

UDC 378.046.4

doi: 10.15330/jpnu.3.2-3.21-25

INNOVATIVE PROCESSES IN EDUCATION: SCIENTIFIC APPROACHES

OKSANA MARYNOVSKA

Abstract. The article analyzes the scientific approaches that define the directions of innovative development of education in Ukraine.

Keywords: education, approach, innovation.

1. INTRODUCTION

In the context of modernization of the educational sector, theoreticians and practitioners focus attention on the implementation of scientific approaches that define the direction of innovation in education. The scientific approach represents a corresponding paradigm that serves as a methodological regulator of pedagogical science and innovative practices.

The category “approach” is used to describe the practical orientation of the teacher on a set of concepts, ideas and methods of his professional activities. The researchers note that the range of such approaches is quite wide but “orientation on one of them allows building a strategy for educational activity, creating a scientific grounding of the designed innovative educational model. <...> In the practical teaching activities, different approaches complement one another, they are implemented in unity, but there is also a prevailing one, that establishes the system” [9]. Let us consider the basic scientific approaches that define the directions of modernization of innovative development of education in Ukraine.

2. ANALYSIS AND DISCUSSION

Within the activity approach, we delineate the definitions of “information” and “knowledge”. The approach is represented by a category of “orientative basis of action” (P. Halperin) “It includes the orientative basis (part) and the performing part. These two main parts can be subjectively called as “understanding” of an action and “ability” to perform it” [2, p. 29]. I. Bekh writes that “behind the formula “*from object-transforming action to knowledge*” lies the direction *from thinking to knowledge*. In its procedural development, any objected-oriented action is the process of thinking, which, respectively, is also object-oriented. <...> The activity approach practically implements the idea, according to which the school should *teach to think*, and not simply full out students with academic material” [2, p. 32]. The idea of training the “ability to learn” was actively developed within the concept of establishing the

school of thinking. The top examples of innovations of that time that have evolved to the level of education systems include developmental learning, problem learning and other. Orientation on obtaining the system of knowledge, abilities and skills had a pronounced academic subject-related and methodological framework that included the active promotion and use of specific methods of teaching academic subjects. For example, the technique of working with key details ("The learning process after E. Ilyin is built according to the formula "from experience of the individual- to the analysis of the artistic work, and from there - to the Book". Introduction of students to the structure of educational material was carried out using the following chain: "detail - question - problem" [11]). The innovative teachers drew attention to the importance of personal experience of a student as a subject of learning that has been the topic of further theoretical comprehension.

The **individual-oriented approach** developed the conceptual idea of development and personal fulfillment of *individuality as a subject of learning*, which implies establishment of *subject-subject* relationship as a new ethics of pedagogical interaction. Scientists develop educational technologies focused on development of *personal qualities* of the child. Thus, the technology of development of critical thinking has the purpose to develop the critical thinking of a student as a subject of learning; the technology of the individual-oriented lesson provides development of student's subjectivity; the interactive training ensures formation of communication skills and cooperation as the basis of interactivity; etc. Within this approach, researchers actualize the question of involving the students in goal-setting, which is the basis of their subjectivity, reliance on their subjective experience, modeling of personal forms of content, subject-subject interaction, etc. "Individual-oriented education as a scientific priority" is a title of an article by V. Kremen, which dealt with preventing imbalance between intellectual and personal development of a student. "A full intellectual component as an estimated basis of practical actions is essential for the acquisition of this universal quality. Research data indicates immaturity of students' theoretical attitude towards surrounding reality as a direct content of learning activities; its inability to transform into subjective value prevents the maximal development of their personal capabilities" [5, p. 53]. One should raise issues of specific didactic basis of intellectual development of students, their educational aspirations in educational situation, interpersonal interaction, and absence of disparity of educational content. "If we accept the position of totality of individual-oriented content in the learning process, it will sharply reduce the level of intellectual component in the overall mental development of the subject, and his personal formation will face serious complications" [5, p. 57].

