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## Scientific direction of integrated research of education

**Abstract.** The essence of the new scientific approach to the study of the integrated sphere of education – osvitologiya is disclosed in the article; the changes of the meaning of the notion “education” are analyzed; the objective factors of the interconnections and interdependences strengthening of the modern society and education development; the main points of the osvitologiya's conception are formulated; the philosophical and pedagogical sources of its forming; the object and the subject of the osvitologiya, the tasks, that face with the osvitologiya as the independent science; it is defined the main stages of the osvitologiya development, the areas of the osvitological training and osvitological researches, that are directed to the overcoming of the society's demands incompatibilities to the sphere of education with real condition of its development.

**Key words:** the sphere of education, osvitologiya, osvitological training, osvitological researches.

Features of the present stage of human civilization (globalization and integration processes, information society and all its institutions) change the status of education for the state and each person. They form new requirements for the educational sector and the educational level of human impact on nature and patterns of education, deepening the difference between the concepts of "pedagogics" and "education". The term "education" is defined as in different contexts: education - value (public, social, personal) system of various universities and educational institutions, special process, split-level result, social and cultural phenomenon, a social institution that affects the state of mind of society. "Education is the most common educational concept, which means both a social phenomenon and teaching process. On the one hand, the concept of education enters an object of pedagogy into the overall social context, and on the other hand – gives an opportunity of its interpretation in concrete terms. But many scientists insisted and insist on the use a word " upbringing" rather than “education” to refer to the object of pedagogy" (Honcharenko, 2008). Developing pedagogy takes place within its "eternal" subject – upbringing of a person. Pedagogy remains the core to education, as in any forms (value, process, result, system of institutions, means for shaping the minds of society etc.) education requires any tools in achieving the educational goals that pedagogy gives it (achievements of didactics, the theory and practice of education, etc.).

The studies of modern education have another character. The contribution of the education system to the economy of any country today can be more significant in comparison with

industries. Proved that, in fact the sum of three years of the economic impact of education on the economy is much higher than this indicator all the oil and gas industry and hi-tech business (Ogneviuk, 2011).

"Intellectualization" of economy, increases the education of society, determining the impact of education on the whole social organism brings education high on the social development. The studies of education increase the number of touch and interaction with other sciences, such as philosophy, sociology, cultural studies, economics, policy, management theory, law, etc. (educational policy, economics of education, sociology of education, education management, education law).

Education interactions with the environment are the factor of internal self-organization, promote the self-organization its subsystems and a condition for the evolution of the education system. More and more scientists stress the need of seeking interdisciplinary approaches to the study of such a complex phenomenon as public education. In particular, this is indicated in the writings of the following researchers as: J.E. Christensen (1981), L.W. Harding (1965), V.G. Kremen (2007), V.I. Luhoviy (1994), A.M. Novikov (2008), V.O. Ogneviuk (1995), E.Steiner (1981), A.I. Subetto (2003), S.O. Sysoieva (2011) and others.

The aim of the paper is to present the concept of an integrated scientific field of education study – osvitologiya (in English - "edukology").

#### **Edukology - "education study" - osvitologiya**

Now many sciences are engaged in the study of various aspects of education (sociology, economics, political science , psychology , mathematics, computer science , etc.). It's urgent to develop a new scientific direction in the education study. The President of NAPS of Ukraine V.G. Kremen said: "Education in general is the field of comprehensive studies, interdisciplinary approach and system analysis because it is a "system" subject to ..." (Kremen, 2007).

Based on this idea, we believe that integrated scientific field of education studies should be formed as one that reveals the direction of the evolution of the Institute of Education in the direction of entry into the important features of civilization development mechanism responsible for the accelerated formation of human qualities, social intelligence and the quality of the educational systems. Therefore it's important for the development of society the understanding of new signs and meanings of modern education in terms of civilizational change of our historical era, understanding trends in its development , internal conflicts and mechanisms of progress. Thus , modernity brings problems whose solution requires the development of system of scientific approaches in the field of humanities.

The scientific term "edukology" is used to outline a comprehensive science education. The term "edukology" was first used by the head of the NGO "Association of Researchers of edukology" in the Public Ohio State University L.W. Harding in 1951. Finally, in scientific usage, the term " edukology " was introduced by E.Steiner in 1964 in the "Logic of learning and edukatology". Later the term "edukatology" was transformed by E.Steiner into "edukology". It should be noted that the scientists who first began to use the term "edukology" thorough analysis of the contents of this notion. Specifically E.Steiner, wrote that the object edukology is "all about education". This researcher considered "edukology" as "intermediate solution" between pedagogy - the science of training and education of youth, the object of study which was considered sufficiently narrow and "ethology" - the science of human activity in the world , the formation of the human character, the object of study which was considered too wide (Steiner, 1981).

