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Characterological Features of Innovative Education

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Abstract: The topic of the article is relevant as the present-day developments of social and economic changes in our society pose new challenges for pedagogical science in terms of innovative changes based on the international scientific and practical experience of many countries of the world - the USA and also countries of Western and Eastern Europe, representing a new stage of education development complying with the globalization epos, formation of socially oriented economy which requires implementation of radical reforms in education. The purpose of the article is to characterize and theoretically substantiate the features of innovative approaches to creation of contemporary education; to discover pedagogical technologies in the process of achieving the innovative goals of education. The article defines the content of theoretical ideas about education in the knowledge society in the context of appearance of its social reality. The research methodology is built in terms of cultural and historical epistemology, which is based on the analysis of socio-economic attitudes to knowledge and cognition using a comparative review of theoretical developments with the real situation. Changes in politics and social priorities introduced a fundamentally new paradigm of higher education in Ukraine, based on the ideas of the growth of spiritual and intellectual potential of each young person, comprehensive development of one's personality by introducing a humanistic type of thinking, forming a new mentality, awareness of the multicultural perspectives of the human society development, as well as understanding, recognition and ensuring the culture common to all mankind. The new paradigm of education and upbringing is aimed at transferring from the upbringing of a citizen of a particular country to the upbringing of a citizen of the world, i. e. a person with a sense of responsibility whose education and morality correspond to the complexity of tasks to be solved. This approach means gradual replacement of the causal, deterministic principle of cognition of reality within each discipline with modern methodological approaches.

Keywords: *neuropsychological and neuropedagogical influence, mental resources, cognitive science, map of the world, modernization of education, the cultural essence of work, continuous education.*

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1. Introduction

At this level of the development of neuropsychology and neuropedagogy, world science considers the analysis of the mechanisms of mental processes, relying on a system with direct and reverse connections, memory, the ability to self-regulation and interchangeability of parts (computer, cybernetic device), thus, it uses a cognitive approach (Berbets et al., 2021; Demchenko et al., 2021; Karasievych, 2021; Kosholap et al., 2021; Sarancha et al, 2021; Prots, 2021).

Cognitivism is a scientific branch that studies the human mind, the mechanisms of cognition, perception and construction of the world, the behaviour of the consciousness of thinking, memory, understanding, the formation of semantic fields in student's consciousness.

Cognitive science combines several scientific areas, namely: psychology, linguistics, neurolinguistics, pedagogy, artificial intelligence modelling.

The basic position is the knowledge that each person has internal mental resources (Nerubasska & Maksymchuk 2020; Nerubasska et al. 2020; Melnyk, 2019). Positive internal mental and emotional states of well-being, comfort, trust, security, joy coexist with opposite internal experiences of fear, sadness, anxiety, and guilt. These emotional states are characterized by mobility, dynamism and can be subject to correction, activation of positive components that contribute to the effective use of internal reserves for the necessary pedagogical transformations (Kremen, 2009).

Perceiving the world through the five senses or modalities, we filter the incoming information according to its importance, and also to our own values and beliefs. The filtered information forms an internal map of images, sounds, feelings, tastes and smells. Such map affects human physiology, behavior, determining the state of being. The more successfully a person solves his/her problems, the more unique his own map of the world is, which allows him to perceive the world richer and wider, opens up the opportunity to see many perspectives and possibilities of the choice.

Methods of neuropsychological influence allow you to achieve your goals, such as: contribute to the creation of psychological contact with people; allow you to achieve effective communication and behavior change; alter life strategies and strategies for successful training, education, health care, sports (Drucker, 1950).

Pedagogical methods and psychological attitudes used for successful problem solving are as follows:

• If the goals are badly-thought, then the result may be unattainable. Therefore, the results should be specific, well formulated in a positive way, with full confidence in achieving the set goals.

• It is necessary to develop careful observation, which will allow the students to notice the details and nuances of their own behavior and the behavior of others.

• Show behavioral flexibility, change tactics depending on the circumstances, select the most optimal options for communicating with a partner, adequately respond to his behavior.

• Mutual understanding helps to negotiate successfully, settle arguments, positively influence other people, settle business and personal issues.

Environment, behavior, abilities, beliefs and values, identity, spirituality, unity are those neuropsychological levels that contribute to the implementation of pedagogical impact.

Radical reforms in the field of education include targeted differentiation of educational institutions; expanding the content of education; application of innovative educational and upbringing technologies.

