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Formation of Planetary Consciousness and the Noosphere Mentality of the Universities' Students as a Condition for Sustainable Development

Abstract

The article represented the idea that universities as centers of formation of the new thinking noosphere, noosphere consciousness perform another function center for training specialists in sustainable development society. The University is regarded as the center of human formation, which has critical and innovative thinking, able to continuous self-development and self-improvement for the purpose of self-realization.

Keywords: noospheric thinking, noospheric consciousness, university, self-realization, self-development

Educational institutions as open systems, are influenced by environmental factors, of which they are part of, thereby acquiring qualitatively new properties and increase its development potential. Numerous studies point to a complex and nonlinear dependence between educational level and potential economic growth of the country. The development of the education system of each country is affected by a legal and political environment factors, socio-demographic, economic, scientific-technical innovation factors, a historical-cultural heritage of the country etc. The leading role in implementing innovative education, educational technologies, creative component and forming of a new thinking belongs to the universities. This is manifested particularly in deepening cooperation between universities on a national and international level of training qualified specialists for the creation and rational usage of information technologies in all areas of the human activity. Universities had established the following principles of proactive education as a fundamentality and integrity of the provided information knowledge, individualization of a teaching, practice-oriented knowledge, application of modern technologies in the study, which in turn will help to boost migration (mobility) of highly educated professionals.

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University is, first of all, not the modern buildings with modern facilities and equipment; – it's a team of associates, working to achieve short – and long-term goals, aimed in perspective for the stable development of a society, euro-integration, preserving the achievements of the past and acquisitions of the present, a vision of its activity perspectives and the activity perspectives of their graduates. That's why a University is a center of formation of the person, who has critically-innovative thinking, is able to continuously self-develop and self-improve for the purpose of self-realization. Thus, the university acts as a center of forming of acme-personality – a professional, constantly striving for self-improvement and self-realization in different areas (Terentieva, 2016, p. 139).

The processes of changes taking place in the world in accordance with the understanding of irrationality of the economic growth paradigm and replacement with a new alternative paradigm of co-evolution (constant interaction between human and natural systems, their mutual influence and constant adaptation to changes), have directed the development of the social systems, including education and scientific-technical-technological progress toward harmonization, compliance with the future needs of humanity, preservation of the environment and the natural-resource potential, i.e. the transition to the so-called sustainable development has begun.

The article goal is proof of the necessity of the formation of planetary consciousness and the noosphere thinking of university students.

The change processes taking place in the world according to the understanding of pointlessness of the economic growth paradigm as well as of necessity to replace it by the new alternative coevolution paradigm (which means constant interaction of human and natural systems, their respective influence and permanent adaptation to changes) have directed the development of social systems including education and scientific, technical and technological progress to harmonization and meeting the future requirements of the mankind, the protection of environment and natural resources' potential, which means the beginning of transition to sustainable development.

The trend of noospherization of the university education is worth to be considered in the context of strategic planning of the society's sustainable development as well as of the human's growth, which enhances the critical and innovative potential of the university and a new thinking of the human under the conditions of the university education. This previews the reaction to the social, economic, scientific and cultural aspects, the formation of the global knowledge in order to solve global problems, the development of the critical thinking and the active civic stance, openness and transparency of the institution's activity in the frame of its autonomy.

The change processes taking place in the world according to the understanding of pointlessness of the economic growth paradigm as well as of necessity to replace it by the new alternative coevolution paradigm (which means constant interaction of human and natural systems, their respective influence and permanent adaptation to changes) have directed the development of social systems including education and scientific, technical and technological progress to harmonization and meeting the future requirements of the mankind, the protection of environment and natural resources' potential, which means the beginning of transition to sustainable development.

