Psychological And Pedagogical Aspects Of Innovation Processes In Educational Activities

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Summary

The article conducted an interdisciplinary study of the concepts of innovation, innovation, innovative educational process, pedagogical innovation, management of an educational institution. · Based on the study of psychological, methodological, philosophical literature, scientific approaches to the management of an innovative educational institution have been analyzed, and a strategy for its improvement has been determined.
Purpose of the work: to study and characterize innovations in education, as well as in the education system.

Key words:
psychophysiological and socio-psychological spheres, individual, education system, educational process.

1. Introduction

The change in the role of education in society has led to most of the innovation processes. "From the socially passive, routine, taking place in traditional social institutions, education becomes active. The educational potential of both social institutions and personal ones is being actualized". Previously, the formation of knowledge, skills, informational and social skills (qualities) that ensure "readiness for life", in turn, understood as the ability of an individual to adapt to social circumstances, were the unconditional guidelines for education. Now education is increasingly focused on the creation of such technologies and methods of influencing the personality, in which a balance is ensured between social and individual needs, and which, by launching the mechanism of self-development (self-improvement, self-education), ensure the readiness of the individual to realize his own individuality and changes in society. Many educational institutions began to introduce some new elements into their activities, but the practice of transformations encountered a serious contradiction between the existing need for rapid development and the inability of teachers to do this. To learn how to competently develop a school, you need to be free to navigate in such concepts as "new", "innovation", "innovation", "innovation process", which are by no means as simple and unambiguous as it might seem at first glance. In the domestic literature, the problem of innovation has been considered for a long time in the system of economic research. However, over time, the problem arose of assessing the qualitative characteristics of innovative changes in all spheres of social life, but it is impossible to determine these changes only within the framework of economic theories. A different approach to the study of innovation processes is needed, where the analysis of innovation problems includes the use of modern achievements not only in the field of science and technology, but also in the areas of management, education, law, etc [1-4].

Progressive changes in educational reality are associated, as a rule, with new pedagogical developments. But creating a pedagogical innovation is not enough. Pedagogical innovations, no matter how attractive and sophisticated they are, cannot be mastered without proper management and organization of innovation processes. The initiators of innovations will inevitably face the problems generated by innovations and will be forced to look for ways to solve them. The introduction of new forms, methods, pedagogical technologies requires an understanding of how to implement, master and accompany these innovations.

The issues of scientific support for innovative activities in education are related to the field of pedagogical innovation.

Pedagogical innovation is a young science, they began to talk about it only in the late 90s. last century, i.e. a little over 15 years ago. Today, both pedagogical innovation itself and its methodology are at the stage of scientific development and construction. Let's consider the

conceptual apparatus and theoretical foundations of innovative processes in education.

Innovations in education represent a creative study of new ideas, principles, technologies, in some cases, bringing them to standard projects containing the conditions for their adaptation and application.

A distinction should be made between innovation and innovation. If a pedagogical innovation is understood as a certain idea, method, means, technology or system, then innovation in this case will be the process of introducing and mastering this innovation. We consider the concept of "innovation" to be synonymous with the concept of "innovation" [5].

With the help of the design of innovations, it is possible to manage the development of educational systems: both at the level of an educational institution and at the level of a region or country. Justification of the typology of pedagogical innovations allows you to study the specifics and patterns of the development of innovations, to identify and analyze the factors that promote and hinder innovations.

The key concept in innovation is the innovation process. Innovative processes in education are considered in three main aspects: socio-economic, psychological and pedagogical, and organizational and managerial. The general climate and conditions in which innovation processes take place depend on these aspects. The existing conditions can facilitate or hinder the innovation process. The innovation process can be both spontaneous and consciously controlled. The introduction of innovations is, first of all, a function of managing artificial and natural processes of change.

2. Theoretical Consideration

Let us emphasize the unity of the three components of the innovation process: the creation, development and application of innovations. It is this three-component innovation process that is most often the object of study in pedagogical innovation, in contrast, for example, from didactics, where the object of scientific research is the learning process.

Another systemic concept is innovation activity - a set of measures taken to ensure the innovation process at a particular level of education, as well as the process itself. The main functions of innovation include changes in the components of the pedagogical process: meaning, goals, content of education, forms, methods, technologies, teaching aids, management system, etc.

Innovation came to pedagogy from cultural studies, linguistics, economics. Innovation has an implementation vector that characterizes the traditional and often criticized relationship between science and practice (science develops and implements it into practice). This understanding

contradicts the personality-oriented pedagogical paradigm that has developed in recent years, which determines the increased role of the subject in the design of his education.

We do not consider it expedient to mechanically transfer to the field of pedagogy the apparatus of innovation, which operates in the economy, entrepreneurship or production. Taking into account the person-centered nature of pedagogy, we define the object and subject of pedagogical innovation not in the traditional way of "external influences" on the students, but from the standpoint of the conditions for the renewal of their education, which occurs with their participation. This is the main principle that we propose as a guideline for building the theoretical and methodological foundations of pedagogical innovation.

Based on the above, under pedagogical innovation we will understand the science that studies the nature, patterns of the emergence and development of pedagogical innovations, their connection with the traditions of the past and future in relation to the subjects of education [6,7].

