The Role of Social Pedagogy in Adapting to the Values of the Biosphere Worldview

T A Kolesnik
1 Bryansk state technical University, Bryansk, Russia

E-mail: 077767475@mail.ru

Abstract. Although there is a great number of discussions in the world arena concerning interconnection of changes in education and the strategy for the development of modern civilization, as well as documents acceded by the variety of UN Conferences in regard to environment and development, there haven’t been any significant changes in the worldview and practice so far. On the contrary, the acceleration of the expansion of the technosphere and thereto related degradation of biosphere life are in evidence. This implies that attempts to solve global problems of our time based solely on the understanding of objective laws of social development are unsuccessful. In our opinion, the development of measures to reform modern education should take into account the interaction of three factors: technogenic society, technosphere and transformed biosphere. The consequences of global change-over of life connected with the spontaneous formation of the techno-noosphere should also be realized. Such change requires new mechanisms for socialization of the younger generation, which are able to allow not only adapting to the changed environment, but also correcting mistakes in the social development as a whole. In this context it should be realized that traditional pedagogy is unable to get radically the things done. Therefore, mainstreaming of social pedagogy into the educational process is of great necessity. In our opinion, it is socialization based on biosphere mentality and mindsets expanding the scope of the ecological worldview that can take all the transformational processes in the society, nature and a human being into consideration and work properly. With a foundation of social pedagogy and biosphere mentality and mindsets it is possible to propose a set of measures aimed at humane correction of modern educational systems in order to increase their effectiveness in the fight for saving of biosphere life.

1. Introduction
Currently, the documents acceded by the variety of UN Conferences in regard to environment and development are the reference point for reforming educational system aimed at solving global problems of our time. They highlight the priorities of the education system in achieving the sustainability of modern civilization [10, p. 92], [6; 11; 16]. In 2002, at the 57th session of the UN General Assembly, it was decided to declare 2005–2014 the decade of education for sound progress (ESP). In 2012, at one of these conferences in Rio de Janeiro, in the final outcome of the conference "the Future we want" an entire section was devoted to the problems of education [12, p. 240-247]. However, despite the extensive discussion of the need for reforming educational system and enlightenment of population, there are no significant changes in the worldview and practice that could become the basis for the transition to the safe route of biosphere life development. Education is still the main means of reproducing the...
Technocracy of modern society [15, p. 118-127], but it can’t correct mistakes in its development properly. In this regard, we believe that additional measures are required in the field of education and educational policy that can result in enhancing efforts of education, science and the business community to overcome dangerous man-made processes that destroy biosphere life.

In our work, we will rely on a systematic socio-natural approach originally suggested by V. I. Vernadsky [3]. This approach enables to analyze the integrated interaction of the technogenic society that created technosphere and transformed biosphere. Being supported by this we have the opportunity of developing a set of measures to upgrade modern education for improving the vector of development of modern civilization in the humane way. The analysis of the processes of transformational socio-technogenic development of the world and life is carried out by the following philosophers and scientists: E. V. Girusov, E. N. Gnatik, G. V. Dobrovolsky, E. S. Demidenko, E. A. Dergacheva, N. V. Popkova, V. A. Kovda, V. A. Kutyrev, I. K. Liseev, A. Pechchei, V. S. Stepin, Yu. V. hen, L. Brown, A. Gor, A. Grunwald, Don. and Den. Meadows, F. Fukuyama etc.

2. Discussion
Analyzing theories of sustainable development area (SDA), we have come to the conclusion that most of them interpret sustainable development from noospheric-idealistic or economic-ecological perspectives neglecting fundamental issues of increasing anthropogenic factor of socio-natural development, radical qualitative transformation of earth life [12, p. 22-46; 9, p. 17-22] and the destruction of the biosphere and biophere soils. The emerging global transition of life associated with the deformation and destruction of the biosphere and the formation of the techno-noosphere causing relocation of all life processes into it escapes observation of these theories [7, p.164]. Life in the techno-noosphere acquires other artificial features alien to man, which is expressed by the acceleration of degradation of natural and biological qualities of man, as well as the integration of people with technosphere at the social, physical, physiological, mental, and genetic levels according to a number of researchers [5; 21].

Under current conditions we are in need of mechanisms making reasonable transition to the increasing artificiality of the world possible, helping to build a full-fledged life strategy that allows people to preserve their identity. At the moment this is rather problematic owing also to disadvantages of the traditional form of education. Modern education is focused primarily on training specialists who serve the objects of technosphere and can’t have critical thinking of processes taking place in the society and bechancing biologically.

