

# INTERNATIONAL CONCEPT SYSTEM AS A STRATEGIC WAY OF MODERN SCIENCE DEVELOPMENT

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**Abstract.** *The article outlines the determination of international system of pedagogical concepts in modern scientific society. The definitions of the major international terms have been explored. The purpose of the research is to define is to outline international concept system as a strategic way of modern science development. It was researched that international conceptual-categorical apparatus of pedagogical science is not only a thesaurus of concepts covering all the terms with their scientific interpretations used in the study, but also a set of interrelated concepts, which reflect the key content and functional aspects of the offered theory. The most frequently used international concepts of pedagogical science have been explained and determined in the article. Original definitions of international concepts have been offered by the authors in a summary table. The system level of scientific concepts that reflects the development degree of its theory and reveals the relationship of objects and the diversity of cognitive situations which arise during the study, education of person and allows the participant clearly outline the subject of research and build its consistent concept have been investigated during the study. It has been summed up that the operation of international 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. It has been concluded that strict understandable system of concepts creates a conceptual-categorical apparatus of pedagogical science.*

**Keywords:** *pedagogy, definition, determination, constituent, international concept system, conceptual-categorical apparatus.*

## Introduction

Nowadays, the main trends and perspective areas of education development attract the attention of many scientists. In each historical period, the effectiveness of the educational system is an important indicator of the degree of development

of any country, its economic, social and technical potential and international reputation.

Although mankind has gained considerable experience in organizing pedagogical concept system, every culture and nation dwell on not only the specific conditions of their country, but also the experience of innovators in the field of education in other countries. Under these circumstances, the interest of the scientific and pedagogical community to international conceptual-categorical apparatus is naturally increasing.

The definition of the aim and objectives of the research is to outline international concept system as a strategic way of modern science development.

We think that unclear definition of that or those notions creates a «hazy» interpretation of events and processes of pedagogical reality that causes confusion in scientific circles. We consider that the «concept» is a «logical framed idea of common essential properties, connections and relationships of objects or phenomena of objective reality». Because researchers in the field of terminology argue that the construction of concepts and terminology of any guided science adopted requirement (principle) the uniqueness of the concepts under which each of them must have only one meaning.

The conceptual system appears as a dynamic unity of the basic components which can function, transform under the influence of historical, political, economic, socio-pedagogical, socio-cultural factors of society development, preserving its essence and, at the same time, changing the content and formal features.

### **Analysis of recent research and publications**

A distinctive feature of recent years was the growing interest of representatives of various scientists to the questions of the international system of pedagogical concepts. This is all more important as a complex and contradictory processes of differentiation and integration of science take place. Recently, the researchers' interest to the international system of pedagogical concepts has increased considerably, as a result the approaches to the classification of pedagogical concepts in historical-pedagogical and subject-thematic relation is developed; establishment of the «age» of pedagogical concepts and terms is carried out; the study of its evolution in connection with the development of educational practice and the progress of science is carried out; reasons for changing the meaning of pedagogical concepts are explored.

The international conceptual-categorical apparatus of pedagogical science becomes the subject of a study as a unified means of clear and adequate determination of scientific and pedagogical concepts, their interpretation, definition and clarification; as important constituent of special scientific and

pedagogical information transfer (Sokol, 2016); as the necessary element of special scientific and pedagogical information transfer (Polonskiy, 2004); 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 (Antonova, 2014). A great number of investigations are dedicated to the history of the formation and development of basic pedagogical concepts (Kicheva, 2013), to introduction the definition of the constituents of the conceptual categorical apparatus, which belong to other branches of scientific knowledge (Robinson, 2017). The problem of defining international concepts system development involves a number of logical steps: the definition of the essence of the concept, its significance in the process of development, the need of society in people with creative abilities, retrospective assessment of the problem, importance of educational systems, the establishment of consistent patterns of the process, the search for innovative ways of personal improvement (Vykhreshch, 2011). Attention is paid to the psychological, socio-philosophical, culturological roots of international concepts that function in pedagogy (Tsaryk, 2016), wide use of general scientific terms in pedagogy (Salter, 2012).

