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Updating of Education for Sustainable Development by the Ideas of Humanitarization, Meta-Subject and Futuristic Orientation

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Abstract: The article describes the updating features of education for sustainable development. The authors traces the emergence of the term "sustainable development", its reflection in the regulations of international meetings under the auspices of the UN General Assembly. Education for sustainable development is seen as an education, which will promote the development of students abilities to set goals for decision of the complex social and environmental problems; to determine the unity of knowledge and skills and their application with respect to social, interpersonal and substantive features of the context; to form the ability to act in socio-natural environment. For directions to update the education for sustainable development the authors suggests a number of ideas, identified based on the concept of sustainable development as a planetary strategy of the international community, involving the solution of environmental problems in social, economical and natural constituents of civilization development. The idea of humanitarization is defined as a basis for a balance of social, economical and ecological development. The idea of meta-subject involves the synthesis of scientific knowledge and moral principles, the addition of a modern life picture to the world one. The idea of futuristic orientation is defined as a probability for an optimistic future. Dedicated ideas constitute the core of the semantic content of the updated education for sustainable development and cause an equivalent correlation of the intellectual, personal, active as a basis of a genuine understanding of the world and the responsibility for what happens in it.

Key words: Sustainable development • Education for sustainable development • Humanitarization • Meta-subject • Futuristic orientation

INTRODUCTION

Technological development of manufacture and social-economical priorities in life support of the society caused negative changes in global ecological situation and gave rise to a new scope of risks of life existence on Earth planet.

That is why the understanding of the world civilization crisis at the international level is connected with creation of a cooperative program of actions to prevent the ecological catastrophe and to provide the conditions for existence of the present and future generations [1].

It determined the emergence of the sustainable development concept [2, 3], which became a planetary strategy for the international community, involving the solution of environmental problems in the social, economical and natural constituents of civilization development.

Firstly, the term "sustainable development" was used in the theories of population dynamics and environment oriented documents, as a method to develop the population or biocenose, free of life threatening and preserving the self-recovery resource. From the 80s of the 20th century this term came into use in relation to social objects and processes, mostly thanks to the works of I.S.Braun, which played the leading role; they described separate fields of activities and a society as a whole [4]. A researcher introduced into scientific use a concept of ecological deficit as an anthropogenic impact on nature, destroying its reproductive and rehabilitation possibilities and proved a relation and interdependence of social-economical and ecological processes: ecological problems cause social-economical ones and low level of public life is accompanied by exacerbation of ecological problems.

Conceptual framework of sustainable development (key notions ("demands", "restrictions"); orientation of

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consumption rates to long-term consistency; consideration of ecosystem service consequences; harmony of resources exploitation, investment patterns, orientation of technological development; valorization of present and future potential in order to satisfy human demands and wants) was specified in the report of the World Commission on Environment and Development "Our General Future" (1987) [2].

Important stages for formation of the conceptual field of sustainable development were the international meetings under the auspices of the UN General Assembly (Nevada, 1970; Stockholm, 1972; Tbilisi, 1977; Rio de Janeiro, 1992; Johannesburg, 2002; Vilnius, 2005; Rio de Janeiro, 2012); the general total of which was the inclusion of the sustainable development ideas to national educational systems in order to develop knowledge and special skills, to form life positions and values of students.

At the UN Second Conference on Environment and Development (Rio de Janeiro, 1992) a Declaration on Environment and Sustainable Development "Agenda for XXI Century" was adopted, as one of the means of sustainable development, specifying the enlightenment, which, including the education, is significant for assistance to the sustainable development and enhancement of countries possibilities in solution of environmental problems and provision of environmental management. Education, being an irreplaceable factor in development of man's ability to self-modification, provides a possibility to evaluate and solve the problems of sustainable development [5, p.467].

The basis for educational formation for sustainable development is the Report of International Commission UNESCO on Education for XXI Century "Education: the Essential Utopia" (1995), which deals with the significant role of education in the process of new world society formation. ECE UN (2006) transformed the principles, mentioned in this report, to the educational goals for the sustainable development: learn to live and work together; learn to think; learn to do; learn to be own master [6].

