МЕЛИЧНА ОСВІТА

DOI: 10.21802/acm.2022.1.1

TECHNOLOGIZATION OF INNOVATIVE EDUCATIONAL PROCESSES IN HIGHER EDUCATION ESTABLISHMENTS

Skrobach N.V., Shapoval O.A., Vyshyvanyuk V.Yu., Petryna V.O.

Ivano-Frankivsk National Medical University, Ivano-Frankivsk, Ukraine

Abstract. The needs of Ukraine's economic development require the creation of new, innovative technologies that take into account changes in the social and spiritual life of young people, the need to form a harmonious personality and optimize the learning process. New pedagogical technologies are aimed primarily at "providing conditions for self-realization of student's essential capabilities in various kinds of theoretical and practical activities, in dynamic life in the new market conditions".

An essential feature of modern innovation processes in the field of education and upbringing is their technologization – a strict compliance with the content and sequence of stages of innovation implementation.

The difference between technology and methodology is a fundamental issue for modern pedagogics. Technology and methodology are distinguished by two main points: the guarantee of the final outcome and planning of the future educational process.

The varieties of personality-centered pedagogical technologies include personality developmental teaching, productive teaching, personalized teaching and technology of higher labor, self-development, technology of humanism.

Analyzing the features of higher pedagogical education technologization, the attention should be paid to an increase in the need for the use of new information technologies in the training of new generation specialists for modern educational systems. New information technologies (NIT) are defined as a set of methods and technological means of collecting, organizing, storing, processing, transmitting and presenting information that increases people's knowledge and develops their capabilities to manage technological and social problems.

Pedagogical technology is interpreted according to three aspects: the scientific aspect (pedagogical technology as a component of pedagogical science that creates pedagogical processes in pedagogical systems); procedural and descriptive aspect (description, process algorithm, a set of goals, content of methods and means to achieve guaranteed results according to the goal); procedural and effectual aspect (implementation of the technological process, functioning of all personal tools).

Keywords: pedagogical technologies, teaching methodology, distance education, a teacher, a student.

The beginning of the XXI century is marked by significant reforms in the field of education. The needs of Ukraine's economic development require the creation of new, innovative technologies that take into account changes in the social and spiritual life of young people, the need to form a harmonious personality and optimize the learning process. New pedagogical technologies are aimed primarily at providing conditions for self-realization of student's essential capabilities in various kinds of theoretical and practical activities, in a dynamic life in the new market conditions [3].

An essential feature of modern innovation processes in the field of education and upbringing is their technologization – and a strict compliance with the content and sequence of stages of innovation implementation.

Pedagogical technologies are interpreted as a systematic method of creation, application and definition of the whole process of teaching and knowledge acquisition taking into account technical and human resources and their interaction, the task of which is to optimize the forms of education.

The difference between technology and methodology is a fundamental issue for modern pedagogics. Technology and methodology are distinguished by two main points: the guarantee of the final outcome and planning of the future educational process. Pedagogical technology is a set of procedures that complement the professional activities of the teacher and guarantee the final planned outcome. The methodology occurs as a result of experience generalization or introduction of new means. Variability is not peculiar to the technology in contrast to the methodology, no element can be emitted. The methodology involves creative searching, problem solving through trial and error.

In our research, pedagogical technologies will be interpreted in the procedural and descriptive (subject) aspect as a set of goals, content, methods, means and process of achieving the planned educational outcomes, including analysis of the result and its correction.

Modern training of specialists in higher pedagogical establishments is impossible without the use of personality-centered technologies which have provided an opportunity to bring together the basic facts about

 $N_{2} \ 1 \ (28) - 2022$

independent work, individual approach, differentiation of learning, to offer some ways to improve the educational process [2].

The varieties of personality-centered pedagogical technologies include personality developmental teaching, productive teaching, personalized teaching and technology of higher labor, self-development, technology of humanism. The idea of personally and practically oriented training of the future teacher is partially covered in the domestic technological and pedagogical literature of theoretical and methodological level.

In practice, personality-centered teaching is limited to making the student a subject of teaching and creating conditions for personal development. At the same time, the person's inner world, self-consciousness, goals, attitudes, values, spiritual needs, personal policy of life and behavior, which can be called the subjective experience of the individual, are disregarded.

Teachers' humane, friendly attitude towards the students, understanding of their problems is necessary in order to reveal this inner world of each student.

The pedagogical technology of humanism and democratization of pedagogical relations should be understood as a rejection of authoritarian pedagogy with its pedagogical pressure on the individual that denies the possibility of establishing normal human relations between a teacher and a student, providing an atmosphere of comfort.

Personally-centered pedagogical technologies are innovative for higher education since they go beyond the existing standards, create new perspectives for the creative activity of teachers and students. Thus, the personal approach acts as a criterion (indicator) of innovativeness of any pedagogical technology.

Our appeal to the pedagogical task is caused by the following reasons:

- a pedagogical task is a way to set goals and activate learning;
- the personality-centered nature of the content and technology of classes with students may be provided and the possibilities of individualization and differentiation of this process may be implemented on the basis of the task;
- pedagogical task, which can be defined as a situation requiring mental and practical actions, provides an opportunity to study the features of innovative pedagogical technologies in specific pedagogical situations;
 - creative nature of the pedagogical task.

