https://doi.org/10.52449/1857-4114.2022.39-1.04

CZU: 378:796

ACADEMIC APPROACHES TO INNOVATIVE TRAINING IN THE SYSTEM OF HIGHER PROFILE EDUCATION

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Annotation. *The article presents an analysis of traditional academic teaching approaches used in the context of innovative education. It is shown that regardless of the fact that innovative processes involve every thing related to best practices, numerous organizational changes in the field of education, achievements of scientific thought and their implementation in practice, the educational process susing traditional teaching approaches canbe considered as innovative, sinceit the goal was and remains to transfer to students new know ledge for them, to educateactual vital skills, to form new personality traits, in accordance with modern requirements for the development of society as a whole.*

Keywords: *innovative learning, learning approaches, teacher'spersonality, student's personality.*

Introduction. At th moment, not only in our country, but also in manyother countries, there are significant changes in education policy, which is associated with an appeal to personality oriented pedagogy. Today, one of the leadingtasks of education, bothhigher and secondary, is to identify the potential of students with the subsequent provision of opportunities for the manifestation of their creative abilities. These transformations contributed to the development of most of the innovation processes, involving the analysis of their essence, features, structure and classification [9].

Innovative learning applies methodology as "a system of principles and methods for organizing and constructing theoretical and practicalactivities" [21], implemented by the approaches to the learning process that have been formed up to this time: cognitive, activity-based, system-activity, structural-activity, personal-activity, individualized-differentiated, competent.

The purpose of the article is to substantiate the application of academic approaches in the framework of innovative learning in modern conditions of the development of society.

Main material. ***The cognitive approach*** to learning [22, 26] is focused on the development of cognitive processes in students, which involves the formation of the correct image of phenomena, processes, relationships, which can be used as a model of action in any situation, in some conditions or another.

The concept of cognitive learning was formed on the basis of the works of L.S. Vygotsky, S.L. Rubinstein, B.M. Teplov. A significant contribution to this direction was the works of G.S. Altshuller, G.P. Shchedrovitsky, I.S. Ladenko, as well as american psychologists Howard Gardner, Robert Sternberg.

At the moment, the educational paradigm is changing towards the development of the creative abilities of future specialists, which include: the ability to produce and develop various ideas, predict the prospect, formulate hypotheses, ask questions and draw conclusions, as well as emotional-figurative, logical abilities, etc. This is facilitated by the cognitive pedagogy.

The cognitive orientation of education combines the achievements of psychological and pedagogical science in order to expand the

field of functioning of all participants in the learning process with the information received, which is expressed in its analysis, processing, synthesis and formation of knowledge [17]. The cognitive approach involves the construction of informational learning models that provide for the mastery of theoretical and practical-methodological competencies based on the implementation of the principle of scientificity, accessibility, consistency, visibility. The main goal of cognitive learning is to develop the whole complex of intellectual abilities and strategies that allow the learning process to be carried out, as well as adaptation to new conditions and situations. For this, not only intellectual cognitive mechanisms are used, which is implemented in traditional verbal teaching methods; both sensory-perceptual processes of various directions and sensory-intuitive methods of obtaining new knowledge are involved here. The main purpose is to acquire information.

The cognitive based activity of a student is considered as a kind of activity in the system of knowledge. "The process of mastering knowledge with this approach to learning is not specifically identified and analyzed. The requirements and the final result of mastering the reproduction and application by students of given patterns, schemes, reasoning and actions are compared" [18, p.22].

The activity-based approach to learning provides for the organization of educational and cognitive activity of students through motivated and purposeful problem solving, thus involving them in direct and active participation in the learning process. In this case, learning does not involve the transfer of knowledge, but the management/regulation of learning activities. The foundations of the activity approach were laid in the works of such psychologists as L. Vygotsky, A. Leontiev, S. Rubinshtein, P. Galperin, D. Elkonin, who studied the development of the human psyche. As a result, the following postulates were formed, on which the activity approach is based:

1. The development of the psyche is inseparably linked with human activity.

2. Activity is a process of human interaction with the environment, involving the process of solving pressing problems.

3. A person is an active stimulus of activity, which implies both internal/mental actions and external/practical ones.

Within the framework of the activity approach, it should be noted the interiorization concept (The theory of the phased formation of mental actions), according to which the mental development of a person (the assimilation of knowledge, skills) is carried out in the process of internalization, which involves the transformation of external/ material activity into internal/intellectual [4, 5, 19]. On this basis, operational models of learning were developed, the executive part of which is represented by a system of mental and practical actions of the student, which implies developmental [6] and sign-contextual [3] learning.

