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## **ENVIRONMENTAL EDUCATION IN GERMANY AND PROSPECTS FOR ITS APPLICATION IN UKRAINE**

**Abstract.** *The scientific work considers the problems of ecological education — an indispensable condition for achieving a balanced, sustainable development of the state. The development of scientific basis for continuous ecological education includes: the gradual phased reformation of environmental education and the education of the individual based on scientific and spiritual principles; formation of ecological culture with a new environmental outlook; analysis of international relations and cooperation in the field of environmental education and science of environmental protection, rational use of natural resources, conservation of the biosphere and civilization; the solution of environmental problems in general, which involves the activities of environmental NGOs, and, as a consequence, the training of higher education graduates with a high level of environmental knowledge, environmental consciousness and culture.*

**Анотація.** *У статті досліджено проблеми екологічної освіти, як невід'ємної умови досягнення збалансованого, сталого розвитку держави.*

*Розробка наукових основ неперервної екологічної освіти передбачає: поступове поетапне реформування екологічної освіти та виховання особистості на наукових і духовних принципах; формування екологічної культури новим екологічним світоглядом; аналізу міжнародних зв'язків і співробітництва у галузі екологічної освіти і науки охорони довкілля, раціонального використання природних ресурсів, збереження біосфери і цивілізації; розв'язання екологічних проблем в цілому, що передбачає діяльність громадських організацій природоохоронного спрямування, та як наслідок підготовку здобувачів вищої освіти з високим рівнем екологічних знань, екологічної свідомості і культури.*

**Keywords:** *education, ecological education, ecological competence, ecological policy, environmental impacts, environmental culture.*

*Ключові слова: освіта, екологічна освіта, екологічна компетентність, екологічна політика, вплив на навколишнє середовище, екологічна культура.*

**Statement of the problem.** One of the priorities of modern educational system is improvement of environmental education and upbringing. The formation of personality starts in childhood, when the primary role belongs to the family. However, its further establishment is given to formal and non-formal education, due to the fact that the development of personality here is implemented on an inter-subject basis.

Therefore, an effective method of forming an environmentally conscious person is to organize these activities with the involvement of students in its various forms of implementation.

**Analysis of recent research and publications.** Philosophical questions of natural science, in particular, are the object of research by modern philosophers: M.C. Monroe, J.E. Heimlich, B. Toomey, V.M. Gushkov, P.S. Dishlyavy, A.K. Kedrovsky, A.P. Markevich, I.G. Pidoplichny, K.M. Sitnik, R.V. Chagovts, etc. The problems of relations between man and nature occupy a significant place in the work of teachers O. Jacobson, M.E. Krasny, N.M. Ardoin, A.I. Vishnevsky, I.D. Zverev, V.S. Krisachenko, N.A. Pustovit, I.T. Suravegina, M.I. Samoilenko and others. The essence of the concepts of “environmental education” and “environmental studies” is defined in the works of M. Marcinkowski, D. Niemiec, L.F. Johnson, V.Yu. Berezhok, V. Verbitsky, T.V. Kucher, G.P. Pustovit, S.V. Sapozhnikov, V.V. Tankaya, and several other works.

**Purpose of the research.** Discovery of the essence of environmental education and upbringing, definition of their goals, tasks, analysis and identification of directions, forms of organization of the specified work in Germany.

**The key findings.** Environmental education is a conservation strategy that creates such synergistic spaces, facilitating opportunities for scientists, decision-makers, community members, and other stakeholders to converge. Environmental education foregrounds local knowledge, experience, values, and practices, often-in place-based settings; in this way, it encourages numerous groups, including those that may be marginalized, to interface productively with research (Toomey et al., 2017). By definition, environmental education encompasses approaches, tools, and programs that develop and support environmentally related attitudes, values, awareness, knowledge, and skills that prepare people to take informed action on behalf of the environment (Monroe and Krasny, 2016; UNESCO, 1978). It focuses on outcomes at various scales, including at the individual level (e.g., an individual’s environmental attitudes or behavior), societal level (e.g., community capacity building), and ecosystem level (e.g., number of an endangered species). Based on a growing body of research foregrounding behavioral complexity, environmental education has moved away from suggesting a linear path from environmental attitudes to knowledge to action, now emphasizing a dynamic, complex ecosystem of relationships that influence behavior rather than earlier ideas derived from an information-deficit perspective (Marcinkowski and Reid, 2019; West, 2015).

Drawing on and leveraging the field’s interdisciplinarity nature, environmental educators incorporate principles from behavioral psychology, health education,

marketing, learning sciences, and sociology, among others (Heimlich and Ardoin, 2008; Jacobson et al., 2015). This diversity of perspectives and theoretical frames guide what researchers envision as effective practices in the field. Those practices include, particularly: having direct, place-based experiences; being part of a community that develops shared prosocial and environmental norms; learning about and developing a connection to the local environment; building and honing action-related skills; and having opportunities to take action on meaningful issues (Monroe and Krasny, 2016; Niemiec et al., 2016).

Over the past several decades, policymakers, funders, nonprofit leaders, and others have consistently called for evidence of the ways in which environmental education brings about tangible improvements in environmental quality and helps achieve conservation outcomes (Johnson, 2013; Krasny, 2009). Researchers and practitioners have echoed the call to investigate links between environmental education and direct environmental outcomes, such as improved air quality, invasive species eradication, or an increase in the population of targeted threatened species. Simultaneously, stakeholders have called for more nuanced understanding of the processes and mechanisms supporting such contributions (Heimlich, 2010; Johnson et al., 2012), while acknowledging challenges inherent in measuring and describing the nature of such multifaceted, nonlinear, systems-embedded relationships (Ardoin et al., 2013; Short, 2009; Toomey et al., 2017).