Analyzing the features of higher pedagogical education technologization, the attention should be paid to an increase in the need for the use of new information technologies in the training of new generation specialists for modern educational systems. New information technologies (NIT) are defined as a set of methods and technological means of collecting, organizing, storing, processing, transmitting and presenting information that increases people's knowledge and develops their

capabilities to manage technological and social problems.

The process of modern society informatization inevitably causes the process of education informatization with theory and practice of development and use of modern new information technologies focused on the implementation of psychological and pedagogical goals of teaching and education. This refers to the computerization of education, the Internet, the creation of virtual educational schemes, and so on. Informatization of society is an objective trend, and therefore it is inevitable [5].

Telecommunication technologies provide completely new opportunities for students and teachers. The development of information telecommunication networks gives a new impetus to distance learning systems, provides access to huge amounts of information, provides an opportunity to obtain a modern form of distance learning with the use of telematics and multimedia means.

The program also includes a number of activities aimed at creating an academic informational and educational network (centralized computer and telecommunication space) in order to provide regulatory, reference, statistical and educational information within the educational units and services of the university and pedagogical complex;

improvement of the methodology and strategy of content formation, selection of methods and organizational forms of education and upbringing;

creation and use of diagnostic methods to control the students' knowledge level;

introduction of distance education system and connection to the system of educational library and information centers such as media libraries, etc. [7].

The main importance in the organization of modern pedagogical training is given to distance education as a set of educational services for the population through a specialized informational and educational environment which is based on the means of educational information exchange at a distance (satellite television, radio, computer communication, etc.). The process of distance learning includes all the basic forms of its traditional organization. However, some of the functions are transferred to the computer for watching videos of lectures; studying of multimedia courses; interactive training programs; organization of network seminars; implementation of formalized current control with the help of tests or the systems of control works sent by e-mail; on-line consultations.

Thus, distance learning provides an opportunity to use teaching, methodical and information and reference materials on the discipline comprehensively for self-acquisition and knowledge control [4].

Thus, we consider pedagogical technology to combine a well-ordered array of actions, operations and procedures that provide a guaranteed outcome under the conditions of changing educational process. Modern

psychological and pedagogical literature interprets this concept according to three aspects: the scientific aspect (pedagogical technology as a component of pedagogical science that creates pedagogical processes in pedagogical systems); procedural and descriptive aspect (description, process algorithm, a set of goals, content of methods and means to achieve guaranteed results according to the goal); procedural and effectual aspect (implementation of the technological process, functioning of all personal tools). Generalization of the main issues of this problem provides an opportunity to the scientists and practitioners to conduct systematic work on the development and implementation of innovative pedagogical technologies in the practice of higher educational establishments. Personally-centered technologies, distance learning, technologies of goal setting and life creation, etc. acquire special significance in the educational process [6].

In the process-descriptive aspect, pedagogical technologies are interpreted as a set of goals, content, methods, means and process of achieving the planned educational outcomes, including analysis of the result and its correction. Consequently, technologization becomes the main characteristic of the future teacher's profession, means the transition of the entire educational process to a qualitatively new level of efficiency and optimality.

Conflict of interest: The authors declare that no conflicts exist.

Financial Disclosure: The authors declared no financial support.

References

- 1. Baranova I, Iliok I, Postavitenko K. Motyvatsiia do navchannia zaporuka efektyvnosti suchasnoyi medychnoyi osvity. Medychna osvita. 2019; 2: 55-60.
- 2. Vykhrushch AV. Yakist universytetskoi osvity: aktualni pytannia teorii i praktyky. Ternopil: TNEU; 2016. 525p.
- 3. Dereziuk AV. Some aspects of modern medical education pedagogy. Medychna osvita. 2015; 3:26-28. [Article in Ukrainian] https://doi.org/10.11603/me.v0i3.4962
- 4. Korda A, Chornomyz A, Shulhai A, Mashtamir A. Osoblyvosti funktsionuvannia systemy vnutrishnioho zabezpechennia yakosti vyshchoii osvity v Ternopilskomu natsionalnomu medychnomu universyteti imeni I.Ya. Horbachevskoho MOZ Ukraiiny. Medychna osvita. 2020; 4: 32-37.
- 5. Lavrovska A, Lapinska T. Mizhpredmetni ta intehrovani zviazky yak neobkhidna skladova u vyvchenni klinichnykh predmetiv. Mahistr medsestrynstva. 2018; 1(19): 41-44.
- 6. Pavlyak AYa. Dosvid provedennia praktychnoho zanyattia z vykorystanniam interaktyvnykh metodiv formuvannia profesiynykh umin u maibutnikh medychnykh pratsivnykiv. Medychna osvita. 2019; 1: 102-106.
- 7. Rakitianska L. Sutnist ta zmist poniattia «emotsiinyi intelekt». Pedahohichnyi protses: teoriia i praktyka. 2018; 4:35-42.

Received: 06.05.2022 Revised: 16.05.2022 Accepted: 18.05.2022

№ 1 (28) - 2022 **63**