis and organization of the educational process ("learning technology", or "learning process technology"). Thus, E.N. Infantry believes that pedagogical technology includes two groups of issues, the first of which is related to the use of technical means in the educational process, and the second - to its organization [28].

The discussion about the essence of pedagogical technology that has been going on for the past 50 years has been reflected in the numerous definitions of many academic teachers, pedagogical commissions and associations. Its essence lies in the clash of two extreme points of view: some consider pedagogical technology to be a complex of modern technical teaching aids, others declare it to be a process of communication. A separate group consists of authors who combine the means and the learning process in the concept of "pedagogical

_____

technology". The main directions of development of pedagogical technology include: the use of technical means and programmed learning in the educational process and the technology of the educational process. This direction combines a wide range of problems related to the analysis of educational material and the organization of educational activities of the teacher and students. Some researchers believe that it is necessary to single out a special direction in "pedagogical technology" that would investigate the entire educational process as a whole, considering it as a system. Thus, "pedagogical technology combines new concepts of the learning process, and the problems of mutual influence of new means and methods of teaching, and the use of a systematic approach to the organization of learning" [32].

Theoretical analysis of literary sources allowed us to conclude that the concept of "learning technology" today is not generally accepted in pedagogical science. In UNESCO documents, learning technology is seen as a systematic method of creating, applying and defining the entire process of teaching and learning, taking into account technical and human resources and their interaction, which aims to optimize the forms of education.

V.P. Bespalko considers the pedagogical system as one that consists of two main parts: a didactic task and a technology for solving it [1]. He emphasizes that each didactic task is solved with the help of adequate teaching technology, the integrity of which is ensured by the interrelated development and use of its three components: organizational form, didactic process and teacher qualifications.

S.U. Goncharenko believes that learning technology is often interpreted as a branch of using a system of scientific principles for programming the learning process and using them in educational practice with a focus on specific learning objectives that allow their evaluation. We absolutely agree with the fair remark of S.U. Goncharenko about the fact that this industry is more focused on the student, and not on the subject of study, on testing the developed practice

_____

(teaching methods and techniques) in the course of empirical analysis and the widespread use of audiovisual means in education, defines the practice in close relationship with the theory of learning [6].

V.M. Monakhov offers an axiomatic approach to the design of pedagogical technologies. He puts forward nine axioms, the fulfillment of which, he believes, leads to "civilized, correct, methodologically prepared and justified" design and implementation of pedagogical technologies [24]. The first group of axioms is the axioms that ensure the inclusion of pedagogical technologies in a single educational space of the country (axioms: the demand for pedagogical technologies; the adequacy of their use by each teacher in the educational process; universality in relation to subject methodological systems). The second group of axioms is the axioms of modeling the educational process (axioms: designing a model of the educational process; parameters that determine the model of the educational process; technologization of the information model of the educational process). The third group of axioms is the axioms of the normalization of the educational process (axioms: technologization of the teacher's professional activity; standardization of the project of the educational process; formation of a working environment in which pedagogical technology should function).

References:

1. Urakova, O. J. (2016). Chulpon s creative work in the legacyof the aesthetical thoughtof mankind. *Theoretical & Applied science" halkaro-ilmij zhurnali*.

2. Urokova, O. J. (2016). Chulpon's creative work in the legacy of the aesthetical thought of mankind. *Theoretical & Applied Science*, (9), 183-188.

3. Urokova, O. (2020). Urakova Oysuluv Jamoliddinovna The praise of nature and the universe in novalis romance. *Архив исследований*.

_____