The coevolution paradigm in the context of the "human-society-education" triad has been considered by Korsak (2006) featuring the transition from "macro--consciousness" as a specific mentality based on the everyday experience and on the complex of classical-mechanistic scientific and linear-hierarchic socialeconomical rules appropriated under the compulsory education system to an essentially new level called "nano-consciousness" as a new way of worldview and social comprehension, which within all the important aspects as studying humans as a biological species and formation and realization of a new spirituality in the social life will be based on the achievements of the nano-, pico-, femtoand other new sciences which, via mastering quantum-mechanical nonlinear processes and implementation of synergetic approaches, reveal new horizons and facilitate the humanity's transition to sustainable development and construction of the "knowledge society" as an embodiment of the noosphere idea under the conditions of the 21st century. This transition demands taking to account the trend of ultimate recount while introducing innovations in education, science and economy (a compulsive shift to the new reform models; the information blow-up consequences; the need to replace a conventional education by the primitive one; the junction of studying and working; a knowledge-based approach to dividing the working population by employment sectors etc.) and avoiding the "hottabization" effect, i.e. ignoring by the humanitarians the achievements of natural sciences.

Though in the end of the 20th century the sustainable development term was used regarding mainly natural sciences and economics, the beginning of the 21st century is marked by a vast comprehension of sustainable development defined as a "perspective ideology of the 21st century" (Bogolyubov, 2012) and is considered as a "society's obligation to act in a way supporting life and allowing our descendants to live in comfortable, clean and friendly environment" (the UN Universal Committee for Environment and Development) (Bogolyubov, 2012). The "Strategy of sustainable development" (2012) represents its objectives and main principles, the history of formation of the concept and analysis of the basic regulatory acts.

The question of sustainable development is an object of study within natural, social, technical sciences as well as of philosophy, economics, political and educational spheres, that what proves the integrative character of the problem and

the need to create a concept (strategy). As a core of the sustainable development concept "the conservation of human as a biological species and its progressive development as a personality" is proclaimed (Bogolyubov, 2012). In our opinion, the sustainable development can be only that one which is based on the competitive economy, a developed home market, the national production complex using the potential of international capital and guaranteeing the economic security of the country, balanced social structure and effective political system. The Ukraine's shift to sustainable development concept defines a comprehensive system of approaches to the sustainable development of Ukraine, legal fundamentals, principles, objectives and organizational means of the state's transition to sustainable development and is a base to elaboration of the sustainable development strategy, state programs, socio-economic development program for both short-term and long-term. The document treats the sustainable development as a social progress within which a need satisfaction by contemporary generations cannot endanger the possibility for the next generations to satisfy their needs which causes the need of coordination of different components of development within ecology, economy and society. The educational sphere is not remarkably mentioned in none of them, though one can refer it to all the components of the state's development, for within the lack of qualified specialists the possibility to take appropriate and long-sighted decisions in all the spheres of the state's economy is quite impossible. Education and science, as it is pointed out in the Chapter 7 of the Concept, has to create methodological and technological basics for ecological, economic and social transformations via formation of the nation's intellectual potential and spirituality of the citizens.

Human development is the main objective and criterion of the social progress. We are agreeing with a classical definition of the Human development represented in the Report on the Human development: "The main objective of the development is a variety of choice for humans. In principle, a human can make choice an infinite quantity of times and change it within some period. Humans often appreciate the achievements which do not deal directly with growth or income data, e.g. a broader access to knowledge, better nutrition and medical care, secure housing, low-level crime rate and street violence, satisfaction through leisure activities, political and cultural freedoms, an engagement into community's life. The development's aim is to create an environment giving humans a possibility to enjoy long, sane and creative life" (*Ukraine...*, 2011; *Millennium...*, 2010).