Modern scientists consider edukology as a new system of integral theory of education research with the trends of its development, internal contradictions, the mechanisms of progress, management particularly at the state level. Many researchers consider edukology as a synthetic science that integrates information from various study areas of education, such as: philosophy and history of education, anthropology, education, psychology of education, sociology of education, economics of education, education management, cultural studies, etc. (Luhoviy, 1994). However, the object and subject of edukology are not always understood in the context of a systematic view of the the education sector, and it is reviewed from specific areas of functioning of the educational sector (economic, legal, etc.); the implementation of the general objectives of education (forming an educated person); the need to identify fundamental knowledge, different areas of the educational sector, the definition of invariant features, creating a system of education for the information of the society; various educational systems and so on.

In Ukraine, the idea of a scientific direction, based on the integration of a number of sciences involved with education, appeared in 1995 and was called "osvitologiya" (Ogneviuk, 1995: 10). The term "osvitologiya" in the Ukrainian-scientific space was offered by V.I. Luhoviy (Luhoviy, 1994: 18). Combining the two concepts of "education" and "logos" for delineating the name of a new scientific knowledge reflects the integrity of the scientific study as phenomenon of modern education, Russian idealist philosophers (V.F.Ern, P.A.Florenskyy) used the term "logos" in the sense of "holistic" and "organic" knowledge, which is characterized by the balance of mind and heart, analysis and intuition.

#### **Conceptual position of osvitologiya**

Here we formulate the basic posions on which *our concept of osvitologiya is built as a scientific research of directly integrated education.*

In educational practice various educational paradigms are being actively implemented. However, none of them by itself can not provide a complex solution to the problems that are now facing education. As a result of dynamic, ambiguity of modern social development the integrated nature of education can not be displayed by any paradigm aimed at implementing its own dominant paradigm.

We believe that as a scientific phenomenon osvitologiya best reflects all the knowledge related to education and the concept of "osvitologiya" as scientific eliminate confusion between proper education and knowledge of education no matter by which sciences it has been received.

Osvitologiya emerged at the intersection of philosophy of education and pedagogy, through the release of scientific knowledge about the field of education outside of the object and the subject. There is nothing surprising in the fact that the new humanities - osvitologiya - without substituting the philosophy of education, still retains the involvement of philosophical ideas. Philosophy deals with boundary, eternal problems. Any science, while it is immersed in the concrete solving partial tasks are also building a relatively complete picture of the world, and therefore can not be based on philosophy. Considering the place and role of philosophy of education in structure research of the phenomenon of education we should pay attention to the fact that ongoing research in the field of philosophy of education, presented the idea of education to the level of universal phenomenon, but the philosophy, because of its mission, does not examine the specific problems of other branches of knowledge, if, of course, they do not reveal general trends (Ogneviuk, 1995). We are focusing on the phenomenon of education, the idea of education and ideas in education, goals and outcomes of education the philosophy as science theoretical and methodological orientation, provides comprehension of the most essential issues and relationships education, and thus creates a basis for the formation osvitologiya. On this

scientific highway the philosophy doesn't only maintain but also enhances its influence on the knowledge of education, as soon as it is able to understand its integrity.

On the other hand *osvitologiya* arose on pedagogy and its teaching concepts and teaching methodology as well as its formation and development of tightly linked with the researches conducted and are held within pedagogy. Pedagogy as a social science focuses on theory and patterns of training, education and socialization, and thus not able to cover all the areas of education, its holistic phenomenon and patterns of development. Germinating on philosophy of education and pedagogy, based on the domain of psychology, sociology, cultural studies, and other related to the field of education sciences, *osvitologiya* aimed at creating an integrated knowledge of education and ensuring its dynamic development according to social innovation. Unlike pedagogy that examines education as a process, philosophy of education that explores education as an idea, *osvitologiya* is formed as a science that studies education as a sphere with a complex segmental structure of systems capable of self-organization (Ogneviuk, 2011).

Education as a sphere of human activity and as a social institution is a complex social organism that functions according to the laws of nature and society. Such complexity and social nature of the education system can be attributed to the complex social systems. It is the systemic nature of education makes its relationship with other social subsystems - political, economic, cultural, etc. and allows the study of education refer to their qualitative and quantitative structural and dynamic characteristics.