In general, the activity approach is based on the concept of the structure of a holistic activity – needs–motives–goals–conditions–actions, which provides a system of actions for the active assimilation of knowledge and skills through a motivated and purposeful solution of problems through the search for an action, with which you can transform their conditions for achieving a result. This way, the activity based approach contributes to the creation of various ways of organizing the learning process aimed at developing a participant in learning activities who can independently identify a problem, determine the purpose of studying a particular issue, formulate tasks, solve them and apply the results in practice. In this case, the teacher not only transfers knowledge one-sidedly, but becomes the organizer and leader (manager) of joint productive learning activities [10].

The definition of **"*system-activity approach*"** was introduced by the

academician, doctor of psychological sciences Alexander GrigoryevichAsmolov [2] as a result of combining the system and activity approaches. With regard to the learning process, the system-activity approach acts as an integral, interdisciplinary approach, since it allows for the integration, unity of academic disciplines. Its main idea is not so much *to give avolume of knowledge* as *to teach how to learn*.

The organization of the educational process within the framework of the system-activity approach involves the formation of the student's personality and his development in the process of individual activity aimed at learning everything new for himself, without resorting to traditional information knowledge, in a "ready-made form" [2]. From this point of view, maximum attention is given to the student's independent cognitive activity in order to arouse his interest in various subject areas of knowledge and motivation for the learning process itself, and at the same time develop self-education skills, which contributes to the formation of a personal life attitude in general. Such a person will be able to set goals for himself, solve both educational and life tasks, and also be responsible for the result of his actions. At the same time, the pedagogical process is, first of all, the process of joint activity of the student and the teacher, based on the principles of cooperation and mutual understanding.

The teacher should interest the students in the research work in such a way that they could independently approach the solution of the established problem and themselves could explain how to act to achieve the tasks set. This way, is created the basis for the independent successful assimilation of new knowledge by students, the formation of competencies, mastery of new types and methods of activity.

In general, the system-activity approach provides an opportunity to highlight the main learning outcomes in the context of the tasks set and "universal learning activities" that students should master, suggesting the ability for self-development and self-improvement through the conscious and active borrowing of modern social experience.

Structural-functional approach to learning is considered as a complex cognitive process. It is based on the research of L. Vygotsky, P. Galperin, V. Davydova, A. Zaka, S. Rubinshtein and others from the standpoint of the psychological and pedagogical aspect of the development of theoretical thinking, reflecting the activity of students in cognition. As a result of such a cognitive process, they develop the ability to build models, which implies a structural component of thinking (development of the ability to analyze and synthesize), followed by their research and analysis of the results obtained, which determines the functional component. Thus, we can talk about the phase development of the structural and functional components of the process of cognition, and hence the learning also. And here the managerial activity of the teacher is inexorable, which is aimed at providing students with objects of activity, monitoring and evaluating the results of their activities.

Within the framework of the structural-functional approach to teaching students, special attention is paid to the influence of external conditions on the learning process and its dependence on the results of the student's own activity. And here an important role is played by the fact that the student is able to change programs, building his own model of cognitive activity, to regulate and change its course in the changing conditions of the learning process. In this connection, there is a certain transition from a rigid management model on the part of the teacher to a more flexible one, as well as to an independent solution of educational problems on the part of the student. In this regard, independent work is focused on the development of his creative activity, the formation of his professionally necessary skills, conducting his own scientific research, which focuses the student's attention

on mastering the knowledge and skills of his future professional activity [7].