The problem of the international conceptual-categorical apparatus of pedagogical science has been arisen in scientific circles. Because unfortunately, there is a sharp lack of systematic studies in pedagogy, while empirical conclusions predominate. Therefore, the formation of conceptual system pedagogical science is a fundamental problem modern science. Thus, in the last three decades several attempts have been made to construct a clear and logical classification of the system of pedagogical knowledge. However, by this time there has not been created a single common system of pedagogical knowledge that could be used in the process of general pedagogical preparation of students, teachers etc.

To solve the tasks of the research a complex of **general scientific and special methods** have been used, namely: comparative analysis, identification, selection, systematization of scientific, educational and methodical literature, documents, periodicals; historical (to determine the degree of scientific comprehension, analysis of theory development peculiarities and practice of creation a system of basic concepts); historical-genetic (to define factors, cause-and-effect relationships of formation and development); historical comparative (to compare the effectiveness of concepts usage in pedagogical science of different countries and at individual stages of development); expert (to analyze problems with evaluation of results); development of a forecast scenario. The method of comparison, descriptive method and method of system analysis have been used in the article.

The tendency of international pedagogical concepts study doesn't develop in isolation, but in the relationship created by them and in combination with not only semantic affinity, but also with thematic closeness of concepts. In general, this makes it possible to attribute the pedagogical international conceptual system to one or another thematic field. So, we can observe the presence of common components in the external form, and in the internal sense, reflecting a certain scientific and pedagogical worldview, cultural tradition. For example, discussions within the framework of the international conference «Gifted and Talented Education» (2015 Poznan, Poland) allowed to reveal English-language conceptual elements and compare them with domestic pedagogical concepts. For example: «academic retardation», «emotional/behavioral disorders», «giftedness», «specific learning disability», «special education», «exceptional children», «creativity», «discourse», «preacademic skills», «reciprocal teaching» etc.

The explication of concept «quality» is one of the main problems in contemporary discussions of modern pedagogical science. The analysis of literary sources has shown that the quality strategy today is the basis of the educational policy of many countries. This process was initiated at the end of the 20th century (Great Britain, the Netherlands, Poland, USA, Hungary, Scandinavia, etc.) and is still ongoing (Germany, Romania, France, Czech Republic etc.). The Academic Explanatory Dictionary of the Ukrainian language distinguishes the following features of this term:

- 1) it is «the internal certainty of the subject, which is a specificity that distinguishes it from all others». In our case, «quality» – has been determined as «to be an education» (Bilodid, 1970, 638);
- 2) «quality» is a «degree of value, suitability for something for its intended use» (Bilodid, 1970, 638). This aspect is usually taken into account in the discussions on the quality of education;
- 3) «quality» is «an characteristic feature, differentiation, a personal characteristic» (Bilodid, 1970, 638).

According to EAQA (European Association for Quality Assurance in Higher Education), the quality of education is «balanced conformity (as a result, process, educational system) to identified needs, goals, requirements, norms (standards)». D. F. Westerheijden believes that «quality of education» is a multi-valued concept, therefore, its measurement should be carried out in relation to the achievement of many goals that each of the participants in the educational process faces. The achievement of practical goals is the equivalent to the quality of the final «product». The scientist indicated that «quality is a multiaspectional concept: it is measured by various goals faced by participants in an educational process in an educational institution» (Antonova, 2014, 183).

