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## Environmental education for balanced development of Ukraine

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## **Environmental education for balanced development of Ukraine**

One of the priorities of sustainable society should be comprehensive and continuous development of environmental education and education of all segments of the population. At the present stage of environmental education should focus on acquiring knowledge, skills, promoting formation of an environmentally literate society, a new outlook, position, values, i.e. development that is socially desirable, economically viable and environmentally safe.

An important aspect of environmental education is an appropriate level of the pupil and the student should be formed on the principles of generality, continuity, interdisciplinary approach, active and diverse interaction that teachers and learners, learning through experience and creativity. Because just in these years environmental awareness is most intense.

Today, national education essentially requires incorporation of key environmental trends, principles, approaches, techniques, forms, tools and teaching methods, links with practitioners for the effective formation, as indicated A. Schweitzer, infinite responsibility for all human living. Therefore, to ensure quality training of young generation will bring humanity to the state of environmental crisis in which it found itself because of ignorance and neglect law relationships in the system „man-society-nature” and the consumer attitude to nature. To do this, at all stages of development should pay special attention to understanding the balance, improve quality of life, reduce environmental and economic risks [Beljavskaja 2009: 158–162; Mudrak 2002: 14–18].

Innovative features of schools, high schools, colleges, vocational schools, technical, pedagogical and medical school, university issues in the educational process severely limit the state standard requirements relating to areas of specializations, the list of compulsory subjects and regulation of the time (many hours) is allocated for studying environmental disciplines.

Today the program is not running the Concept of environmental education, ecology completely stopped teaching in secondary schools, high schools, colleges (only some optional courses). Previously created under the Cabinet of Ministers of Ukraine Commission on Sustainable Development is not functioning

since 2001, wiped cooperation of Ukraine and Ministry of Education Ministry. The current education system of Ukraine, unfortunately, is strictly centralized with limited self-government in higher education, and environmental education itself is not a systematic, continuous, perfect (in some university training courses „Fundamentals of Ecology” read to date – „Health”. Safety. Civil protection). Due to the lack of experienced and qualified teachers, sufficient quality teaching literature and contemporary literary computer database (as required by European standards and regulations Strategy UNECE) level of training of Ukrainian specialists-ecologists remains low [Beljavskaja 2009: 158–162].

Feature of learning in higher education is irreversible transition to the step-wise system that leads to a specific organization of environmental education. Previously active „Regulations on the educational and skill levels” (approved in 1998), which provided training in skill levels „bachelor”, „professional” and „master” was not relevant because of the adoption by Ukraine of the Bologna Declaration. In what motivation the process of creating an integrated space is formulated as the need to strengthen the intellectual, cultural, social, scientific and technological dimension of the European community and the development of European citizenship and „prosperity” stable, peaceful and democratic society. According to this statement preparation to high school, in the context of environmental education in the field „bachelor-ecologist” and „master-ecologist”. Overall, the meeting in Bologna typed that in the world today there is no system of higher education, even in the U.S., which could be taken as a landmark in the modernization of education systems [Dolzhenko 2000: 19–20], let for example (standard).

Guideline under the Bologna Declaration concerning environmental education in Ukraine, in our opinion are:

- The purpose of environmental education – training, can provide the transition from industrial to information and technology and sustainable society through innovation (innovation, novelty know-how) in training, education, scientific and technical and practical work;

The main objectives and principles of a single European space of higher environmental education in universities:

- input two-cycle education (bachelor, master);
- introduction of credit-modular system of education;
- introducing the rating of student assessment;
- introduction of rating universities;
- a quality control system for environmental education;
- Extension mobility of students and teachers;
- the employment of graduates (overseas);
- the attractiveness of European environmental education.

Basic principles of environmental education modernization of Ukraine:

- Through consistent, general, professional, continuous, complex (ecology, sociology, economics), adapted to local peculiarities, interdisciplinary, integrated system of training highly qualified specialists: Pre-School – School student – a student – a specialist.

Implementation of standards of environmental education should be available:

- 1) a basic principle: independence, creative activity, improving continuity of education – one who learns and who teaches (as taught? Which teaches why teach? Will help to teach?);
- 2) Content: humanism, deep, and professional excellence, innovative educational technology training;
- 3) integrate environmental education into the European and global information space.

According to official Ministry of Education and Science of Ukraine today there are 109 departments of environmental conservation and direction in universities that train specialists-ecologists directly from 6.040106 „Ecology, environmental protection and balanced nature” (in 2000 there were only 22). Thus their training differs significantly by level and orientation. These institutions provide, as a rule, applied areas of ecology to the specific industries (Hydroecology, Agroecology, landscape ecology, methods of geo-ecological research, meteorology, climatology, metallurgy, food industry, timber engineering, phyto forest reclamation, industrial safety, aerospace environmental monitoring etc.). Takes an important role in environmental education teaching state university, where it should be placed on the highest level. After all, regardless of specialty, future teachers should learn at least some environmental awareness, to realize the severity of both global and local environmental problems, know how to prevent, decrease the negative impact on environment and human health, environmental management methods have to work with students on lessons in school and extracurricular activities, like children to be able content, forms, methods of environmental education, given the psychological characteristics of students. Today, schools and other educational establishments and Science of Ukraine in dire need of qualified teachers – environmentalists. Unfortunately, teachers – environmentalists, under license, prepare only two universities – Melitopol and Chernigov Pedagogical from a set of only 50 persons who did not satisfy the need for these specialists. Despite the fact that in Ukraine each year to protect the 4–6 master's and doctoral thesis on environmental education and training (teaching methods), still not established qualifying academic council of this specialty [Brovdiiy 2000: 27–30; Mudrak 2002: 14–18].