The personal-activity approach to teaching was formed on the basis of the works of B.G. Ananyeva, L.S. Vygotsky, A.N. Leontiev, A.V. Petrovsky, S.L. Rubinshtein and others, in which the personality was sought as the subject of the activity within which it was formed. Both components of this approach are quite strongly interconnected due to the fact that a person is the subject of any human activity, and therefore, carrying out any actions in a given situation or environment, his personal development as a subject takes place. Thereby, personal experience is formed, which is not traceable in traditional education, according to which knowledge and skills are "imposed", rather than formed, coordinating them with previous and actual personal experience in coordination with social experience [24]. In this regard, one should be guided by such provisions as:

– maintaining the individuality of the student;

– creation of conditions for the selection of student information material in the learning process;

– formation of the stimulating nature of the interaction between the teacher and students;

– assistance in developing methods of self-realization of the individual.

At the same time, the personal-activity approach is mediated by the values of shared experience, interaction between a teacher and a student, a student and a group of students. The latter determines the development of the personality of each student in the group, which reorients the teacher from a teacher-informer to a coordinator. The training is structured in such a way that students, interacting with their life problems, would strive for their growth through the desire to create when they are unable to find a way out of a difficult situation. And here the role of the teacher is to organize the personal relationships of students, as well as relationships with students, which would contribute to the implementation of activity plans [16].

In general, it should be noted that within the framework of the personal-activity approach to learning, the focus is on the student with his needs, motives, goals, as well as individual characteristics in mental and intellectual development. And, as a result, taking into account the interests of the student, the level of his knowledge and skills, the teacher determines the purpose of the lesson, forms, directs and corrects the entire learning process.

An individualized-differentiated approach to teaching is determined by the postulate that the learning process involves not only the adaptation of all its components (forms, methods, techniques, etc.) to the individual characteristics of students, but also a fragmentary transformation of the discrete aspects of the content of learning, taking into account inclinations, interests, and students' abilities. In other words, *the individualized* component of this approach determines the consideration of the individual characteristics of students in the learning process in all its forms and methods; *the differentiated* component assumes a form of organization of educational activities, taking into account the enthusiasm, interest, erudition, and internal potential of students.

As part of the individualization of the learning process, E.S. Rabunsky focuses on the complex of such teaching and educational means that would be consistent not only with the goals of educational activities, but also correspond to the level of cognitive abilities of each student according to his potential/real capabilities [15, p.15]. According to V.K. Shishmarenkov, an individual approach involves "creating an equal psychological, pedagogical, intellectual conditions not only for the development of all, but also for the development of each" student [23, p.150].

At the same time, it should be noted that the individualization of educational technologies is reflected in the resources that

the educational program provides. It mainly establishes the diversity of knowledge and the interaction of their types in terms of dignity and purpose in the context of comparable competencies to improve the individual abilities of students, which makes it possible to determine the strategy of professional formation and individual development of the personality.

Under the differentiated approach in teaching O.V. Agoshkova understands "an active, interdependent interaction of teachers and students, during which the formation and development of individual typological features of the personality and cognitive sphere of the subjects of educational activity is carried out on the basis of taking into account their learning opportunities and by varying didactic conditions, organizational forms, content, techniques and teaching methods" [1, p.20]. In this sense, the definition of students in groups, due to the levels of training and abilities, interest in educational material, etc., is implied. From these positions, *internal* and *external* differentiation is distinguished. *The first one* reflects the organization of the educational process, taking into account the individual characteristics of students; *the second* is their differentiation into study groups. Thus, a differentiated approach to teaching makes it possible to create conditions for the "maximum development" of students "with different levels of abilities" [13]. In this regard, they turn to multi-level training focused on the development of the "individuality of the future specialist" [25]. The development of multi-level tasks, both in the laboratory and for independent work, allows the student to master the educational material in more detail, according to their possibilities/abilities, interests, and developmental features. At the same time, the assimilation of the curriculum planned at various levels should not be below the level of established requirements.

In view of the above, we turn to the scientist N.S. Kolishev, who especially emphasized the two-sided nature of the individualized-differentiated approach, linking its two sides: 1 – thediagnosis of "individual psychological characteristics" of students; 2 – avariety of means of organizing "differentiation both with typological groups of students and with individual students" [11]. At the same time, I.G. Ogorodnikov [14] believed that the individual approach does not reject a differentiated approach, but provides for it within the framework of the already existing system of training sessions. He is supported by I.S. Yakimanskaya [24], who evaluates a differentiated approach as a scientific design of an individual training program for each student in solving the problems of personality formation and the development in their chosen field of study.

