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THE DYNAMICS AND PROSPECTS OF CONCEPTS CONSTRUCTION IN EDUCATIONAL PROCESS

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ДИНАМІКА ТА ПЕРСПЕКТИВИ ТВОРЕННЯ ПОНЬТЬ В ОСВІТНЬОМУ ПРОЦЕСІ

The aim of the work – to highlight the development of the concept-categorical apparatus in the field of education.

The main body. The article deals with theoretical concepts of dynamics and development of concepts in the educational process. In the context of Ukraine’s integration aspirations, it is important to comprehend the prospects for the development of domestic science, including education, the conceptual-categorical apparatus of pedagogy in order to harmonize with world and European vectors. It is proved that the system level of scientific concepts, reflecting the degree of development of its theory and reveals the relationship of objects and diversity of cognitive situations that arise during the study, education of the individual and allows the participant to clearly outline the subject of the study and build its consistent concept. Taking into account the technical innovations of modern pedagogical science, it has been assumed that a clear system of concepts is an integral part of the educational process. The relevance of the study by the authors is due to the subjective determination of the conceptual-categorical apathy, which manifests itself in general tendencies in various scientific fields.

Because of the essential analysis of the concepts of “man”, “individual”, “personality” and their explication, the versatility of the interpretation of the conceptual-categorical apparatus in the domestic and foreign scientific spaces has been proved. The necessity of studying the basic tendencies of the conceptual-categorical apparatus of pedagogical science has been substantiated. The triad of pedagogical concepts “man”, “individual”, “personality” has been singled out.

Conclusions. We conclude that the educational conceptual-categorical apparatus is one of the conditions for the development of a world pedagogical culture as integral quality that ensures the development of an individual pedagogical culture, the acquisition of scientific theories, and educational technologies in a single, multicultural informational and educational space. As the pedagogical system of concepts becomes an instrument for finding new landmarks that develop the educational industry and contribute to the comprehensive development of the individual.

Key words: conceptual-categorical apparatus; development; educational process; concepts.

Мета роботи – висвітлення розвитку понятійно-категорійного апарату в освітній галузі.

Основна частина. У статті розглядаються теоретичні концепції динаміки та розвитку понять в освітньому процесі. В умовах інтеграційних устремлень України важливим є осмислення перспектив розвитку вітчизняної науки, включно з освітою, понятійно-категорійного апарату педагогіки з метою гармонізації зі світовими та європейськими векторами. Доведено, що системний рівень наукових понять, що відображає ступінь розвитку його теорії і розкриває взаємозв’язок об’єктів і різноманіття пізнавальних ситуацій, що виникають під час навчання, виховання особистості, і дозволяє учаснику чітко окреслити предмет дослідження та побудувати його послідовну концепцію. Враховуючи технічні нововведення сучасної педагогічної науки, було припущено, що чітка система понять є невід’ємною складовою освітнього процесу. Актуальність дослідження авторами обумовлена суб’єктивною детермінацією понятійно-категорійного апарату, що проявляється у загальних тенденціях у різних наукових галузях.

На основі сутнісного аналізу понять “людина”, “індивід”, “особистість” та їх експлікації доведено різноплановість трактування понятійно-категорійного апарату у вітчизняному та зарубіжному наукових просторах. Обґрунтовано необхідність вивчення основних тенденцій розвитку понятійно-категорійного апарату педагогічної науки. Було виокремлено триаду педагогічних понять “людина”, “індивід”, “особистість”.

Висновки. Освітній понятійно-категоріальний апарат є однією з умов розвитку світової педагогічної культури як цілісної якості, що забезпечує розвиток індивідуальної педагогічної культури, оволодіння науковими теоріями, освітніми технологіями в єдиному, багатокультурному інформаційному та освітньому просторі. Оскільки педагогічна система понять стає інструментом пошуку нових орієнтирів, які розвивають освітню галузь та сприяють всебічному розвитку особистості.

Ключові слова: понятійно-категорійний апарат; розвиток; освітній процес; поняття.

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Introduction. The development of modern society is a complex, multifaceted process, the important component of which is the phased social and cultural society environment and the transformation of these results into an external, hostile force. In the conditions of essential social changes, the problem of pedagogical concepts determination acquires a special scale and relevance.