The **technological approach** actively works on the idea of developing the subjectivity of student implemented through means of educational technology, the essential purpose of which is to design the process in order to achieve a guaranteed result. The latter is achieved under presence of technological compatibility of innovations regarding specific problems that should be solved, since the purpose of the technology has to meet the educational appropriateness of its practical application. This approach actualizes problems of formation of readiness of teachers to innovations, provides *technologization* of educational process and *personalization* that ensures personal sense of interaction between teacher and student, introduces the concept of "technologized knowledge" that justifies the *importance of skills* as a prototype of the knowledge acquired in the personal context, develops technology, the essential feature of which is algorithmization of the learning process in order to achieve results. ("So, the defining component of teaching technology is diagnostically specified purpose as the standard of learning presented in a list of specific learning outcomes, possible levels of mastering knowledge, abilities, skills, experience of formation of creative activity by students" [3]). Analysis of the implementation of technologies shows that "innovation is not an end in itself but rather a means of improving the quality of education". Researchers developed the models of scientific and methodological support of innovation activities, the laws of formation of readiness of teachers to design and implementation activities, the common pedagogical and specific principles [8, p. 101], such as: voluntarism and partnership, morally responsible choice, personalization and technologization, synergistically coordinated interaction between subjects of these activities. "Thus, the school has to embrace the updated scientific and pedagogical methodological paradigm aimed at implementing forms of

interaction between educators and students, improving communication culture of teachers, their ability to solve complex educational and extracurricular situations correctly" [4, p. 85].

The **axiological approach** brings understanding that the issue of quality of education is rooted in the system of its *value orientation* [6, p. 126–146]. Educational work actualizes problems of formation of value attitude of students towards society and the state, people, nature, art, work, and most importantly, towards oneself because treatment is a result of and a precondition for the effectiveness of any activity that involves choice backed by the level of development of personality's sphere of value and sense. In the educational process, it is an attitude to learning that acquires significance during establishment of the competent orientation of content and forms of the educational process. This period coincides with the development of new national standards in education. "Category of "quality of education" is regarded as a *set of value characteristics of education that satisfy requests and needs of each individual, society and the state for their services*. Value potential of the quality of education can be identified by processes and effects. In procedural terms, the quality of education is a succession of states through improvement of values, actions, means that simultaneously meet the educational needs of people and the interests of society and the state. The efficacious context of quality education lies in the ability of citizens with a certain level of training to fully develop their potential in accordance with public demands and needs of the labor market" [12, p. 13]. Scientists gradually confirm the logics of understanding education as variable and motivational system that "tests the new ways out of different uncertain situations in the culture and reveals to individual the spectrum of possibilities for choosing his destiny. <...> Variable education is understood as a process of *expansion of opportunities* of competence selection in life and self-development for an individual. The purpose of the variable education is formation of a world view in a joint interaction with adults and peers which would provide guidance for individuals in various situations including the *situations of uncertainty*" [1, p. 8].

The **competence approach** is built as a methodological reflection of science and practice that relies on the concept of "capacity" and "competence"; the latter is characterized by the individual's ability to apply his knowledge in practice. O. Savchenko interprets competence as "efficiency- and activity-oriented characteristic of education that is acquired by learning and gaining personal cognitive and life experience. The key competencies are the result of interdisciplinary interaction and activity of the student himself. Therefore, each educational sector has to contribute to the formation of the competency associated with its contents" [10, p. 4]. The structure of the concept of subject-related competence includes: *knowledge, abilities, skills, experience, attitudes and personal qualities of the personality of a student* as the subject of learning that not only knows and can, but knows, understands, applies, analyzes, synthesizes and has his own attitude (in other words, he is able to assess, because he has a personal position that reflects his emotional and value attitude to the studied material). Resorting to Bloom's taxonomy influenced the development of the basic structure of the notion that it issued in the current state standards, because it provided the specification of objectives in the process of formation of student's competence. There was a specification of purposes carried out at the levels of program, educational and methodological support that required from the teacher in the classroom "to determine the educational activities that reflect the transition from an overview of the study results to a particular standard, a criterion of its achievement by a student" [3]. Let us note one more sign of practical implementation of the approach in response to the challenges of our time, namely the fact that competence "works" with a situation of uncertainty because it is inherently oriented on problem solving. It is more important to develop the ability to solve the unusual situations than just the ability to apply knowledge in practice. This requires the development of non-linear thinking, formation of creativity, flexibility, mobility, etc.