The innovative process in education is a combination of consistent, focused actions aimed at updating it, introducing innovations; pedagogical innovation is a special organization of activity and thinking, the process of assimilation, implementation and dissemination of new aspects of education (Stanistreet, 2020).

There is research in the scientific literature on the topic of the article: Kremen (2009) conducted research on the historical aspect of the introduction of innovations in the education system; in his scientific works Karpov (2015) proved that when knowledge is combined with technical work, new professional opportunities (hybrids) arise, when in automated workshops several operators replace the labor of many hundreds of workers, and their labor also includes manual operations.

In the works of Drucker (1950) the innovative pedagogical experience is presented as the result of a problem-oriented, scientifically organized innovative activity of a teacher aimed at transforming the pedagogical process and educational environment approved by didactics and theoretical guidelines. Tovkanets (2020) believes that the global objective of any innovative project is to improve the quality of education, make the best use of available resources, introduce modern educational technologies, ensure a continuous development of the educational process and the development of everyone.

Radical reforms in education include targeted differentiation of educational institutions; expansion of the content of education; application of innovative educational and pedagogic technologies.

The modern life of society is faced with an unprecedented phenomenon - the crisis associated with the COVID-19 pandemic, which exposed contradictions not only in the economic sphere, but also in the social sphere, highlighting the inequality of people in the face of the disease (Reimers & Schleicher, 2020).

In difficult conditions the educational process must undergo a reassessment of the quality in order to obtain a full-fledged decent education for various segments of the population (Stanistreet, 2020).

2. Stages of the historical development of innovative search and renovation of education

The history of the development of educational systems declares the existence of various models of education having been formed depending on the nature of the educational policy of the society, the development level of culture and the system of universal human values.

Innovations in the educational system in Ukraine integrate the theoretical and practical foundations of innovative processes in the educational sphere. A study of the historical aspect of the introduction of innovations in the educational system allows us to conclude that this area integrates various (philosophical, psychological, pedagogical) approaches, as well as modern directions formed as a result of a combination of several existing ones - pedagogical psychology, pedagogical sociology, pedagogical computer science. This process, which reflects the essence of a new interdisciplinary scientific field, is becoming promising for the evolution of education, positively affects its development, as well as the development of a wider multicultural space.

In the context of an innovative search and rapid modern renewal, education is reaching the world level. The characteristics of its modernization include variability, the emergence of various educational models, individualization with the possibility of providing freedom of choice of the educational program, continuity, that is, the ability to learn throughout life.

The experience of developed countries in solving these problems, such as the USA, Great Britain, France, and Germany, is noteworthy. The experience of these countries shows that despite the diversity of traditions and the nature of education in each of them, there are identical problems in preparing future teachers - a creative professional teacher who is ready to

work in an environment of interaction of different cultures with its growing mobility and democracy.

In the UNESCO world report "Towards knowledge societies" (2005), the concept of lifelong learning is associated with the concept of "learning society".

The term "postindustrial society" was introduced by a Harvard University Professor D. Bell about fifty years ago, the characteristics of which are process of technologizing, science, information, knowledge; the transition of the economy from predominant production of goods to production of services, research, organization of the education system and improvement of the quality of life (Bell, 2004).

Postindustrial society is a modern stage in the development of civilization, the main economic resource of which is information related to high-tech basic technologies, which requires a high level of education, qualifications, translating human capital into the main driving force of economic growth, the emergence of a new class of consultants, technologists, innovative managers, experts on the introduction of new technologies, marketers for the markets of scientific and industrial products, experts on computer technology, bankruptcy, competitiveness, intellectual property protection, corporate governance, personnel for working with securities, emergency commissioners, arbitration managers, etc. A need for the formation of new qualities of an industrial worker arises, which is acquired by a knowledge worker. In this regard, the ideas of advanced education and the principles of lifelong education are formed for the training of a knowledge worker (Drucker, 1950).

By the beginning of the 21st century, the model of an educational institution (school, university) as a translator of instructions had been passive, not consistent with the development and intellectual needs of students, created educational problems in universities in which educational effectiveness directly depends on the student's cognitive readiness to master complex systems of professionally specialized knowledge. The modern level of development of society requires a high level of overlap of competencies necessary "for employment" and scientific and cognitive, as well as research activities. The formation of high-level complex competencies requires long time and should begin at the stage of school education to ensure continuity between the school and the university, which requires a special generating educational environment and research methods of cognition (Karpov, 2016a; Karpov 2016b).