A distinctive feature of recent years was the growing interest of representatives of various sciences to the questions of pedagogical concepts determination. This is all more important as a complex and contradictory processes of differentiation and integration of science take place. Autonomization of scientific knowledge can be considered as a stage of development. Disseminated information flows tried to unite the philosophy, whose representatives were quite successful, but not always effectively sought to answer the main questions of world knowledge, giving advice to representatives of individual sciences. In the process of developing each science, its content and methods became so complicated that the gap between each science and pedagogical generalization became increasingly apparent. Moreover, the authors of the pedagogical studies tend to use examples from the achievements of modern philosophy, logics, biology and other sciences, these attempts do not always look right and meaningful.

Nowadays the researchers' interest to the dynamics and prospects of concepts construction in educational process has developed considerably. As a result, the approaches to the determination of pedagogical concepts in historical-pedagogical and subject-thematic relation has been increased. The formation of the prospects of conceptual-categorical apparatus has been carried out. The study of its dynamics as in connection with the development of educational process and the progress of science has been defined. The reasons for changing the concepts definitions has been researched.

The dynamics and prospects of concepts construction in educational process becomes the subject of a study as a unified means of pedagogical reality reflection in all variety of multilingual world cultural traditions (P. Shchedrovitsky); as a means of clear and adequate expression of scientific and pedagogical concepts, their interpretation, definition and clarification (N. Razkin); as the necessary element of special scientific and pedagogical information transfer (V. Polonsky); as a reflection of historically formed and consolidated in the

language integration processes of the rapprochement and synthesis of sciences, pedagogical traditions and systems that characterize various pedagogical cultures (E. Bondarevska). Attention has been paid to the socio-philosophical, culturological and psychological roots of the concepts that function in pedagogical science (E. Bondarevska, I. Kantor), wide use of general scientific terms in pedagogy (I. Sushkov, E. Kryukova). The genesis of new concepts establishment of pedagogical science (I. Rozina, A. Fedorov, A. Novikova), the nature of relations between the previous and new values, borrowed and traditional pedagogical terms have been studied. Furthermore, according to given aspect, different concepts have been explored through the dynamics and prospects of its construction in educational process.

The aim of the work – to outline the dynamics and prospects of concepts construction in educational process.

The main body. The operation of concepts is a prerequisite for the study and construction of theoretical models, as well as for the study of educational processes in dynamics and prospects. We believe that the very understandable system of concepts creates a conceptual-categorical apparatus of pedagogical science. Violating the principle of novelty, we have a chaotic accumulation of facts in the history of pedagogy. Thus, pedagogy along with other humanities cannot get closer to the level of understanding of the laws of educational systems development, and the laws of human development have not even become the priority of modern science. These contradictions have been manifested from the system of basic concepts, completing the laws of development of creative abilities. Let us consider this problem on the example of determination the notion “concept”.

If we analyse the state of the humanities that study, or at least should study the laws of human development, then the existence of crisis phenomena, due to subjective and objective factors, is obvious. Subjectivity, in our opinion, is due to the lack of researchers who would be able to combine the encyclopaedic level of knowledge in philosophy, pedagogy, psychology, sociology with practical experience. Moreover, each of the above-mentioned sciences is experiencing a period of crisis, which in the nearest future will become a prerequisite for a qualitatively new stage of development. It should be noted that the characteristic feature of crisis phenomena, the hidden form of dissatisfaction with the

existing state of affairs is the appearance of dozens of types of “concepts”. The study of the historical features of the system of pedagogical concepts in the history of the development of pedagogical science will positively influence the decision of the pedagogical problem of systematization of knowledge about the conceptual-categorical apparatus and will improve the intellectual level of society.

Let us try to use the works of famous thinkers of the past to outline important issues of the present. It is noteworthy that a number of scientific studies are devoted to terminological problems of pedagogy. For example, H. Shchedrovytskyi noted, “the real processes, bodies, or phenomena being investigated form one or another concept, constitute the object of thought. The content of the concepts never exhausts all the properties of objects, remaining always relatively limited and one-sided. It is through “the development of a community of practice, it is constantly changing, as a result of a change in the content of concepts is changing their structure” [8]. In addition, another scientist believes that the scientific concepts “reflect the essential and necessary signs, and the words and symbols (formulas), which express them, are scientific terms” [7].

