From Environmental Education to Biophile Orientation of Education

Hana Horká a *, Petra Vystrčil Marková b

a Hana Horká, Poříčí 31, Brno 625 00, Czech republic
b Petra Vystrčil Marková, Poříčí 31, Brno 625 00, Czech republic

Abstract

The new interpretation of education highlights the environmental dimension. Authors are involved in processes which lead to overcoming of manipulative looking on nature and primitive egocentric opinions and values. They follow that problematic in the context of biophile orientation of education. They deal with the change of curriculum, they structure the expected outputs and they also report strategies, it means thoughtful and optimal ways to achieving goals in creating the relationship to environment.

Keywords: Environmental education, biophile orientation of education, strategies;

1. Introduction

Healthy development of the individual, society and nature requires a change in the content structure of education with regard to clarifying essence of culture and its relationship to nature. Updated questions connected with the formation of the relationship to the environment with an emphasis on natural component, threatened by civilization development and current lifestyle. Education shall be directed to the development of attitudes and behaviour that will determine the running and ways of social and economic development in line with sustainable development. It aims at an integrated view of the world by integrating, expanding, consolidating and systematization knowledge from different areas (science, humanities, engineering, economic, philosophical and arts, etc.). Intentional effect on individuals affects the relationship between humans and the environment (natural, cultural and social). It is clearly shown that questions of environmental issues are not, as was generally expected, questions of ecology such as scientific discipline, but are a matter of culture. This fact is reflected on the environmental dimension of education.

* Corresponding author: Petra Vystrčil Marková. Tel.: +420-776-578-115.
E-mail address: 319967@mail.muni.cz
2. Biophiled orientation of education

Nature is a “substrate material” to implementation of tasks of environmental education, because it is based on knowledge of scientific principles and on the acquisition of a positive relationship to nature. In the school education, however, is clarified the essence of a culture (civilization) as a system of artificial, man-made, with its own subjective and organizational forms (material culture and institutions) with the spiritual culture and its own reproduction and evolution. It simplifies the human life, but also makes it difficult for biological adaptation of the human body, its reproduction, and ontogenesis and by its expansion is caused a loss of irreplaceable nature.

Content structure of education should be according to J. Šmajs (2001, p. 8) in accordance with not only the current knowledge about the world, but even with such an evolution ontological minimal, which could be the basis of the emotionally infused value attitudes of people. The positive effect of personally formative is reflected by the fact that self-conserving activity of an individual will be balanced by esteem and respect for the perfection, beauty and vulnerability of natural harmony, humility and admiration, not pragmatic-utilitarian calculation (Kučerová, 1996, p. 76).

Transforming educational curriculum is characterized by principles (cf. Šmajs, 2008, p. 50-63), which represent the transition:

• From the orientation “abiotic to the orientation biotic and pro-nature”- in accordance with the current state of knowledge and respect for the still unknown states about the learning about nature in which it is an aesthetic element complementary to the ethical connected with growing awareness of responsibility, moral justifiability of human behaviour, especially ethical responsibility towards nature and culture and to future generations;

• From the predominance of “partial information and the passive acceptance of knowledge to the development of evolution and systems thinking” through the knowledge and understanding of ecosystems, including the effects of human activity on the environment, detecting contexts, relationships, conditionality;

• From “axiological arrogant anthropocentrism and mechanistic interpretation of reality to education of environmentally responsible citizen” who is able to resist hypertrophy civilization moments in the form of dictate of fashion, advertising suggestion that cause not-fulfillment of material needs and influence the rate of respectful discipline, wasteful way of life, hinder ecologically cultivated consumption; to this is related strengthening of positive personality traits (conscientiousness, discipline, politeness, courtesy, friendliness, voluntary modesty, careful, humility, tolerance, respect for the order of nature and human rights and responsibilities).