In our opinion, the quality of education is significant changes in the educational system itself, the correlation of its components (students, teachers,

equipment and materials), and the creation of productive educational technologies and programs, economic, cultural and political development. Consequently, according to the UN criteria «quality of education» is one of the leading indicators of life quality. In connection with the course of Ukraine to accelerate integration into the structure of united Europe, the quality of education becomes important and calls for the bringing of domestic educational standards into conformity with the criteria of the member states of the European Union. Let's sum up that, the new methodology of quality education should be based on the interaction of traditions and innovations, and the provision of high-quality education at all its stages and levels. The evaluating of its effectiveness and quality management is one of the main tasks of the present, which is not only pedagogical or purely scientific, but also social, political and governing aspects.

It should be noted that the term «acmeology» refers to the science that arose on the breakthrough of natural, social and humanitarian disciplines. It examines the laws and mechanisms of human development at the level of its maturity, and especially when it reaches the highest level in this development. Thus, in the dictionary of V. Khalipov, «acmeology» is «knowledge (science) about the highest achievements in the field of professional skill. In the conditions of life democratization, there was a need to systematize knowledge, ideas about modern requirements for personality of leader, state and economic chief, and a significant increase of various kinds and rank managers professionalism. These goals have been served into the development of acmeology issues» (Khalipov & Khalipova, 1996, 12). In «Pedagogical Encyclopedia Dictionary», it has been found a more detailed interpretation of this concept: «a science that studies phenomenology, patterns and mechanisms of human development in the period of professional maturity. Acmeology explores the problem of contradiction between the growing volume of information, on the one hand, and the time it takes to master it, on the other. It distinguishes the general and distinctive features inherent to people in the process of their activities, as well as explores the factors that determine the qualitative and quantitative characteristics of «acme». The moral education of a professional is the transformation of universal values into his own values Acmeology also studies the problem of the relationship between the characteristics of human professionalism and his behavior outside the sphere of professional activity» (Bim-Bad, 2002, 14). Thus, in other modern sources, it has been found a somewhat different interpretation of this doctrine as a science «about life achievement and human development», and further, the author has been added that acmeology «explores the conditions for achieving high quality educational systems and the development of educational process subjects: Teacher and Student» (Khalipov & Khalipova, 1996, 3).

The works of domestic scientists of the twentieth century have been devoted to pedagogical creativity that has been permeated with the concept «creativity» –

an obligatory precondition for the pedagogical process, necessary professionalism in teacher's activity. S. Goncharenko in «Ukrainian Pedagogical Dictionary» has been interpreted «pedagogical creativity» as «the original and highly effective approach of the teacher to upbringing and educational tasks, enriching the theory and practice of education and training» (Honcharenko, 1997, 326). By the way, the author has been argued that «the achievement of creative results is ensured by systematic targeted observations, the usage of a pedagogical experiment, and critical usage of advanced pedagogical experience. Pedagogical creativity relates to various aspects of the teacher's activity - conducting training sessions, work on the organization of the student's staff in accordance with their age and individual characteristics, designing the student's personality, developing a strategy and tactics of pedagogical activity in order to fulfill optimally the tasks of individual's development» (Honcharenko, 1997, 326).

The nativity and intensive development of pedagogy as a branch of scientific knowledge and pedagogical sub discipline belong to the progressive tendencies of solving the problem of creativity of the teacher at the international level. «Pedeutology» (derived from the Greek *paideuke's* - teacher and *logos* - word, science, and French *pédeutologie*) is the science about teacher and his profession, which is an important sub discipline of systematic pedagogy. It has over a century of history. We agree with G. Kvyatkovska's point of view that *peedeutology* determines education and teaching activities from different sides: as art, as an activity that recognizes, organizes and gives to reality human meaning as an auto-creation of a human person, as a kind of union of persons who participate in the educational relational» (Okon, 1975, 12).