It should be noted that a number of conditions affect the formation of scientific concepts. First, this is a separation and generalization of significant signs that are separate from the other external, non-essential features. The second condition of the concept content must be taken into consideration in such form that can be used in the following mental processes, but the goal will be in creating a clear amount of signs of this concept that is, the process of its formation ends with verbal formulation. Despite the fact that “the formation of the concept relies on verbal structure of thinking, so at the moment of concept appearance we have only the process of its origin and it may not have the proper word for it” [4]. Therefore, the process of formation and development of the conceptual-terminological apparatus of any science is rather closely connected with the process of formation and development of the very scientific knowledge. Therefore, the formation of the concept – is a complex dialectical process, which is carried out by using such methods as comparison, analysis, synthesis, abstraction, idealization, generalization, experiment, etc.

The process of formation and development of concepts and terminology of any science is closely associated with the process of formation and

development of scientific knowledge. The integration of a concept in pedagogy is a complex and lengthy process of scientific investigation. Indeed, the latest achievements of science, social practice are accumulated and concentrated in terms. The starting material for the formation of concepts serves as sensory images of reality perceived and clearly serves the recipient. This process is carried out by abstraction and generalization of any of these parties’ sensory images and understanding them as a special, independent content of thought. As a conversion tool practice, pedagogical integration can eliminate duplication, that optimize the teaching process, lead to the creation of new objects (concepts, theories, educational systems, new courses, activities, change of environment, new models, technologies, teaching tools). The integration of conceptual and categorical apparatus of pedagogy is a purpose for association (synthesis) certain pedagogical concepts into independent educational purpose system that has the aim to ensure the integrity of knowledge and skills.

Note, that the logic of the “concept” is an integral element of the judgment (subject, predicate) or syllogism. Because, there are concepts in the broad and narrow sense, as well as separately allocate scientific concepts. The first formally distinguish common (similar) signs the general subjects of universal phenomena fix them in words. Concepts in the narrow sense belong to a certain branch of science; clearly define the main features of an object, phenomenon, process or object. In general, essential and necessary signs of a single object, object, phenomenon or process, and words and expressions (formulas) characterize scientific concepts expressing them are scientific terms. We add that the totality of generalized, reflected, in the concept of objects is called the volume concept, and a set of essential features, which summarize and allocate objects in the concept – its content.

From the point of view of the history of philosophy, we have two opposing lines concerning the theory of concepts: materialistic believes that the concept is objective in its content, while the idealist states that the concept is an imaginary entity that arises spontaneously, is completely independent of the objective reality. The philosopher I. Kant believed that any concept is “a general idea of what is common to many objects, and therefore, an idea that can be contained in various objects” [9]. However, according to G. Hegel’s “notion” is a “synonym of a true understanding of the es-

sence of the case, and not just the expression of any general, any similarity objects contemplation. In the concept reveals the true nature of things, but doesn't mention its similarity to other things, and it should find its expression not only the abstract community and a feature of its object" [2].

It should be noted that in logic there are different types of definition of "concept" as a form of thinking. Here are some definitions of the term "concept": the concept is "an integral set of judgments, that is, thoughts, which somewhat argue about the distinguishing features of the object being investigated, the core of which is the judgment of the most and at the same time, the essential features of an object" (M. Kondakov). The concept is "a form of thinking, which is the result of the generalization and allocation of objects of a certain class on the general and specific features of them" (A. Konversky). "The concept is an idea that captures the signs of objects and phenomena that are displayed in it, which make it possible to distinguish between these objects and phenomena from adjacent to them" (D. Gorsky). "The concept is a thoughtful reflection in the form of the direct unity of general, essential features of objects" (I. Chupakin). Summing up, the above definition of the concept reflects the essence of the concept as a form of thinking. However, each determination or definition of a particular concept in science, generally, is incomplete or unclear.

Analyzing the psychological-pedagogical literature, we can cite several definitions of the term "concept":

- "the concept is a form of thinking, which displays items in their general and essential features" (M. Tof-tul);

- "the concept is an idea that, by pointing out a certain sign, distinguishes itself from the universe and generalizes objects that are characteristic of this class in the class" (I. V. Khomenko);

- "the concept is a form of thinking, which shows significant signs of single-element class or a class of related objects" (A. Hetmanova);

- "the concept as a form (kind of) thought, or as a mental formation, is the result of the generalization of the objects of a certain class and the thoughtful allocation of this class in a certain totality of the general objects of this class – and a set of distinctive signs for them" (E. Voishvillo);

- "the concept is an idea that captures the signs of objects and phenomena that are displayed in it that make it possible to distinguish between these objects and phenomena from adjacent to them" (D. Gorsky);

- "the concept is a form of thinking, which is the result of the generalization and allocation of objects of a certain class on the general and specific features of them" (A. Konversky) [6].