The education for sustainable development requires refocusing the attention from provision of knowledge to working out the problems and searching for the possible solutions. The education shall have the possibilities for multiway and inter discipline analysis of real life situations. Such education will promote the development of students abilities to set goals for solution of complex social-ecological problems; specify the unity of knowledge and skills and their application, taking into account social, interpersonal and objective contextual peculiarities; provide the formation of ability to act in social-natural environment.

At the present time, the education for sustainable development shall be considered as a new educational paradigm, aimed at bringing up a man of a new type, oriented at civilization development, balanced with biosphere capabilities.

A strategic guideline of this paradigm is the development of a student's personality, focused on maintenance of biosphere-compatible principles of a man's actions, caring about life support of present and future generations, stop of consumer attitude to world around.

Thus, the education, considered as a motivation for development of a personality and society in a whole, shall be updated according to the demand of the postindustrial society. Conceptual framework of sustainable development involves the updating of educational content by the ideas of humanitarization, meta-subject and ?futuristic orientation. It involves the connection of bases of ecology, sociology and environmental management with technological principles of interaction of a man, nature and society in conditions of intensifying ecological crisis.

Education as a condition for development of a personality and society shall be updated according to the concept of sustainable development by *the idea of humanitarization*, as a basis for a balance of social-economical and ecological development.

As per the existing social-economical situation, led to ecological crisis, the scientific achievements can become harmful to the humanity, thus revealing the negative value of knowledge. S.N. Glazachev consider, that "beyond the social-moral use the scientific knowledge loses its cultural-humanistic dimension and leads to cynicism" [7, p.5].

T.A. Akimova mentions that a man has become the main reason of natural imbalance, because of his alienation from wildlife, creation of technosphere and giant overbiological consumption of natural resources. Pointing to humanitarian sources of the emerged ecological problems, the author writes, that preserving the genetic relations with nature, the humanity turned out to be in the situation of sharp contradiction between its biological essence and antibiological behavior [8].

Humanitarization is essentially important in educational spheres, connected with natural sciences and engineering. This is due to the fact, that in consequence of technological progress, understanding plays the leading role in the activity of people, as a way of advanced knowledge formation, based on meta-subject, conciseness and unity of the whole human activity. Humanitarization provides the education with humanity and ensures the formation of aesthetic and ethic attitude of a student to the world around, people and himself.

As per conviction of Yu.N. Afanasyev, the idea of humanitarization, being the idea of the general world for a man, nature and society, shall change the pragmatic understanding of reality. The task of the educational sphere shall be the creation of conditions for revealing of "truly human, focused on integral organization of consciousness and thus strictly humanitarian knowledge in all fundamental spheres" [9, p.41].

The idea of humanitarization shall promote the learning of such cultural aspects, which provide the ability of a personality to self-development, understanding of other people and their communities: the attitude of people to themselves, nature and to the others; social norms and requirements, intangible assets in the sphere of language, art and social sciences.

The updating of education by the idea of humanitarization provides the life learning, active and proper participation in development of the society and formation in each student his subjectness, as a demand and an ability to self-determined, self-organizing, selfregulating and self-checking behavior.

The humanitarian character, as a peculiarity of the modern education, is specified by the fact, that the humanitarity, being a true human nature, is understood as addressing to the human personality, as a practice of humanizing the human, a practice of formation, in opinion of V.I. Slobodchikov, "strictly human in a man" [10], which is contained in the field of human relations and which introduces to human essence, moral principles, life values and transformation of reality, based on love to life quality and will to perfection in all its spheres.

Humanitarization creates an interrelation and interdependence of ecological, social and economical processes and a leading role in a man's life in solution of the problems of sustainable development through the development of a system "Man-Society-Nature".

Education for sustainable development specifies the understanding of students of the modern situation from the positions of the varied theoretical constructs and promotes the addition of the life view to the world view in the variety of paradigms, theories and opinions. A transfer from learning of content to multidirectional study of the real life problem situations and the formation of actions for their prevention and solution determines the development of the following idea of educational updating - the idea of *meta-subject* (from Greek "meta" the one, that stands "behind", a direction of general subject), providing the understanding by a man of his place and his real role in the world, where he lives.