The sphere of education is a complex system, which is characterized by a large number of interacting subsystems, is open, it has the features of open systems (Sysoieva, 2011): it exchanges with the environment stuff (resources), energy (finance) and information (knowledge). Field of education as a complex system is nonlinear (ie there are inverse relationships between variables in time and space quantities that describe the state of the system), unbalanced (in which a certain dynamic processes happen). Openness of education is related with the openness of our society, the necessity of a dialogue with other educational systems, addressing the problems of multicultural and intercultural cooperation in society, globalization and integration, creating space for their own educational movement of each individual. A look at education as an open complex system reflects the essential features of modern education - an objective transformation into a separate independent branch of the industry. Education, as an open, non-linear, complex and unbalanced, should be referred to the synergetic systems operating in accordance with the principle of positive feedback and are able to change their own structure in order to adapt to changes in external conditions of existence (Sysoieva, 2008). In education new structures with degree of self-organization can appear under certain conditions.

The openness of education systems as a starting principle provides a qualitatively new approaches to understanding the development of education, the essence of which is not only the beginning of the educational system as a whole in its static state, but a man with his originality as a permanent source of spontaneity, of disorder (chaos) and while development (Sysoieva, 2008). A look at the current field of education as a synergistic system changes our perception of the randomness and the need for education systems, the irreversibility of the educational process, allows to understand differently the nature and essence of entropy processes in educational systems. Thus, fluctuations in social development and in social intelligence (innovation, invention) that affect the education system and educators often perceived as "chaos", according to the synergy should be understood as a special kind of regular irregularity, not as the destruction of the education system, since the and self-organizing open systems are carried out through chaos and imbalance. An example is the invention of modern information and

communication technology, which has become the mega fluctuation of social intelligence, which hasn't only changed the contours of the future, but also has become a bifurcation point for the whole of human civilization, civilization has caused all these processes, which we now speak, turned the education sector in a synergistic system (Sysoieva, 2008).

"Information Revolution" radically transforms the topology of the educational environment, its distribution in the metropolis and periphery, is the beginning of a new civilization, a new information system of life with new meaning, purpose and values. Informatization of education has formed a dominant system of education, which can be considered a derivative and whose purpose is to "stretching" of social intelligence to borders mega fluctuations to achieve it (social intelligence) equilibrium shape. The system of derived dominants of modern education includes: the globalization of education, convergence of education, continuity of education, access to education, open education, fundamentalization of education, capitalization of education (knowledge and skills are its human capital and personal property); innovative education.

Osvitologiya is very open system, which includes a requirement and resource dependency introduced into it from the outside scientific community. Thus, a significant difference of osvitologiya of humanities, including pedagogy, is that osvitologiya is a kind of educational synergy for research education.

Considering the current education sector as a complex interaction of subsystems capable of self-organization, self-development and self-synergistic approach allows us to consider modern education and as a means to integrate different ways of man's knowledge of the world increases the creative potential of human beings for free and meaningful action, perception and open holistic understanding of the world. Therefore osvitologiya is always interdisciplinary (multidisciplinary, transdisciplinary) nature and scientific research instrument shown researcher depending on the purpose of the study. Although it is believed that osvitologiya "as synthetic scientific discipline that must integrate at least eight areas of embodied scientific knowledge - philosophy, sociology, cultural studies, anthropology, psychology, pedagogy, physiology, methodology" (Testov, 2008). We believe that not osvitologiya integrates and synthesizes no other sciences, it is "cooperating" with them in the study of various aspects of education, is an independent research areas, which because of its synergistic nature is realized at the level of interdisciplinary research.

Recent developments in research in the humanitarian sector – are difficult and complex, as they reflect the objective reality - a complex, dynamic and uncertain. And so today, in the humanities there is a shift from clearly defined concepts to less precise ("fuzzy"). In terms of modern postclassical methodology the necessity of such fuzzy concepts lies not so much in the lack of insight of the human mind, but in the complexity of the world, it no hard limits on the total body turnover, "fluidity" of things. Such vague concept is effective in the study of complex dynamic systems (Subetto, 2003), in particular osvitolohichnyh.

The leading position of conceptual research in osvitologiya is the understanding of education as an integral dynamic formation, the structure of which includes inextricably linked elements (segments), the aggregate of which on the one hand holds the dynamic integrity of education, on the other hand, it provides the ability to develop and self-organization, interactions with other systems of the body and the social impact on their development. That integrity is one of the leading categories of osvitologiya which gives the opportunity to explore the educational process on the basis of quality (A.I. Subetto), and organize major categories of osvitologiya based on a holistic approach that allows holistically to regard the problem of creating a scientific theory of osvitologiya and directions for its implementation in practice. So osvitologiya is the



scientific direction within which the education sector as a whole phenomenon is studied, and interdisciplinary coordination and integration of the research contributes to the development of education in the aggregate of all the factors that have an impact on it and despised its impact on society.