Thereby, it can be stated that the individualization of the learning process involves its differentiation, which involves the design of a system of classes and tasks of various levels of complexity and volume in organized study groups, taking into account the individual characteristics of each student.

The competency-based approach to learning was proposed by the American psychologist David Clarence McClelland in the 70s of the last century. D.K. McClelland was against the use of intelligence and psychometric tests in hiring. He believed that the possession of a number of general and specific competencies is considered a more indicative criterion of professional suitability [12]. In addition, D.K. McClelland drew attention to the fact that competencies are formed, developed and changed during the learning process. This became the basis for the development of a competency-based approach to the training of a qualified specialist.

In the context of the Bologna process, the result of education implies "*a graduate's professional readiness for the labor market*", which means "the use of a combination of knowledge, skills, competencies, as well as personal characteristics for the successful growth of university graduates in their chosen

profession and for expanding their employment prospects" [27].

In this regard, the basis of the competence-based approach in education is the ability and readiness of a person to carry out professional, effective and productive activities in relation to any kind of circumstances for its implementation. This, in turn, focuses education on the formation of such personal qualities as self-determination, self-development, self-improvement, self-control, as well as proper general cultural and professional competencies. This approach focuses the entire education system on providing quality training in accordance with the needs of the society of the present, "which is consistent not only with the need of the individual to integrate into social activities, but also with the need of society itself to use the potential of the individual" [8].

Achieving success in the development of competencies involves comprehensive training. According to Professor Jeroen J. G. Van Merrienboer of Maastricht University, the Netherlands, learning tasks should be aimed at acquiring cognitive and interpersonal skills and their components, forming relevant knowledge, attitudes and values, which is carried out in a simultaneous, integrated process. Only the integration and coordination of all aspects that characterize competence allows one to move on to new problems and situations, keeping them throughout life. Jeroen J. G. Van Merrienboer offers 3 directions for developing learning tasks within the framework of a competent approach [28]:

I. *Development of learning objectives for competency-based learning*

1. Combine "the world of knowledge and the world of work in learning".
2. Create effective student support.
3. Promote the development of higher order skills.

II. *Accomplishing Learning Objectives and Providing Resources in Multimedia Learning Environments*

1. Develop an online guide that will make a difference.
2. Defeat the transfer paradox of effectively and efficiently using the cognitive resources contained in multimedia learning environments.
3. Get students to work together.

III. *Diagnosis of learning systems based on an "incompetent student progress"*

1. Provide meaningful feedback.
2. Use tests for complex characteristics.
3. Ensure the quality of competency-based learning.

In general, it can be stated that the process of forming any competence includes both content (knowledge) and procedural (skill) components, which are in close unity, providing for interdisciplinary interaction.

The teaching methodology used in the competency-based approach is focused on acquiring the practice of obtaining knowledge and its purposeful application. At the same time, the priority is given to the development of such personal qualities as positive self-esteem, tolerance, empathy, which allow one to be prosperous in modern society.

Competence-based learning is also promising because learning activities take on a "research and practice-oriented character". As F.K. Tubeeva states: "In the process of educational activity, new competencies arise as a result of self-knowledge, self-development and self-improvement of the subject of the educational process" [20].

Conclusions. This way, the analysis of the presented approaches, which are both traditional academic and topical in the field of education, allows us to emphasize the strategy of innovative learning, which implies a conscious systemic organization of the management of the educational process.

The first component of this systemic organization is the teacher's personality itself. In the context of the innovation process, there is a change in his position in relation to both the student and himself. In addition to traditional pedagogical functions, the teacher

ceases to be an assistant in the formation and development of the student's personality, respecting this personality, regardless of the extent to which it is introduced to knowledge.

The second component is a change in the function and structure of knowledge that is mastered in an educational institution, as well as ways to organize the process of their assimilation, which moves away from routine memorization and becomes a tool of knowledge, organizing in different forms.

The third component of the systemic organization of innovative learning is bringing to the fore the social nature of the student, the development of his personality. This is connected with the installation not only on individual, but also on group forms of education, joint activities, on the variety of forms of interaction, interpersonal relationships and communication, on the natural formation of the individuality of each student.

The fourth component is associated with the denial of the "repressive", overwhelming role of the evaluation process.

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