It should be noted that in «New Pedagogical Dictionary» (V. Okon) has been presented the following definition: «peedeutology ia a separate branch of pedagogy, that studies the problems of teachers, the personality of the teacher, the selection of candidates for the profession of teacher, pedagogical education and training, their professional activities» (Westerheijden, 2011, 154). In addition to this interpretation, the author has been added another definition of the concept: «peedeutology is a branch of interdisciplinary, sub disciplinary pedagogy, resulting from the intensive development of a school that requires knowledge from the teacher, education and training» (Westerheijden, 2011, 155). Ch. Bahn has been defined «peedeutology as a part of pedagogy, which deals with issues related to the teaching profession» (Banach, 2015, 302). We noted that the scientist has been singled out the following directions of *peedeutological* research: «the personality of teacher, his talent and authority, the selection of candidates for training for this profession and pedagogical education, professional ethics, etc» (Banach, 2015, 303). We agree with J. Shtempruch's statement that «peedeutology» should be regarded as «the science of a teacher, a mentor who studies all the tangible spheres

of a teacher's life: education, livelihoods, self-development, self-development, his social role as a personality» (Kwiatkowska, 2010, 10).

Let's consider the definitions of such a new concept as «assertiveness» (originates from English to assert – to insist on its own) – a behavior that combines inner strength and politeness with others. «Assertiveness» is derived from the English verb assert (insist, declare). In scientific circulation, «assertiveness» explains both as the quality of personality or as the ability of a person to defend his rights constructively, to demonstrate a positive and respectful attitude to other people, as an ability to defend his own interests, formulate and defend his opinion, freely express his feelings and emotions, achieve his goal, but at the same time without violating the rights of other people and taking responsibility for their own behavior.

The idea of assertiveness as a practical methodological theory of interpersonal interaction was proposed and developed by the American scientist A. Salter (Salter, 2012). The author has been asserted that «assertiveness» is a certain way of personal behavior, accompanied by a sense of respect for one's own personality and emotional and value relation to other people. At the same time, in works of the Czech scholars V. Kappony and T. Novak, it has been found the following idea that the «assertiveness» is a harmonious combination of human personal qualities, reflected in the form of concrete ideological positions and positive orientation, that manifests itself in the knowledge of the human nature, in the skills and abilities of the effective interactions. Let's look through one more definition of «assertiveness» as a way of organizing behavior, the ability to formulate personal needs and desires, the willingness in achieving the goals, respect for people, and, most importantly, respect and love for oneself» (Alberti & Emmons, 1990).

By modeling the latest conceptual-categorical apparatus, we cannot overcome such concepts as «mobing» and «bulling». «Mobing», sometimes «Mobbing» (English mob - crowd) – systematic harassment, psychological terror, forms of decreasing authority, the form of psychological pressure in the form of harassing an employee in a team, usually for the purpose of his release. Bulling is a regular and purposeful physical or mental harm to a child, and mobing refers to psychological terror committed by a group in relation to a person.

The first time problem of bulling was started by Norwegian scientist D. Olveus. He has been defined this phenomenon in a school team as a situation in which the student repeatedly becomes a subject of negative actions and attacks from one student or several students during a long time.

It is noteworthy that bulling includes three important components:

- 1) bulling is an aggressive behavior that includes unwanted, negative actions;
- 2) bulling is a long-term and systematic phenomenon;

3) bullying is characterized by inequality of power or force.

Furthermore, almost all researchers define boiling as a long-term and systematic aggression. Another key thing to remember that also this phenomenon can be determined as:

- «subtype of aggression», which can take many forms, both physical and verbal (E. Peligrini, S. Salmiwali);
- destructive interaction (R. Hezler);
- part of the social life of the group (E. Roland);
- repeated attack - social or verbal from the side of those who has higher status (B. Besag);
- prolonged, deliberate violence that is directed against a person who is unable to defend himself in the actual situation (D. Lane).

An analysis of the situation suggests that modern education is a participant in the process of the birth of a new global community. It turned out to be at the heart of the problems that have a direct influence on the development of personality and society.