Foreign experience in searching for new concepts of teacher training believes that the best prospect for versatile training (analysis and solution of problems of activity in a rapidly changing environment, scientific knowledge,

the development of various information from many fields, scientific knowledge, value system, pedagogical skills) will be the theoretical basis of teacher training education of the 21st century.

3. Creation of the innovative approaches of modern education

Modern education, its quality, level of training, knowledge, abilities will allow a young person to be competitive in modern society; form the ability to adapt to a rapidly changing world; become self-fulfilled in professional, personal and family activities; respect the opinions of others; live without conflict, regardless of religion and nationality (Kozinets, 2017).

Education in a knowledge society acquires a new meaning in the context of social reality, attitudes towards knowledge and cognition, cultural and social and economic foundation of its time. Knowledge processing becomes necessary for the machine worker, businessman, manager, politician, financial expert, by transforming it unrecognizably. Thus, a new cultural essence of labor is being formed, which allows applying scientific knowledge, directly operating it in various social aspects - both when performing physical, manual and mental activities, both in industry and in organizational work. Such work, according to Drucker (1950), was called "knowledge work" or "knowledge job", and "a worker with new knowledge has already become a massive part of the new middle class, intellectually and technically prepared person, who is the most productive member of the society" (Dwyer & Walsh, 2020).

When combining work with knowledge and technical work, new professional opportunities (hybrids) arise when several operators in the automated workshops replace the work of many hundreds of workers, while their work also includes manual operations. In the social sphere, scientific hybridization of labor is spread in management, medicine, public order services, social security, utilities, trade, etc. Special varieties of technical hybrids are represented by human-machine systems, where a person is represented by his thinking, as well as the manual labor. When applying the complex of knowledge and technical capabilities, a new professional position arises - the "knowledge worker", which leads to a new division of labor, where the basis for labor is operating with knowledge models, including manual operations. The "knowledge worker" can pick up scientific knowledge in scientific periodicals, technologies, designs, technical equipment, drawings, tables, diagrams, regulations and professional slang (Abrami et al., 2008).

In the second half of the 20th century, the concept of knowledge for the knowledge society has begun to take shape, which is associated with the

emergence of the global economy, the rapid acceleration of the technological revolution, due to which higher education loses its elite status, becoming massive and directly responsible for the development of a society based on education.

The globalization processes represent a long-lasting, unified planetary process of uniting people and technology; moving inter-country ties to a new world level of social relations, in which the mass communication will overcome traditional boundaries, and education allows to acquire knowledge in terms of cognitive efficiency, using them most practically (economically).

According to American experts education (secondary and higher) is the largest field of the knowledge industry. A new education should form the need for the systematic acquisition of knowledge for advanced training, the effective use of achievements. Life and professional experience, the development of thinking, the ability to perceive, acquire and use knowledge form the basis of the concept of "adult education", which is an ongoing process that allows the most efficient and most practical (economically) use of this knowledge capital (Shen & Lai, 2014).

The idea of lifelong education arose, in which the structure of education should allow one to acquire knowledge at those stages of a person's life when the person is effectively able to perceive it, forming the only real capital today based on the human mind (Drucker, 1950).

The continuity of education is directly related to its innovativeness as an objective challenge of the time. In all professional areas of modern society, dynamic changes are taking place that require constant updating of knowledge, the formation of competencies, and the increase in the level of individual training of any specialist, including a teacher. Every modern specialist should have the ability to understand the dynamics of technology and foresee the speed and direction of technological changes, for which, relying on one's own research mindset, one can penetrate a fundamentally new, unknowable, unforeseen, thereby expanding the development horizon of modern education.

The 2019-2020 climate crisis, large-scale population movements, demographic changes and the COVID-19 pandemic, hundreds of millions of people around the world who lack basic skills require modern education systems to take action to meet lifelong learning needs, access to professional training. People willing to continue their education, especially in the context of mastering new technologies and changing jobs, should have the opportunity to learn throughout their lives (Stanistreet, 2020).

Innovation involves unconventional approaches to the creation, dissemination and use of any means to meet social needs, in contrast to innovations that are developed and implemented based on generally accepted ideas, theories and methodologies. Thus, innovations improve the traditional, current approach to the process, while innovative approach involves its cardinal transformation. Innovative pedagogical experience is the result of a problem-oriented, scientifically organized innovative activity of a teacher, aimed at transforming the approved didactics and theoretical principles of the pedagogical process and the educational environment. Innovations correspond to any developing social system, their absence indicates conservatism, stagnation.