### **Object, subject and task of osvitologiya**

The object of osvitologiya as a study is education sector in its sustainable development (Ogneviuk, 1995). The formulation of the object indicates not only its comprehensive character (educational processes and phenomena), but also emphasizes that the object of osvitologiya is an open system. The subject of osvitologiya includes: existing systems and subsystems of education in sustainable development, the conditions and factors that influence this development, the dominant development of modern education (which define the vector of development of educational systems) (Ogneviuk, 2009). This subject of research is dynamic and dependent on social change. Therefore, osvitologiya aims to study modern education as an integral social phenomenon, the factors influencing its development and determine the impact of education on the development of modern civilization as civilization, education and science, human civilization a new evolutionary level - an educated man.

In theoretical perspective osvitological strategy should take into account current demographic trends, the labor market situation, the changes that have occurred and are occurring in the same system of education, and the environment (external and internal) that affect its development (Ogneviuk, 2011). External factors that affect the development of education systems include: economic, cultural, historical, demographic, social, political, social. The internal factors - the dominant development of the education sector, which determine the direction of innovation policy in education, aimed at supporting innovative educational activities as a response to innovation in society.

In the practical implementation studies in osvitologiya are carried out in a particular context, as to take into account all factors that affect the education sector is almost impossible. However, the dominant definition of modern education contributes to the accuracy and validity of the choice of the vector content of educational innovation.

Separately, we emphasize that one of the most important tasks is to study the conditions osvitolohiyi the formation of the new type - "homo educatus" (educated person) (Ogneviuk, 2011). The emergence of homo educatus is primarily the result of the intellectual and spiritual development of modern man, which distinguishes it among his predecessors in the evolutionary series. Of course, this does not exclude the impact of natural, biological and social factors, but factors of intellectual and spiritual content in the emergence of homo educatus are crucial. The most important of them include: understanding the biological and spiritual nature of man, the deployment process of learning through self-knowledge, knowledge of the ownership system integrity and unity of the world, making the value system on which deployed its own worldview and lifestyle, understanding their responsibility for world harmony.

### **Discussion**

Modern education really becomes a productive force and a guarantor of national security. Increasingly dependent on knowledge of each individual becomes a modern economy, as the primary means of enhancing its efficiency are manpower (combined intelligence and knowledge of people, their ability to innovate, creative and management quality, etc). "Smart" economy, in an environment where knowledge and skills are capital and personal property of every person quite differently begins to interact with the subsystem of the social body that "produce" human capital - with education.

The proposed concept of osvitologiya finds practical application in expanding the professional competence of managers at all levels of education. Initial training of osvitologiya aimed at enhancing the professional competence of middle and high schools and for training experts in the field of education. Preparation of osvitologiya, in our opinion, should be implemented at the level of interdisciplinary MA program. This training should begin with micromodules "Introduction to osvitologiya", which consists of two modules, the content of which is directed to the field of education as an object of scientific research achievements and contradictions in the theory and practice of functioning of modern educational systems, components osvitological training. Further are studied consistently makromodule that reflect these subjects, "Philosophy of Education", "History of Education", "Education Policy", "Education Law", "Economics of Education", "Education Management", "Sociology of Education", "Cultural Education" that reveal the interconnections and mutual education and related fields of society. In this case, the subjects "Philosophy of Education" and "History of Education" can represent the idea of development of education and historical foundations of formation and development of the education sector. Educational disciplines "Sociology of Education", "Cultural Education" reveal sociocultural technology of educational and socio-cultural area of human development, the nature of education as a part of culture, the unique socio-cultural phenomenon, interdependence and interdependence of the plurality of cultures and educational systems that they reflect, mutual societies, culture and education.

Integrity of osvitological training is provided by the fact that the last makromodul interdisciplinary course "Osvitologiya" (methodology of interdisciplinary research education) is studied after studying all makromodules as a cohesive osvitological knowledge and understanding and integrated approach to the study of education (at interdisciplinary, multidisciplinary and transdisciplinary). Preparation of osvitologiya through learning context osvitologiya study of educational processes and phenomena allows a scientific perspective to understand the nature and essence of the social phenomenon - education.

Therefore, osvitologiya conceptually envelope multifaceted problems of educational sphere, offers research methodology phenomenon of modern education and training direction of professionals who are able to systematically solve the problems of modern education.

We believe that osvitologiya can become a productive new ideological paradigm, aimed at the development of society by means of education.

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