The **acmeological approach** is actively developed in the experimental educational institutions in Ukraine, since it is considered as one of the conditions for improving the quality of education. It offers an appeal to the *individual potential* of a person, acts as an essential indicator of formation and development of personal qualities, competence and readiness for self-realization. The sign of implementation of the acmeological approach in the educational process is the formation of a *student's acmeological position* which is a manifestation of his *individual maturity* as a person and as a future

professional. V. Maksimova says that this position is expressed through subjectivity, adaptability, humanistic values, and desire for personal fulfillment of a student [7]. In pedagogical acmeology, a lot of attention is given to self-development of a person as a subject of life activity in school educational space, creation of pedagogical conditions for self-realization of a student. Development of the acmeological approach [6, p. 260–278] is actualized in the new economic, social and cultural conditions because of objective necessity of establishing a new competitive model of education focused on the development of *successful* teacher and student.

3. CONCLUSIONS

The article examines the essential features of activity, individual-oriented, technological, axiological, competence and acmeological approaches that define the directions of innovative development of education in Ukraine.

REFERENCES

- [1] Asmolov A. In the world of variable education. In: Yasvin V.A. *Educational environment: from modeling to design*. Moscow, 2001, 4-6. (in Russian).
- [2] Bekh I. Activity and competence approaches: essence and scope. *Director of school, lyceum, gymnasium*, **1** (2011), 29-34. (in Ukrainian)
- [3] Chajka V.M. *Basics of didactics*. Akademydav, Kyjiv, 2011. (in Ukrainian)
- [4] Kremen V.H. Pedagogical science: time of a methodological reflection. In: Kremen V.H. *Education and science in Ukraine: ways of modernization (Facts, thoughts, perspectives)*. Kyiv, 2003, 80-85. (in Ukrainian)
- [5] Kremen V. Personality-developing education as a research priority. *Native school*, **11** (1998), 53-57. (in Ukrainian)
- [6] Lozova V.I. *Scientific approaches to pedagogical research*. Virovets A.P. Apostroph, Kharkiv, 2012. (in Ukrainian)
- [7] Maksimova V.N. *Introduction to acmeology of school education*. Saint Petersburg, 2002. (in Russian)
- [8] Marynovska O.Y. *Formation of readiness of teachers to design and implementation activities: theory and practice*. Symphony-Forte, Ivano-Frankivsk, Environment, Poltava, 2009. (in Ukrainian)
- [9] *Paradigm as a methodological regulative of pedagogical thought and innovative practice*. Available at: <http://ua-referat.com>. (in Ukrainian)
- [10] Savchenko O. Concept of development of new edition of the State standard of primary education. *Primary school*, **4** (2010), 1-5. (in Ukrainian)
- [11] Sydorov S.V. *System of literature teaching by E. N. Ilyin*. Available at: <http://si-sv.com/publ/16-1-0-230>. (in Russian)
- [12] Vashchenko L.M. Theory of innovation development of education. In: Vashchenko L.M., Chmil A.I., Pustova T.V. *Innovative model of the educational process organization in the institutions of postgraduate education*. Pedagogichna Dumka, Kyiv, 2012. (in Ukrainian)

Address: Oksana Marynovska, Ivano-Frankivsk Regional Institute of Postgradual Pedagogical Education, 3, Mitskevycha Pl., Ivano-Frankivsk, 76000, Ukraine.

E-mail: om.ippo@gmail.com.

Received: 07.10.2016; **revised:** 18.11.2016.

Мариновська Оксана. Інноваційні процеси в освіті: наукові підходи. *Журнал Прикарпатського університету імені Василя Стефаника*, 3 (2-3) (2016), 21–25.

Стаття присвячена аналізу наукових підходів, що визначають напрями модернізації інноваційного розвитку освіти в Україні.

Ключові слова: освіта, підхід, інновація.