Innovative processes in the education system reflect the need of society for fundamental changes in accordance with the constantly changing requirements of society and the individual; and "science innovation represents the self-sufficiency of science in general and intellectual activities in the whole, modelling its dynamism and orientation to modernization" (Kremen, 2009). This is a single process of creating and discovering new aspects (ideas, concepts, theories) and a comparative assessment of the existing system of pedagogical values in society, the development and practical use of everything new.

Innovative pedagogical experience represents a qualitatively new stage in the interaction and development of scientific and educational, as well as pedagogical creativity, when ideas arise and are implemented on the initiative of the practitioners themselves, satisfying their professional and personal needs and interests. The ways of forming new experience can vary, based on a research approach, integrating elements of existing experience into a new set, using scientific developments and recommendations (Kremen, 2009).

The system-forming factor of innovative experience is a new pedagogical concept or idea presented by the author; while the system retains its integrity, structure, form, reflecting the process of mastering pedagogical laws (Zagvyazinsky, 2001) and suggests the possibility of applying methods of transforming reality. In this idea, the teacher assumes his goal, the transformation plan, the desired result.

The study and generalization of innovative pedagogical experience involves the determination of its criteria. Thus, scientists and teachers called the following criteria factors for a comprehensive assessment of *advanced pedagogical experience*: novelty, high performance, representativeness, stability, relevance, continuity, prospects, the possibility of creative application of experience by other teachers, optimality.

An important criterion for innovative pedagogical experience is the development of the scientific component of experience, the ability to derive clear theoretical laws from this experience, transfer ideas to new conditions, and adapt to mass practice. The practical significance lies in the possibility of developing various options for innovations that allow solving the problem with the least cost for the teacher and students (Nussbaum et al., 2021).

One of the main criteria for the study of pedagogical experience is to identify the main idea of experience that ensured the success of the teacher; theoretical and methodological prerequisites for success, based on the experience of theoretical and scientific laws; informative and analytical work; scientific character, ending with conclusions of the subject matter of innovative pedagogical experience, the degree of its novelty, the definition of objective value, the possibility of dissemination and adaptation to mass practice (Kozinets, 2017). The degree of simplicity, ease of understanding, reproducibility contributes to the widespread involvement of teachers in innovative activities with the development and introduction of their own options for implementing their own experience. It is necessary to be prepared for the fact that not every experience giving good results in practice will quickly reveal regular relationships and claim unappealable scientific novelty and significance. "Only the experience having been theoretically comprehended and thoroughly ... experimentally verified has the right to be spread and implemented" (Giacumo & Savenye, 2020).

The methods for the study, generalization and implementation of innovative pedagogical experience include methods for stating experience (observation, study of documents, survey, etc.); a theoretical comprehension group (theoretical analysis and synthesis, analogies and thought experiments). At the implementation stage - modelling, justification of expert assessments, determining the degree of reproducibility of experience and its further development.

The willingness of a teacher to innovative activity is determined by the presence of a need for creativity, the ability and skills to navigate freely in modern educational technologies and methods of pedagogical activity, the ability to conduct a dialogue, collaborate, stimulate and support (Bespalko, 1989).

In order to successfully implement a pedagogical project, it is necessary to correctly apply the theory of management of innovative processes in higher education, aimed at optimizing and humanizing the educational process, improving the quality of education, introducing innovations in the managerial, methodological, teaching and educational activities of the university. All participants in innovative activities activate

targeted self-education, organize the implementation of innovative technologies and study the effectiveness of organizational, managerial, methodological, self-educational, practical and research activities.

The most effective are *pedagogical technologies* aimed at organizing the educational process in a university taking into account the professional orientation of training, provided that the students take an active position based not only on the development of ready-made knowledge, but also on an independent search and assimilation of information, creative participation in the discussion of the material being studied.

High requirements are imposed on the teaching technology, where, along with traditional methods, innovative pedagogical and educational technologies are introduced and mastered with psychological and pedagogical support, high intellectual and creative potential of teaching and pedagogical competence of students with the material and technical base of the university that meets modern requirements. An innovative situation is created when the complexity of the human environment increases and a lack of knowledge and technology is found having relevance to this particular situation.

Educational technologies determine the methods and forms of training, ways of mastering the basic material of a particular subject and include classical lecture training, the use of information computer technologies, "consultant", "tutor" systems, distance learning, game technology, etc.