Environmental education is certainly appropriate for instruction. There is much to learn. «Responsible behavior», as it is propagated by the highest education officials in Germany, is a major objective of the school system in general. Instruction, no matter how superb it may be, cannot possibly be sufficient if the school setting does not correspond — if a fitting «environmental culture» at the school doesn't exist.

There are five necessary conditions for responsible behavior with regard to the environment:

- adequate knowledge about ecology must be present;
- responsible behavior necessitates ecological values;
- relevant behaviors require opportunities within a conducive infrastructure;
- there must be incentives for environmentally relevant behavior;
- environmental behavior must have positive consequences, i.e., social recognition.

All of these conditions are directed at the broader society in general, yet school is equally capable of recognizing and fostering environmental achievement at least as much as they do others. Extrapolating, schools ought to allow students the opportunity to conduct themselves environmentally in everyday situations there.

#### *Germany: Bavaria*

Environmental education is compulsory for all pupils in primary schools within the content of existing subjects. According to the curriculum documents, environmental education should start with the everyday experience of students in their local environment (e.g. school, family home). On walking tours, teaching walks or other opportunities students can experience the environment that has emotional importance for them. A number of possible teaching locations are suggested (e.g. parks and nature reserves, eco-centres) and action-orientated learning experiences (such as the layout of the school

building, grounds and everyday school life). Specifically, within the primary school, pupils should build on knowledge gained before school, acquire basic knowledge, have positive experiences of nature and be given opportunities to develop sensitivity for environmentally friendly behavior. This should be embedded in social learning like trusting each other, being dependent on each other. Environmental education starts with local issues; gives a first impression of interconnectedness, prepares students to become active and to take responsibility.

*Germany: Thuringia*

According to the curriculum documents, the aim of environmental education is for students to gain knowledge, abilities and attitudes that are necessary for environmentally friendly, aware and responsible activities. Environmental education encompasses:

- part of an up-to-date general education;
- enlightenment of environmental problems in their ecological, historical, ethical, social, economic and political dimensions;
- value oriented education (relation between humanity and nature, sustainability of foundation of life, critical perspective on different life styles, action-oriented);
- exploration of the problems of cause and effects – activities need holistic perspective, isolated actions can do more harm than good;
- interdisciplinary learning and working;
- action-oriented education;
- school as environmentally friendly location (with issues that have been learned being reflected in daily experience);
- a European dimension (environmental problems cross borders).

Environmental education is one of six interdisciplinary topics (others are peace education, health education, media education, preparation for professional life and traffic education). In the primary school (Grundschule), pupils are seen as open to nature and natural phenomena. Pupils should learn from their local environment. A number of themes should form the focus of their experiences: people, animals, plants, water, air, earth and consumption.

The introduction of education for sustainable development in the system of formal and informal education will increase the competence of citizens and enhance their ability to lead a healthy and environment-friendly lifestyle. A term «Education for sustainable development» and its meaning is based on the materials of Resolution of Summit Rio +20 «The Future We Want».

Environmental competence can be considered as one of the most important outcomes of education for sustainable development. The current ecological competence involves the ability of the individual to solve life situations on the basis of sustainable development principles.

Scientists emphasize on the importance of environmental awareness, new system of values, ecological culture, development of environmental education to harmonize the interaction of human being and nature. Scientists offer to:

1. provide public discussion of the concept of education for sustainable development;
2. strengthen cooperation in the field of education for sustainable development between the leading environmental NGOs and youth organizations of Ukraine with

Ministry of Education and Science of Ukraine, Ministry of Youth and Sports of Ukraine and Ministry of Ecology and Natural Resources of Ukraine;

3. share experience and apply best practices in the field of environmental education and education for sustainable development;

4. strengthen cooperation between environmental NGOs and youth organizations in Ukraine with the leading international organizations in the field of education for sustainable development;

5. launch a system of state monitoring of education for sustainable development and the state database in the field of environmental education;

6. launch and ensure functioning of Partner Network for Education for Sustainable Development in Ukraine which will include government agencies, institutions of postgraduate education, universities, colleges, schools, community organizations, etc. Create a website to disseminate information on the Partner Network, disseminate educational, informational, informative materials, share best practices, expand contacts and partnerships;

7. determine creation of youth environmental centers at schools as priority to consolidate the efforts of teachers, students and the public;

8. develop strong links between the learning process and society through participation in important social and environmental actions at international, national and local levels;

9. create online portals with online books and other materials in the field of education for sustainable development;

10. apply a wide range of teaching methods, use such methods as discussion, role play, case studies, excursions and trips;

11. support initiatives of NGOs in conducting annual children's and youth environmental conferences and forums;

**Conclusion.** Identifying and specifying the ways in which environmental education leads not only to conservation actions and behaviors, but also to tangible environmental improvements, necessitates many steps. Environmental education addresses wicked problems, such as climate change and biodiversity loss, which are mixed in the complexities inherent in socioecological systems. Understanding and contextualizing the success of an environmental education program often involves measuring short- and intermediary-term outcomes, followed by tracking outcomes that require more time to develop and manifest.

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## **THE ROLE OF INTERCULTURAL COMPETENCES IN THE PROCESS OF DIGITIZATION OF UKRAINIAN LABOR MARKET**

**Abstract.** *The digitization of the labor market is one of the determining drivers of the development of the intercultural competences of its subjects. The digitized labor market ensures effective integration of workers from virtually all countries and regions without changing their physical location. The use of technology in business simplifies the job search process, giving companies access to a wide pool of highly qualified professionals.*

*This creates powerful socio-demographic effects, provides ample opportunity to realize the potential of knowledge, skills and abilities of independent potential professionals. In such circumstances,*