Despite obedience to technosphere a human still indulges in illusions of personal significance, which centers around the dominance of an anthropocentric worldview that finds excuses for the destruction of biosphere life under a pretext of the improvement of human life quality. However, this mindset does not explain the complex artificial reality based and developed on it, where the importance of a person becomes secondary while the development of the technosphere is at its centre. Chances of success in the living standards become more shadowy due to increasing destruction of the natural biotic mechanism of biosphere self-control. Thus in the guise of legendary anthropocentrism and the triumph of people there is technofeminism (the technocracy) in reality. And yet this range of problems still remains outside the scope of SD and SDA theories. In our opinion, this stands in the way of forming human development strategy and an appropriate educational system for that. Most scientists see a way out in the transition to ecological thinking and frame of reference. They believe that global problems can be solved by substituting anthropocentrism with ecocentrism intending socialization of the younger generation based on the values of ecoculture [5, p. 10; 18, p. 89-102; 4, p. 74-72; 11]. Thus, we understand completely neither the complexity of transformational development of the planet-life combination, nor the whole range of interrelated changes affecting this process. For example, N. M. Mamedov confines tasks of the ecological world outlook to the safekeeping and development of the "society-nature" system [17, p. 10].

Ecology, according to our reckoning, has a narrow view of biosphere processes: it is just relations of interacting living organisms in the environment [20]. Deep interconnected transformations taking place in society, technosphere, man and nature are still under-investigated. For better studying of the issue some biosphere mentality together with ecological thinking should be used. Biosphere thinking can
expand the scope of the ecommerce worldview, since it can be used to analyze the interrelated transformations of "socio", "techno" and "bio", identify their causes and develop appropriate methods of recalibration. The fundamental pillar of biosphere thinking and mindset formed on its basis is the idea of organic integrity, priority value and biocentric equality of life, understanding all the consequences of transformational development of life, the direction of its evolution and the need for operational activities to keep and protect it.

It’s our understanding that it is biosphere perception that gives the basis for integration of economic, environmental, social, humanitarian, safety and physical culture. And it is not just identical to the integration of all the types of cultures into one culture of sustainable development described above by S. V. Alekseev [1]. For solving this problem the resources of education should be widely used.

Being a specific form of socialization, education should adapt people to a new reality helping them to preserve their health and their identity and steering on the right course. Socialization on the basis of biosphere thinking anticipates such a level that would not only be able to ensure the entry of an existing type of society, but also correct system of values and motives of younger generation for saving biosphere life. High-quality education should help not only to reduce the number of young people who are not successful in the modern labor market, but also realize the tasks of socialization for lowering this number as written by T. L. Klyachko and S. G. Sinelnikov-Murelyev [13, p. 12-13]. Effective socialization in the process of education, in our view, should take place precisely on the basis of biosphere thinking, which contributes to the gradual separation of people from the values formed owing to their technocratic culture with total worship of things, not meanings and destroying them. In this context the statement of B. Devall and G. Seshns concerning personal separate in the narrowest way and socialized "self-image: I" is just an illusion, in fact, we are subtly connected with all the processes happening around us [2]. This is why it is so important not to stand apart from these processes due to technosphere, making their break. The appreciation of this should be developed in the process of education.

Traditional pedagogy does not have the necessary potential capacity to cope with such a wide and complex range of interrelated problems. Solving these problems requires breaking of the traditional worldview and its behavioral stereotypes and motives based on it. Under existing conditions it is social pedagogy that is much-needed for a deep investigation of the processes of socialization for it can provide means of their improving in the proper way diffusing the impact of the transition to a new biosphere-oriented system of values. It should be noted that the role and significance of social pedagogy in the formation of biosphere thinking are not studied by anyone. It is regrettable to note that even those ideas of SDA that were formed in the international arena have not yet been put to good and wide use in practice. This is due to the fact that educational activities in this regard are practically non-existent. There is no clear recognition of real substance of SDA and the way of adapting it to the concreteness of modern education. E. N. Dzyatkovskaya notes that for making changes in the current situation, it is necessary to develop and implement technologies of transdisciplinary education in the educational process, which are still by-way [9, p 18].

Together with the biosphere way of thinking transdisciplinary learning technologies should become a boon changing the motives of behavior and activities with a focus on saving biosphere life. However, no one is currently engaged in implementing these ideas in the educational process, so they remain methodologically and methodically inoperable. There are only diminutival attempts to introduce environmental issues and so-called learning of sustainable development into the process of education. Efforts taken by N. N. Moiseev towards “thorough ecologization” [19, p 33] or the search for a model of transdisciplinary environmental education according to E. N. Dzyatkovskaya [9] aren't virtually undertaken. The search for models of education based on the biosphere integrated way of thinking is not being conducted.

3. Conclusion
Without doubt humanization of education requires a set of measures aimed at overcoming this technocratic development in the society and forming a new type of its reasonableness. Humanizing rational foundations of society progress stand in need of the whole set of measures aimed at humanizing
economic, scientific, and technical-technological rationalities [8, p 172-173]. But herewithin we will focus on those strategic measures that should be fundamental in regard to humane correction of education itself in the conditions of socio-technological development of the world. The first group of measures, in our opinion, should be aimed at overcoming technocracy in modern education. The second group of measures should focus on building an educational system intent on a high level of socialization of younger generation in line with main values of a biosphere-oriented worldview. The third group of measures should concentrate on active use of health-saving learning technologies in the educational process. The fourth group of measures involves: 1) clear and responsible obeyance of the existing legislation in the field of education; 2) development of the practice-oriented state strategy in the field of education aimed at overcoming negative transformations of technological development.