4. Pedagogical technology in the process of achieving innovative educational goals

Pedagogical technology is a type of organization of the educational process that, through the integration of theoretical knowledge and practical experience, makes it possible to solve the problems of humanizing education. Pedagogical technology represents a way of achieving pedagogical goals; self-sufficient, scientific phenomenon; the special nature of pedagogical technology implies the creation of a unique space of human relations arising between a teacher and a student (the process of humanization and education). This set of principles, methods, ways is used by a teacher on the basis of one's own personal and professional competence, culture, activity.

Pedagogical technology is knowledge about activity as a means of pedagogical impact.

Technology occupies an intermediate position (according to Aristotle) between theory (episteme) and experience (empiricism), enriches and brings new qualities, properties and contents to the previous one;

corresponds to each social and historical era, making the work of the teacher more effective, teaching activity - modern, corresponding to the needs of the economic formation.

The use of pedagogical technology allows us to determine the goals of the educational process, the motives for their achievement, the implementation of quality control of education, the development of the student's personality and the evaluation of the result of the educational process (Kaufman, 2016).

Preliminary design of the educational process brings the project directly to the student, and the principle of integrity determines the unity of the pedagogical technology of a particular pedagogical system.

Changes in the social and economic conditions in Ukraine, joining the integrative Europe-wide educational process, entailed changes in the concept of education, making high demands on teaching technology, where, along with traditional methods, innovative pedagogical and educational technologies are introduced and mastered with psychological and pedagogical support, high intellectual and creative potential of academic and teaching competence of students with material and technical base of a higher educational institutional corresponding to modern requirements.

A clearly designed pedagogical technology is the definition of didactic tasks using innovative educational technologies on a modern information technology and communication base, which determines the positive outcome of the work of all participants in the pedagogical process of higher education.

The goal of technological approach to education is to form the educational process starting from the given initial settings (social order, educational guidelines, goals and content of education) (Klarin, 1998).

One of the types of innovative pedagogical technologies aimed at mastering the ways of reflective thinking, cognitive skills used in the process of independent research is the **technology of critical thinking** based on the development of personal thinking mechanisms: awareness, determination, self-esteem, etc.

Critical thinking includes the ability to identify the main elements and assumptions of an argument and the relationships between them, as well as drawing conclusions based on the information that is available, evaluating evidence, and self-correcting, among others. It is seen as a self-regulated process that comes from developing skills such as interpretation, analysis, evaluation and explanation; going beyond technical skills (Nussbaum et al., 2021).

Critical thinking is vital not only for educational achievements, but also for continuous professional development, as it is necessary in a social

and interpersonal context, where it is necessary to make adequate decisions and solve problems on a daily basis, which is especially important for distance learners, as well as for those who return to training for further professional development.

ADL (Advanced Distributed Learning) has conducted a number of studies on the ability and impact of teaching critical thinking through distance learning. A series of sampling tests were conducted to assess the effectiveness of critical thinking taught in basic education: hypothesis testing, verbal reasoning, argumentation analysis, uncertainty assessment, and problem solving (Karpov, 2016a; Karpov, 2016b).

Critical thinking represents the use of cognitive techniques or strategies that increase the likelihood of obtaining the desired ending result. This is the type of thinking that is resorted to when solving problems, forming conclusions, probable assessment and decision-making using skills that are justified and effective for a particular situation and the type of problem being solved.

The idea of teaching critical thinking is far from new. It goes back to the ideas of ancient Greek scholars and philosophers. Already in the 4th century BC, Socrates resorted to the development of critical thinking through special questions to make the speaker think. Such questions stimulated communication between the teacher and the student, as well as forced the latter to defend one's point of view.

Critical thinking, being affirmative in its content, is evaluative in essence, includes both positive and negative assessments of thought processes leading to conclusions when solving tasks assigned. Unlike automatic thinking, critical thinking is directional, aimed at obtaining the desired result.

Critical thinking is the use of cognitive techniques or strategies that increase the likelihood of obtaining the desired end result (D. Halpern, 2000). This is the type of thinking used in problem solving, formulation, credible assessment and decision-making using skills that are grounded and effective for the particular situation and type of problem being solved.

The term "critical thinking" was introduced on the basis of the research of K. Popper (1985), suggesting the presence of critical reflection, awareness of one's own activity, which underlies our world-view, our own cognitive, research and search activity.