The search of technological vision errors contributed to the basic ideas of the new civilizational paradigm. According to this paradigm, nature and the society must evolve as an integrity and not as competing values. Integrity foresees interconnections and interdependence of the elements of the system. That's interpenetration between the influence of the biosphere and society, their coevolution will determine the future of human civilization. Malyarchuk (2008) outlines a new type of society with so-called "eccentric ecological consciousness", which has the following properties:

- the harmonious development of the human and nature is the highest value that is conceptually revealed through the following: a) the natural is recognized as self-sufficient, regardless of the usefulness, uselessness or harmfulness for the human; b) a human is not the ruler of the nature, but only a member of the nature community;
- refusal from a hierarchical world view (humanity is not opposed to nature, they are part of a unified system in which the person is charged with the additional duties regarding the environment);
- the purpose of interaction with nature is the maximum satisfaction of human needs as well as needs of the nature community as a whole (ie, intervention and irreversible influence on nature is transformed into the interaction);
- the nature of interaction with nature is determined by the "environmental imperative" that confirms: a correct and allowed is everything that does not affect the existing nature equilibrium;
- nature and everything natural is seen as a rightful subject of interaction with the human;
- ethical rules and regulations apply equally to both the interaction between humans and the interaction with the world of nature;
- environment protection activity ruled by the need to preserve nature for itself and for humanity in particular;
- the development of the nature and the human is recognized as a coevolution process – mutual unity.

Snizhko while working over geopsychical influence of bio-geographical bio-ceniz environment of somatic and psychological aspect of human psychic considered that environment is the one of most important factors of human development geo-psychological structure. Based on natural psychological and philosophical concept he tells: "Only concrete bramble creates particular ethnic, but not ethnic creates environment and adjusts ecology" (Snizhko, 2010, p. 189). Exactly environment is a dynamic structure which condition depends on climactic and natural conditions as well as from social reasons. Respectively author emphasis on "interdependence between blackthorn and human that are in time and space development" (Snizhko, 2010, p. 158). This causes understanding of ethnical culture as totality of material and spiritual values, that were developed during evolutional, social-natural way over geo-psychical theory and using tools of ethnical self-determination (special nutrition system, ethno esthetic, Godunderstanding, work e.g.). Grounding on the idea of interconnection of ethnos with bio- and socio-spheres Snizhko (2010, p. 197) makes an assumption about existence of particular historical, cultural and psychic-functional one, that is

a part of world ethnosphere. Unfortunately, awareness about human responsibility for planet transformation coincided with the sharp decrease of nature capabilities.

Awareness of modern civilization reality about the global environmental crisis has forced scientists to review the concept of a holistic view of how the world is made. Relevant is the use of noosphere approach, namely representation of the surrounding world as a system or holistic living organism. Noospherical approach is based on an analysis of historical and cultural biospheric processes (system-ecological approach to knowledge), certifying different approaches of natural processes in the biosphere and man in the techno-sphere that is antagonistic character and shows the crisis nature of the relationship between society and nature. From the standpoint of nonlinear approach the historical path of humanity is presented as a set of distinctive historical organisms, multiline, polycentric, different-dimentional daunting process configuration, development of which is not limited to a set of progressive changes in character. Under natural system and their impact on the cultural and historical process associated with global environmental crisis that requires a system-ecological approach to its analysis (Popov, 2011, p. 74).

So informative and form-building is the core process of nature ecological culture as a concrete historical embodiment of human adaptive strategies. Ecological culture manifests itself in two ways: a) as a set of specific actions, technologies, human exploration of nature, providing a stable equilibrium in the system "man – environment"; b) the theoretical field of knowledge about man's place in the biosphere as being active, organizing its structural and functional blocks as a growing factor in their ability to state regulation of the biosphere. Without knowledge of the range of problems inherent ecological culture, scientists cannot understand why some communities (ethnic groups) live in harmony with nature, that are anchoring in the world as ethnic groups ekofil why in some cases, human activity generates harmonic landscapes and ecosystems, and others – the environment becomes a wasteland (Melnychuk et al., 2005).

Thus, testify that universities as centers of formation of the new thinking noosphere, noosphere consciousness carry one additional function: training centers of society sustainability.

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