Let us formulate the object and subject of pedagogical innovation as follows. The object of pedagogical innovation is the process of the emergence, development and assimilation of innovations in education. Innovation here is understood as innovation - purposeful changes that introduce new elements into education, and cause its transition from one state to another. Education is viewed as a socially, culturally and personally determined educational activity, in the process of change (renewal) of which the subject of this activity is included.

The subject of pedagogical innovation is a system of relations arising in innovative educational activities aimed at the formation of the personality of the subjects of education (students, teachers, administrators).

Innovative changes are taking place today in such areas as the formation of a new content of education; development and implementation of new learning technologies; application of methods, techniques, means of mastering new programs; creating conditions for self-determination of the individual in the learning process; a change in the way of activity and style of thinking of both teachers and students, a change in the relationship between them, the creation and development of creative innovative teams, schools, universities.

Studies of innovative processes in education have revealed a number of theoretical and methodological problems: the ratio of traditions and innovations, the content and stages of the innovation cycle, the attitude to innovations of different subjects of education, innovation management, personnel training, the basis for criteria for assessing the new in education, etc. These problems need comprehension of a different level - methodological. The substantiation of the methodological foundations of pedagogical innovation is no less relevant than the creation of innovation itself. Pedagogical innovation is a special area of methodological research [10-13].

To develop scientific support for educational innovations, we need to rely on the existing methodological base. For this, it is appropriate to use the scientific apparatus related to the methodology of general pedagogy.

What is pedagogical methodology? In the works of philosophers, methodologists, teachers, there are different understandings on this score. The active essence of innovations in education and the need to display them in the form of teaching put forward a requirement for understanding the methodology of pedagogical innovation as an organic unity of two components: teaching and activity. To fix this unity at the conceptual level, we will use the definition of pedagogy methodology: "The pedagogical methodology is a system of knowledge about the foundations and structure of pedagogical theory, about the principles of the approach and methods of acquiring knowledge that reflect ... pedagogical reality" and was developed later: "... obtaining such knowledge and substantiating programs, logic and methods, assessing the quality of special scientific pedagogical research" [4].

The above constructions allow us to introduce the following definition:

The methodology of pedagogical innovation is a system of knowledge and activities related to the foundations and structure of teaching about the creation, mastering and application of pedagogical innovations.

So, the sphere of the methodology of pedagogical innovation includes the system of knowledge and the corresponding activities that study, explain, substantiate pedagogical innovation, its own principles, patterns, conceptual apparatus, means, limits of applicability and other scientific attributes characteristic of theoretical teachings.

Pedagogical innovation and its methodological apparatus can be an effective means of analysis, justification and design of education modernization. Scientific support for this global innovation process needs to be developed. Many innovations, such as educational standards for general secondary education, a new school structure, specialized training, a unified state examination, etc. have not yet been worked out in the innovative pedagogical sense, there is no integrity and consistency in the processes of mastering and applying the announced innovations.

There is a growing need for a new theoretical understanding of the essence of management of innovative processes in an educational institution, the development of pedagogical conditions that ensure continuous innovative movement. It is also important that innovative processes require special training of personnel - teachers, administrators, education managers, who are competent in the field of pedagogical innovations.

Within the framework of the ways of solving the listed tasks, let us consider the problem of the typology of pedagogical innovations [7-9].

Based on our research, we offer a systematics of pedagogical innovations, consisting of 10 blocks. Each block is formed on a separate basis and differentiated into its own set of subtypes. The list of grounds was compiled taking into account the need to cover the following parameters of pedagogical innovations: attitude to the structure of science, attitude to subjects of education, attitude to the conditions of implementation and characteristics of innovations.

According to the systematics developed by us, pedagogical innovations are divided into the following types and subtypes:

1. In relation to the structural elements of educational systems: innovations in goal-setting, in tasks, in the content of education and upbringing, in forms, in methods, in techniques, in teaching technologies, in teaching and educational tools, in the diagnostic system, in control, in evaluation of results, etc.

2. In relation to the personal formation of subjects of education: in the development of certain abilities of students and teachers, in the development of their knowledge, abilities, skills, methods of activity, competencies, etc.

3. By the field of pedagogical application: in the educational process, in the curriculum, in the educational field, at the level of the education system, at the level of the education system, in the management of education.

4. By the types of interaction between the participants in the pedagogical process: in collective learning, in group learning, in tutoring, in tutoring, in family learning, etc.

5. By functional capabilities: innovations-conditions (ensure the renewal of the educational environment, socio-cultural conditions, etc.), innovations-products (pedagogical tools, projects, technologies, etc.), managerial innovations (new solutions in the structure of educational systems and management procedures to ensure their operation).

6. By methods of implementation: planned, systematic, periodic, spontaneous, spontaneous, random.

7. By the scale of distribution: in the activities of one teacher, methodological association of teachers, at school, in a group of schools, in the region, at the federal level, at the international level, etc.

8. According to the social and pedagogical significance: in educational institutions of a certain type, for specific professional and typological groups of teachers.

9. In terms of the volume of innovative events: local, mass, global, etc.

10. According to the degree of the proposed transformations: corrective, modifying, modernizing, radical, revolutionary.

Conclusions

In the proposed taxonomy, one and the same innovation can simultaneously have several characteristics and take its place in different blocks. For example, such an innovation as the educational reflection of students can act as an innovation in relation to the system of diagnostics of learning, the development of students' methods of activity, in the educational process, in collective learning, an

innovation-condition, periodic, in a senior specialized school, local, radical innovation.

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