The introduction of techniques for the development of critical thinking contributes to the development of activity, initiative, creativity of students at all stages of the learning process; brings learning results closer to the practical activities of the teacher, which improves the quality of teaching work.

Providing the student with the conditions for independent thinking, solving complex and confusing tasks, overcoming obstacles and learning difficulties puts the student in the position of a researcher led by a teacher.

According to Bespalko (1989), the most important property of critical thinking is that it "can be fully learned". The main aspects of critical thinking include: systematicity; completeness; consistency in judgment; multiperspectivity (any content is suitable for its schemes); metacognitiveness (the presence of reflection and multi-level); accessibility of education.

The main qualities of a person using critical thinking are: readiness for planning, flexibility (lack of rigidity), perseverance, willingness to correct one's mistakes, awareness (metacognition or metacognitive monitoring), search for compromise solutions.

The idea of human *creativity*, which is the main driving force of economic growth and the development of a new society, is a key factor in solving complex social and economic problems directly affects education. The economic aspect of creativity contributes to entrepreneurship, innovation, and economic growth.

In 2006, the European University Association (EUA) developed the research project "Creativity in Higher Education", which is funded by the European Commission as part of the Socrates program. The main goal of the project is "to contribute to the promotion of the European knowledge society". The results of studies (Kurliand, 2007) showed that creativity in universities, as centers of knowledge creation, has a significant impact on the economy and culture, positively affecting the economic, cultural, technological and social aspects of the society development. At the European meeting in Hampton Court, universities, along with research and development, were called the basis of European competitiveness (Commission of the European Communities, 2006). Thus, it can be stated that education is at the center of the links between economics and creativity.

Creative thinking and activity must be considered in the social aspect, since environmental and social factors related to external motivation can increase or decrease creativity. External factors affecting the choice of work, limited by the choice of materials, constant, often negative assessment of others, supervision - these are the components that lower the internal motivation of people involved in creativity process. Creativity development is hindered by the following factors: risk avoidance, desire for success at all costs, strict stereotypes in thinking and behavior, conformism, disapproving assessment of imagination and fantasy, worship of authorities, etc. Creative thinking is innovative, risky and fearless.

Creative thinking is hard work that requires a person to be patient and persistent; a skill that can be developed. It is necessary, first of all, to determine the tasks and what needs to be solved using various methods - analogies and metaphors, "more or less interesting", brainstorming, vertical and lateral thinking, synergism, sensitivity, intuition, making a checklist, which are aimed at the use of knowledge in various fields, the ability to combine diverse information, distant ideas to enhance the creative and mental activity of a human. It is necessary to learn to ask yourself a lot of questions that will help you better navigate in the world around you, to know the unknown, to delve deeper into the essence of what is happening. Anyone who knows how to ask questions, seeks answers to them, broadens one's horizons, one's search area, determining the direction in the study of material and research activities.

5. Conclusion

The author of the article found that the pedagogical methods and psychological attitudes used to successfully solve problems are as follows: the results should be specific, well formulated in a positive way, with full confidence in achieving the goals; it is necessary to develop observation in oneself, which will allow the student to notice the details and nuances of one's own behavior and the behavior of others; show behavioral flexibility, change tactics depending on the circumstances, select the most optimal options for communicating with a partner, adequately respond to his/her behavior; mutual understanding helps to successfully negotiate, resolve conflicts, positively influence other people, and resolve business and personal issues.

The author of the article proves that the study of the historical aspect of innovation introduction in the education system allows to conclude that this area integrates various approaches, specifically: philosophical, psychological, psychosocial, pedagogical - and contemporary directions that are created by combining several existing ones - the pedagogical psychology, the pedagogical sociology, the pedagogical informatics, which reflects the essence of a new interdisciplinary scientific direction and becomes promising for the evolution of education, which has a positive impact on its development and the development of a wider multicultural space.

The authors of the article focus on innovations that involve non-traditional approaches to the creation, distribution and use of any means to meet social needs, in contrast to innovations that are developed and implemented on the basis of generally accepted ideas, theories and methods. Innovations improve the traditional, current approach to the process, the

innovative involves its cardinal transformation. The innovative pedagogical experience is the result of a problem-oriented, scientifically organized innovative activity of a teacher, aimed at transforming the pedagogical process and educational environment approved by didactics and theoretical guidelines.

The need for a dialogue between science and practice requires a more thorough development of the theoretical and methodological foundations for the study and generalization of innovative pedagogical experience and paying close attention to science including the introduction of experience into educational practice.

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