At the present moment is full uncontrollability by the State concerning the content of programs and media materials that not only enhance informal environmental education, its promotion, and working to reduce morality in society, the fall of spirituality and general cultural level of citizens in shaping young generation of aggression, cruelty, promote violence, immorality, consumer life-

style, distrust in the future [Beljavskaja 2009: 158–162]. Today, instead of sexually deprivatien, cruel, robber films and broadcasts to show the public the environmental tragedies of our time, way out of ecological crisis, to promote a healthy lifestyle [Mudrak 2002: 14–18]. According to Professor V. Brovdiya, it would be useful in studying environmental disciplines legitimize the oath, such oath Hypokrat, but had problems with healing environment [Brovdiy 2000: 27–30].

To improve the situation, we offer some innovative approaches intensify the training ecologists in teacher training institutions. They need to adapt to different teaching specialties: physics, mathematics, language, literature, journalism, history, law, music and singing, and initial employment training, physical education and sports program etc. „Fundamentals of Ecology”, developed a team of authors Beljavskyj G.A., Brovdiy V.M. etc., 2001, approved MOiNU as standard. But there are no textbooks, teaching development, and illustrate Ecology adapted to specific specialties. Based on some experience, we believe that the effectiveness of environmental education and culture not science professions students can be increased only by following principles: first, the formation of modern scientific understanding of the biosphere as a global ecosystem be connected with the development of dialectically contradictory unity „Biosphere – Human – Society – technosphere” and secondly, the environment (natural surrounding, anthropogenic, environment) environment should be considered as a unit on environmental, economic, educational, social, philosophical, political, legal, cultural paradigm, technical and technological, innovation and investment, cultural, aesthetic and ethical positions and programs; thirdly, the formation of scientific views that global environmental problems have deep social roots (irrational demographic policy); fourth, a common level of environmental education and culture student teachers should at the expense of ecological disciplines based on interdisciplinary and internal disciplinaty approach. In addition, each specializing in a university should have its own specific tasks and do them based on their own approaches and principles adapted to it.

To ensure an adequate level of environmental education for sustainable development of Ukraine, we offer:

- Exit request to MOiNU of the possibility of inclusion in school basic education course „Fundamentals of ecological knowledge” as a normative academic discipline, not discipline of choice;
- Enter in the new discipline of rural schools „Agroecology” or „biology of the fundamentals of agroecology” and in urban „urban ecology” [Mudrak 2002]. The famous Ukrainian scientist V.S. Krysachenko offers not only introduce courses in environmental regulations („human ecology” and „Environmental Culture”) for schoolchildren and students of all disciplines, but also enter a special examination of the ecology and raise its status to the degree of state [Krysachenko 1999: 3–29];

- Schools with advanced learning environment to offer such subjects „Plant Ecology” (Grade 6), „Animal Ecology” (Grade 7), „Fundamentals of Chemical Ecology” or „Environmental Chemistry” (8 rating), „Human Ecology” (8–9 rating), „General Ecology” or „Geoecology” (class 10), „conservation”, or „natural balanced” (class 11);
- Offer a view MOiNU university curricula, where the course „Fundamentals of Ecology” included in the other, to his selection as an independent and reading;
- The Program for Environmental Education in Ukraine based on the concept of environmental education (with particular encounter and observations);
- Quickly create Qualifying Special Council for the Defense of dissertations (candidate and doctor of environmental science) with the allocation of specialty bioecological environment science, Geoecology, Technical Ecology, socioecology, Agroecology [Mudrak 2002: 14–18];
- VAK approval to initiate a new scientific specialty 13.00.02 – theory and methodology of ecology;
- Renew membership and start of the Commission on sustainable (balanced) development under the Cabinet of Ministers of Ukraine, which has developed a national action plan and decide on government support for scientific support implementation of the Strategy of Education for sustainable development [Beljavskaja 2009: 158–162];
- Law of Ukraine „On ecological education” [Beljavskaja 2009: 158–162; Mudrak 2002: 14–18];
- Carry out personnel changes at the Ministry of Environmenting natural environment and their bodies on the ground, given the appropriate level of environmental-education leaders logical these offices or authorized persons on the ground;
- Comprehensive development of informal environmental education through the involvement of children, pupils and students of public environmental and conservation organizations that have some experience (Ukrainian Environmental League, Environmental guards, the Ukrainian Society of Nature Conservation, Mama-86, National Environmental Center etc.).

Thus, only the above mentioned objectives of environmental education development in Ukraine will, in our opinion, to withdraw it from the heavy ecological and economic crisis and implement greening of society through the government – companies – schools at all levels (levels of accreditation) – NGOs – religious Offices – Media – family education (family) – per person.

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### **Abstract**

The paper deals with problems of environmental education, due to its role as an important factor for the ecological and economic reforms in Ukraine. The basic ways to ensure appropriate level of environmental education for sustainable development of the state.

**Key words:** environmental education, balanced development.

## **Edukacja środowiskowa dla zrównoważonego rozwoju Ukrainy**

### **Streszczenie**

W artykule przedstawiono problemy edukacji środowiskowej, ze względu na jej rolę jako ważnego czynnika dla ekologicznych i ekonomicznych reform na Ukrainie. Zaakcentowano podstawowe drogi zapewniające odpowiedni poziom edukacji środowiskowej dla rozwoju kraju.

**Słowa kluczowe:** edukacja środowiskowa, rozwój zrównoważony.