Summarizing the above-mentioned information, we can emphasize the importance of comparative tables of the structure of the basic concepts presented in M. Sokol doctoral dissertation defended in 2018 on theme “The system of pedagogical concepts in the history development of XIX-XX cent.” (Sokol, 2016). The problem of modern pedagogical concepts system has been shown in the fact that the authors of textbooks and monographs avoid the answers to the main question about the nature of the triad: a person-individual-personality. So in our turn we offer a summary table devoted to the main concepts.

*Table 1 The system of basic concepts*

<b>Concept</b>	<b>Definition</b>	<b>Author</b>
Person	The living being is capable of development and self-cognition	A.Vykhreshch
Individual	A person who has a unique system of qualities	A.Vykhreshch
Personality	The individual is capable of self-perfection and creativity	A.Vykhreshch
Creativity	The process of formation original ideas that have value	K.Robinson (Robinson, 2017)
Pedeutology	Science about the regularities of successful pedagogical activity	A.Vykhreshch
Assertiveness	The way of personality behavior that accompanied by a sense of respect for one's own personality and emotional-value attitude to other people.	A.Salter (Salter, 2012)

## **Conclusions**

1. The principles and approaches used in this study, as well as general conclusions, directly influenced into the logic of defining international conceptual apparatus in pedagogy. On the basis of the analysis of philosophical, psychological, logical, linguistic, historical and pedagogical sources, we analyzed such concepts as: acmeology, assertiveness, bullying, creativity, mobbing, bullying, pedeutology, quality of education. Such determination is carried out by taking into account the degree of availability and scientific elaboration of the main international components of the conceptual-categorical apparatus of a given research.
2. At first sight, there may be a false impression that the definition of the essence of international concepts is a theoretical problem, the solution of which has an academic interest. In fact, this is not true. It is no coincidence that specialists in the field of psychodydactics drew attention to the significance of knowledge at the conceptual level, which first of all presupposes the systemic nature of assimilation, understanding of the phases of “conceptual experience”: motivation, categorization, enrichment, transfer, curtailment, as well as the fact that the assimilation of concepts is peculiar key to understanding the essence of the processes of students psychological (including intellectual) development.
3. The gradual transition to the information society, the rapid growth of life activity tempo, the importance of the personal factor in the economy, and competition in the labor market determine the attention to the intellectual potential of the nation and interstate associations. That is why the human factor becomes a pledge of economic development, security, prospects of social welfare.
4. Conducting a series of international conferences devoted to the pedagogical concepts, preparation on the basis of comparative studies of European pedagogical dictionaries would significantly contribute to the improvement of the quality of education, the level of pedagogical skills, integration of educational space, innovation and creativity.

## **Summary**

Let us summarize that international 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 mastery of scientific theories, and educational technologies in a developed single, multicultural informational research and educational space. Notably, that an international pedagogical system of concepts becomes the tool for finding new

landmarks that develops education and education of a person. Having universal boundless fields of application and the possibility of expressing all manifestations of pedagogical reality, it acquires the features of the essential force of intercultural and interpersonal scientific and professional communication, promoting the exchange of ideas and concepts, the transfer of scientific and pedagogical experience and knowledge. Also it becomes an expression of the entire set of scientific and pedagogical knowledge and ideas. As a result, the question of professional-language competence has been arose. This type of specialist professional competence is characterized by a set of knowledge, skills and skills that enable him to perceive, understand the international conceptual-categorical apparatus.

Above all, it seems pertinent to remember that, the possession of an international system of concepts, as well as knowledge of exactly how pedagogical concepts in their main features and relationships are determined in the term. They are considered as the most important components in the structure of vocabulary, communicative competence, discourse, intercultural competence: interpersonal communication across cultures, information and pedagogical competence. In conclusion, linguistic and intercultural competences become important conditions not only for deepening of a new knowledge, but also by mechanisms for spreading their own experience and pedagogical traditions. Significantly, that they also contribute to the enrichment of scientific and pedagogical research and pedagogical practice, the involvement in the field of scientific and pedagogical knowledge of new subject areas related both to the formation of the fundamental provisions of pedagogy and the acquisition of valuable information on new aspects of pedagogical theory and practice.