4. References
[1] Alexeev S V Culture of sustainable development as integrative effect of education for sustainable development. Available at: http://partner-unitwin.net/wp-content/uploads/2016/08/%D0%9E%D0%BA%D1%83%D0%BB%D1%8C%D1%82%D1%83%D1%80%D0%B5%D1%81%D1%82%D0%BE%D0%B9%D1%87%D0%8D%82%80%D0%BE%D0%B3%D0%BE%D1%80%D0%B0%D0%B7%D0%B2%D0%B8%D1%82%D0%B8%D1%8F.pdf (accessed: 19 December 2019)
[2] Devall B, Sessions G 2005 Deep ecology (Kiev) Available at: https://ecocrisis.wordpress.com/deep-sessions/ (accessed: 18 March 2020)
[3] Vernadsky V I 2004 Biosphere and noosphere Iris-press Publ. (Moscow) 576
[4] Girusov E V 2009 Ecological culture as the highest form of humanism Philosophy and society 4 74–92
[5] Gnatik E N 2010 Human Genetics: past and future (Moscow) 280
[6] The Rio Declaration on Environment and Development, Conf. on environment and development” (UNCED) Rio de Janeiro 3-14 June 1992 Available at: https://ru.wikipedia.org/wiki/%D0%94%D0%B5%D0%BA%D0%BB%D0%B0%D1%80%D0%B0%D1%86%D0%B8%D1%8F_%D0%A0%D0%B8%D0%BE-%D0%B4%D0%B5-%D0%96%D0%B0%D0%BD%D0%B5%D0%B9%D1%80%D0%BE-%D0%BF%D0%BE_%D0%BE%D0%BA%D1%80%D1%83%D0%B6%D0%B0%D1%8E%D1%89%D0%B5%D0%B9_%D1%81%D1%80%D0%B5%D0%B4%D0%B0%B5_%D0%B8_%D1%80%D0%B0%D0%B7%D0%B2%D0%B8%D1%82%80%D1%8E%82%80%D0%B8%D1%8F.pdf (accessed: 23 December 2019)
[7] Demidenko E S, Dergacheva E A 2010 Technogenic development of society and transformation of the biosphere: monograph (M) 284
[8] Dergacheva E A 2005 Technogenic society and contradictory nature of its rationality (Bryansk: BSTU) 195
[9] Dzyatkovskaya E N 2014 Trans-subject model of education for sustainable development Astrakshtnik Vestnic of ecological education 3(29) 17-22
[10] Ermakov D S 2013 Content of education for sustainable development Vestnik of RUDN, psychology and pedagogy series 3 91-96
[11] Zakhlebnyi A N 2011 The concept of General environmental education in the agenda of the XXI century Scientific researches in education Available at: https://cyberleninka.ru/article/n/kontseptsiya-obschego-ekologicheskogo-obrazovaniya-v-povestke-dnya-xxi-veka/viewer
[12] Ilyin V I, Elk V A, Ursul A D 2015 Sustainable development and global processes: (Moscow) 445
[13] Klyachko T L, Sinelnikov-Murylev S G 2018 Strategy for Russia: education (Moscow) 120
[14] Kolesnik T A 2017 Transformational development of the world and life in a technogenic society (Context and Reflection: Philosophy of the World and Human Being) Vol 6 6A
[15] Kolesnik T A 2017 Philosophical understanding of technocraticism in modern education Context and Reflection Philosophy of the World and Human Being Vol 6 6A 118-127
[16] Koptyug V A 1992 UN conference on environment and development (Rio de Janeiro, June 1992) Information review RAN. Novosibirsk Section IV Means of implementation Chapter 36 Promotion of education information and training
[17] Mamedov M N 1996 Culture, ecology, education (M) 52
[18] Mamedov N M 2011 New Aspects of Ecological Cognition. Philosophy of environment formation 6 89-102
[19] Moiseev N N 1994 "Sustainable development" or "Strategy of the transition period": report at the meeting of the Supreme ecological Council of the Russian Federation
[20] Moiseev N N 2012 Historical development and environmental education (Proc.of N. N. Moiseev on problems of modern education (Moscow: Academy of MNEPU) 33
[21] Ecological encyclopedia Kishinev: 1989 Philosophical encyclopedia (2010) Available at: https://dic.academic.ru/dic.nsf/enc_philosophy/3768/%D0%AD%D0%9A%D0%9E%D0%9B%D0%9E%D0%93%D0%98%D0%AF (26.03.2020)
[22] Yudin B G Human Perspectives: between the past and the future Man and his future: New technologies and human capabilities pp 44-57