• From “distancing / alienating to nature to value rehabilitation nature by imprinting of life as the highest value” and by the education to values, with an emphasis on quality (of life), to the creation of such a system of self-regulation, which at each intervention in the environment will conduct to individual thinks, evaluates, wants and acts in the spirit of environmental laws to be able to recite, to overcome, to promote the legitimate demands etc. It is useful to prioritize temporary principle of experience before reasoning, understanding, rational explanation (especially for younger pupils). If a pupil receives a value by emotional way, it is expected that later, after rational justification, becomes his permanent property and personal value.

These principles of knowledge support the biophiled orientation of education, which in school practice means:

• To replace the superiority of partial information and passive acceptance of knowledge by promoting procession thinking and sensitivity for links and connections in nature;
• Strengthen systemic and evolutionary way of thinking, in the sense that “we do not create nature, for its functioning and evolution, taking place without us, we are not responsible”; person is responsible for culture, for his work (Šmajs, 2008, p. 58);
• To explain value priority of nature for human life and that the natural world is not necessary to protect just because it could serve to man; nature has a value sui generis regardless of the needs of man;
• To clarify what are nature, culture, evolution, and its products and, in particular, the material culture “is built only from substance and energy, which were built in unique natural structures” (Šmajs, 2008, p. 54).

3. Strategies for creating the relationship to nature

Strategies for the creating the relationship to nature/the environment are discussed in three levels - cognitive, cognitive-affective and cognitive-motor. Aspect of cognitive is saturated with mediation images of the complex character of the natural environment, their interdependence. It aims at understanding the value priorities of nature for human life and the principles of sustainable development. The cognitive-affective domain is connected with acquiring ethical principles of act and behaviour and overcoming primitively egocentric opinions and values, especially arrogance and indifference to nature. In the field of aesthetic leads to the development of the ability to perceive, experience, evaluate mystery and beauty of nature as a whole. Cognitive-motor area consists of a set of skills and habits necessary for environmentally friendly consumers and citizens, for everyday act in the area of protection of nature. This empirical element counts the provision of opportunities for direct contact with the environment, for observation, measurement, interpretation and discussion. In the terms of Czech schools, the efforts to emphasize the synthesis, interdisciplinary context and integration of knowledge have become a positive conceptual feature of Framework Educational Program for Basic Education (FEP). They are provided by division of the curriculum into the areas of education and into the crosscutting themes, where is Environmental Education. It should lead individuals “to understanding the complexity of human relationships and the environment, i.e. to understanding the necessity of gradual transition to sustainable development of society and understanding the importance of responsibility for the actions of society and each individual ... Leads individuals for active participation in protecting and creating the environment and affects in the interest of sustainable development of human civilization lifestyle and value orientation of pupils.” (FEP, 2007).

Inclusion of environmental education among cross-cutting themes in the Czech curricular documents, called general educational programs, means a significant progress in its understanding. Being a “cultural protector of the environment” is considered as a basic responsibility of the individual. Therefore, it is emphasized the education, which takes into account the importance of understanding the conflict between culture and nature; competence to deal with it, the need to protect pupils against utilitarianism, instrumentalism, pragmatism of an adult world; to instil children often opposites of what is daily shown as ethics, knowledge, relationship and personality standard, standard lifestyle and value orientation.

4. Conclusion

Achieving the objectives of environmental education is a complex process in which an individual is not formed by what impassively learns, what indifferently accepts as given and done, but how he discovers the values, how identifies with them, how incorporates them into the inner world, how he is able to overcome difficulties on the way to these values (Kučerová, 1996, p 49).

The effectiveness of environmental education is related to penetration into the concept of education, into concept of curriculum, textbooks and teachers’ work. Studying of available literature led us to conclusion that partial knowledge about creating the relationship of man to the environment is the reasoning and administered unilaterally.

There are dominated impersonal approaches of science and abstract philosophical and sociological. Unilateral egoistic limited anthropocentrism alternates to unilateral biocentrism. The solution brings the concept of harmonious development of man, society and nature in the relationship and context. It is necessary to overcome still surviving
concepts isolated informative, divorced from the recipients and their local or regional capabilities and needs.

References