The meta-subject idea in education actualizes the problem of personal readiness not only to survive in new conditions, but also to construct the reality. That is why the formation of student' knowledge and abilities, which are the guidelines for their activity in social-natural environment, becomes very urgent.

Meta-subject essence of education A.V. Khutorsky sees in the unified basis of the world and a man, expressed in the activity, as a connection method of inner (microcosm) and outer (macrocosm) in a man. Key bases of the world and a man, specified in the investigation of the scientist as the first-meaning, bring all occurring to common bases, what corresponds to the concept of sustainable development in our investigation. The scientist states that the world is full of conceptual symbols, by means of which a man cognizes the world [11].

The notions of the meta-subject content, putting the student beyond the frames of the scientific field to natural and cultural bases, are the following values: Life, Nature, Man, Health, Beauty and Harmony. The following questions of sustainable development are connected with them: How and why do the changes happen in the world? What is a life? What is a man? What is important for a man's life? How did everything emerge? How is everything connected? Who is a man, getting control over the natural forces? What are his rights and obligations towards the nature and himself? Are there any limits of these rights? If yes, what are they?.

The formation of the meta-subject knowledge involves the attention to the moral development of a personality. It allows developing in students moral ideas, embodied in a moral image of a man and providing the formation of the moral imperative, which regulates the relations between people inside the society and which is a basis for its survival. The basis of the moral imperative is the life value in all variety of its displays.

The abovementioned determines the task of meta-subject in updating the content of ecological education: synthesis of scientific knowledge and moral orientations, the addition of the modern life view to the world view. The updating of the educational content by the idea of meta-subject is aimed at the change of man's relation to reality, which becomes apparent in the demand of a student to act in accordance with the key imperative of sustainable development - moral one - and acts as a guide for formation of actions for solution and prevention of social and natural problems.

Thus, the idea of meta-subject, as a synthesis of scientific knowledge and moral principles, means the universal character of education for sustainable development through the addition of the modern life view to the world view. Meta-subject contributes to the harmony of knowledge and social reality, observance of moral standards, realization of a man as a significant reason of this state of the society and affirmation of friend-dominant meanings of individual existence.

The selection between the short and long-term profit in environmental management as a priority of sustainable development makes it necessary to update the content of education for sustainable development by the *idea of futuristic orientation*, as a direction for optimistically possible future.

The idea of futuristic orientation provides the development of forecasting, planning and self-criticism. These qualities, combined with the knowledge, allow avoiding the mistakes of simplified perception of reality and they are connected to the ability for mutual respect, tolerance and coordination of actions.

The most important in the idea of futuristic orientation for education for sustainable development is the forecast of possible shift to equal interaction of elements of the system "Man-Society-Nature", the creation of model and scenarios of the image of future. It reflects the advanced character of the updated ecological education, the tools of which become the revealing of tendencies of development of the humanity future demands and the priorities of society, based on prognostics, working out and analysis of development patterns. The advanced character of the education becomes an answer to a challenge of the modern global constantly changing world - upbringing of people, able to adapt and exist in dynamic society.

The advanced character of the ecological education determines the formation of the conscious attitude to knowledge acquisition, formation of creative approach to accepting individual decisions and views on socialeconomical problems of the society, development of views and orientations in relation to the system "Man-Society-Nature". Formation and development of a personality in the process of education provides the formation of a new culture, new values in relations "Man-Society-Nature", promotes the formation of society, which declares a mutual development of nature and society as its slogan.

The idea of futuristic orientation specifies the understanding and forecasting of the civilizational dynamics, the acceptance by a man a necessity in continuous education, which serves to help to orient in changes in time, to preserve an ability of individual analysis and well-grounded opinions on solution of problems of environment, society, sound and safe way of living.

CONCLUSION

Thus, the idea of futuristic orientation shall provide the shift from information transfer to the dialogue and project solution of environmental problems, formation of responsibility for the health and well-being of recent people and their future generations.

The ideas of humanitarization, meta-subject and futuristic orientation reveal the core of the semantic content of the updated education for sustainable development per the following vectors: ecological, economical, social; individual, natural, public; past, present, future. It determines the equal correlation of intellectual, personal and active, as a basis for the genuine understanding of the world and the responsibility for what happens in it.

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