Therefore, pedagogical concepts allow recipients to open new opportunities, to master generalizations cumulative knowledge that freed them from the one-sided development and will improve the conditions for full formation of each individual. Preparation of conceptual and categorical apparatus is connected with structuring and systematizing the scientific pedagogical knowledge. In the process of scientific investigation thesaurus knowledge modeling, identification and classification of basic notions, that are correlated to develop a model of scientific knowledge in the subject plane study of basic educational concepts, takes place. The elaboration of the conceptual apparatus with application of foreign sources lead to better theoretical analysis of the problem of conceptual and categorical determination of pedagogical science apparatus, and thus for further experimental work.

A distinctive feature of the modern level of pedagogical science is their integration. Here are some typical examples. In the preface to the popular philosophy in Ukraine, the authors state: "The dynamic processes of the contemporary contradictory world place every person in the extremely difficult conditions of social life. The radical change in value orientations, the urgent need for a constant search and quick finding of vital decisions, stressful situations – all these are the problems of everyday human existence, the sphere of practical application of ideological culture, the basis of which is the philosophy" [3]. Obviously, a similar introduction could open a manual on psychology or pedagogy. In addition, it is no coincidence that the authors analyse the specificity of philosophical comprehension of reality, the philosophical foundations of being and knowledge, the specificity of world outlook as a spiritual and practical phenomenon. The authors substantiate the methodologically important conclusion that knowledge of the general laws of being is the basis of world outlook. At the same time, "the worldview is not only a collection of knowledge about the world, but is rather a kind of synthesis of types of knowledge and various meanings of comprehension of the world by man, the projection of personal problems. In other words, it is not a high process of assimilation of the finished knowledge, but inside work and self-attainment. Absolutisation of knowledge is a defect in the educational concept of a person. The

analysis of scientific papers that directly or indirectly affect the outlined problems shows that there is a lack of comprehensive research on the formation and determination of concepts. In addition, scientists have traditionally focused their attention on the logical and meaningful clarification of educational concepts. While the formation of global thesaurus of different fields of science, education and development concepts as the concentrated expression of historically achieved pedagogical knowledge in pedagogy has not been solved at the conceptual level. In our study, we qualify pedagogy thesaurus scientific as a scientific and cultural phenomenon, providing an understanding of scientists and practitioners in the global educational space and consistency of methodological principles of research of problems. It is a system of concepts that are designed for people and their assimilation, mainstreaming the successful orientation in the plane of the subject of scientific knowledge. In the formalized language as it appears in the system terms or terminology research problems of educational system concepts.

We can state that in the context of the research problem: “the description of the conceptual apparatus in all the humanities must begin with the famous triad: human – individual – personality”, further building up this “triad” scientist proposes defining such concepts: “human is a living creature, capable of development and self-knowledge. The individual (from the Latin language – “indivisible”) is a human, who are characterized by unique qualities. Personality (a person, in Greek theater it is a mask for an actor) is individual, characterized by the ability to creativity. This approach allows us to treat the person as a living being capable

to development and self-knowledge and characterized by unique qualities and the capacity for creativity” [5].

Since most of the concepts and terms derived from Latin and Greek equivalents, it is advisable to begin our comparative analysis of the above mentioned “triad” of concepts from Latin glossary. In Latin language *Individuum*, *I n* is person, individual, and that is synonymous to identical concepts. *Persona*, *ae f* is personality or person. *Personalitas*, *atis m* is personality. *Homo*, *inis m* is man, intelligent, sensible, honest decent and weak creature [5]. Consequently, the following notions are the primary source of a number of synonymous concepts regarding personality: *individuum*, *persona*, *personalitas*.

Conclusions. Let us sum up that a certain paradox of the situation manifests itself in a peculiar imbalance between pedagogical science and practical needs. This paradox is not surprising, given the fact that even the very concept of “science” has no distinct definition. There is another difficulty. In the process of historical development, the semantic content of many concepts has changed and, therefore, in the history of any science it is necessary to specify these aspects as well. Every science of the humanities originates from folk culture, which in the course of development reaches the level of ethnophilosophy, ethnopädagogie, ethno-psychology. If we compare the achievements of the representatives of different nations, which is one of the main tasks of comparative studies, then one can see an interesting thing. Each nation uses the ways of expressing the main ideas, inherent in its culture. At the same time, the content, main vectors of generalizations coincide completely.

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