### References

- Alberti, R. E., & Emmons, M. E. (1990). *Your perfect Right: A Guide to Assertive Living* (6<sup>th</sup> ed.). San Luis Obispo, CA: Impact Publishers.
- Antonova, O. Ye. (2014). Stanovlennia systemy bazovykh znan z pedahohiky v istorii vitchyznianoï ta zarubizhnoi pedahohiky (Establishment of the system of basic knowledge of pedagogy in the history of domestic and foreign pedagogy). *Profesiïna pedahohichna osvita: stanovlennia i rozvytok pedahohichnoho znannia (Professional pedagogical education: formation and development of pedagogical knowledge)*. Zhytomyr, 44-107.
- Banach, Cz. (2015). Pedeutologia. *Encyklopedia pedagogiczna XXI st. (Pedagogical encyclopaedia of XXI of century)*. Warszawa: Wydawnictwo Akademickie «Żak», 301-306.
- Bilodid, I. K. (Ed.). (1970). *Slovník ukraïnskoï movy (Dictionary of Ukrainian)*. Vol. I. – AN URSSR Instytut movoznavstva. K.: Nauk. Dumka.
- Bim-Bad, B. M. (2002). *Pedahohichni entsyklopedychnyi slovník (Pedagogical encyclopaedic dictionary)*. M.: Prosveshchenye.

- Honcharenko, S. U. (1997). *Ukrainskyi pedahohichnyi slovnyk (Ukrainian pedagogical dictionary)*. K.: Lybid.
- Khalipov, V. F., & Khalipova, Ye. V. (1996). *Vlada. Polityka. Derzhavna sluzhba. Slovnyk (Power. Politics. Government service. Dictionary)*. M.: Luch.
- Kicheva, I. V. (2013). *Obogaschenie pedagogicheskoy terminologii v 90-e g. XX veka. (The enrichment of pedagogical terminology in the 90-th of XX cent)*. Pyatigorsk: PGLU.
- Kwiatkowska, H. (Ed.). (2010). *Ewolucja tożsamości pedagogiki, praca zbiorowa (Evolution of equality of pedagogics, work of collection)*. Warszawa: IHNOiT.
- Okon, W. (1975). *Słownik pedagogiczny (Pedagogical dictionary)*. Warszawa: DOM.
- Polonskiy, V. M. (2004) Metodologicheskie printsipyi razrabotki ponyatiyno-terminologicheskogo apparata pedagogiki (Methodological principles of conceptual and terminological apparatus of pedagogy). *Obrazovaniye i obshchestvo (Education and society)*, 4(27), 55-63.
- Robinson, K. (2017). *Osvita proty talantu. Sylta tvorchosti (Education against talent. The power of creativity)*. Lviv: Litopys.
- Salter, A. (2012). *Conditioned Reflex Therapy. The classic book on Asertiveness that began behavior therapy*. Wellness Institute, LA.
- Sokol, M. (2016). *Systema pedahohichnykh poniat: zakonomirnosti rozvytku (The system of pedagogical concepts: regularity)*. Vol. 1. Ternopil: TNEU.
- Tsaryk, O. (2016). *Formuvannia kultury pysemnoho movlennia osobystosti v systemi vitchyznianoï shkilnoi osvity pershoi polovyny XX st. (The formation of the culture of the written speech of the person in the system of national school education on the first half of the twentieth century)*. Ternopil: TNEU.
- Westerheijden, D. F. (2011). Peers, performance and power: quality assessment in the Netherlands. *Peer review: quality assessment in British and Dutch higher education*. – Utrecht: Lemma, 183-207.
- Wychruszcz, A. (2011). Wychowanie umysłowe: historia problemu. W trosce o nauki pedagogiczne i rozwój polskiej edukacji (Education of mental: a history of the problem. For the sake of science education and the development of Polish education). *WSEI*, 309-316.