

## **UMWELTKOMPETENZ ALS ZIEL UND ERGEBNIS MODERNER BILDUNG**

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**Zusammenfassung:** Es ist bekannt, dass unsere Welt am Rande einer ökologischen Katastrophe steht. Die Weiterentwicklung der menschlichen Gesellschaft ist nur im optimalen Umgang mit der Natur unter Wahrung ihres Ressourcenpotenzials möglich. Dieser Artikel untersucht das Problem der Bildung von Umweltkompetenz von Universitätsstudenten unter den gegenwärtigen Bedingungen der Umweltkrise. Ansätze zur Definition des Wesens der Umweltkompetenz werden betrachtet. Außerdem werden die methodischen und didaktischen Grundlagen der Umweltbildung zusammengefasst. Vielversprechende Richtungen für die Ausbildung studentischer Umweltkompetenz werden aufgezeigt, wie forschungs- und praxisorientierte Bereiche, Kontroll- und Gutachter- sowie gestalterische und produktionsbezogene Tätigkeiten. Die Merkmale praktischer Tätigkeiten zur Umsetzung des Systems der Ausbildung von Fachkräften mit hoher Umweltkultur werden bestimmt.

**Schlüsselwörter:** Umweltkompetenz, Umweltbildung, Umweltkultur.

## **ENVIRONMENTAL COMPETENCE AS A GOAL AND RESULT OF MODERN EDUCATION**

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**Abstract:** it is known that our world is on the verge of an ecological catastrophe. Further development of human society is possible only with optimal interaction with nature, preserving its resource potential. This article examines the problem of the formation of environmental competence of university students in the current conditions of the environmental crisis. Approaches to defining the essence of environmental competence are considered. And also, the methodological and didactic foundations of environmental education are summarized. Promising directions for the formation of students' environmental competence are revealed, such as research and practice-oriented areas, control and expert and design and production activities. The characteristics of practical activities for the implementation of the system of training specialists with a high environmental culture are determined.

**Keywords:** environmental competence, environmental education, environmental culture.

In accordance with the Constitution of the Republic of Uzbekistan, land, its subsoil, water, flora and fauna and other natural resources are national wealth, are subject to rational use and are protected by the state.

Analysis of the current state of the environment, global and regional environmental problems, new environmental threats have necessitated the development of the Concept of Environmental Protection of the Republic of Uzbekistan until 2030 [1], which is an integral part of the socio-economic process of improving the quality of life of the population in the Republic of Uzbekistan.

The concept defines the priority directions of the state policy in the field of environmental protection for the specified period, the implementation of which will ensure the sustainable development of the state in the interests of future generations.

The objectives of the Concept are:

- ensuring a favorable state of the environment as a necessary condition for improving the standard of living and health of the population of the Republic of Uzbekistan;

- sustainable economic development through the introduction of innovative technologies that reduce the negative impact on the environment and public health;

- ensuring the rational use of environmental objects and the reproduction of biological resources.

The objectives of the Concept are:

- preservation and protection of environmental objects (land, water, atmospheric air, subsoil, flora and fauna);

- expansion of protected natural areas;

- ecologization of the economy, the introduction of economic mechanisms for nature management, the priority use of materials, products, production and other facilities that pose the least environmental hazard;

- improvement of state control in the field of environmental protection and rational use of natural resources, as well as the system of environmental monitoring of the environment;

- scientific support of environmental protection;

- improvement of the waste management system, taking into account environmental safety, ensuring the environmentally safe use of toxic chemical and radioactive substances;

- increasing the ecological culture of the population, the level of transparency of the activities of state bodies in the field of environmental protection and strengthening the role of civil society;

- formation of a society that ensures sustainable development with a minimum impact on the environment;

- expansion of international cooperation in the field of environmental protection.

In this regard, today the domestic pedagogical system is focused on the development of society, the formation of the values of upbringing and education, where the formation of the ecological dominant of modern public consciousness is designed to help overcome the negative phenomena of our time. Appeal to the formation of environmental competence of the individual predetermined the main trends in modern pedagogical theory and practice.

Environmental education and upbringing objectively become the core of the concept of education in the 21st century, reflecting the historical necessity of a person's transition to a new type of relationship with nature, production and society. The environmental component is increasingly entering the sphere of education, which contributes to a balanced attitude towards nature and man [2].

The issues of environmental education in the education system are considered at the international, federal and regional levels: they are included in the UNESCO program "Man and the Biosphere", the "United Nations Environment Program" (UNEP); reflected in leading international projects ("World Culture", "Environmental Education in Europe", "Environmental Culture", etc.), etc.

Scientific interest in the problem of the eco -man and energy-saving technologies has recently made environmental education and upbringing one of the most significant areas.

The formation of an environmentally friendly educational environment at the university largely coincides with the characteristics of the process of formation of key general cultural, general professional and professional competencies, as well as independent work skills, the mastery of which allows future specialists to meet the changing environmental and socio-cultural conditions of the environment.

At the same time, students are included in the following processes:

- awareness of the personal significance of the environmental problems of an educational institution and the development of a need to improve the quality of the environment [3];

- development of cognitive interest in the world around and the development of skills to recognize, examine and resolve problem situations in the field of ecology based on mental operations of a reproductive, productive and heuristic type;

- expansion of the technological field and ecologization of the context of professional training of a specialist;

- study of the legal framework of environmental activities and adherence to moral norms and rules for maintaining relations with the outside world and oneself;

- the formation of critical thinking in connection with the acquisition of skills to analyze the role of natural objects in human life, the ability to predict the results of human impact on nature;

- mastery of systematized environmental knowledge, awareness of the social and personal significance of research activities in the field of ecology, the desire and ability to resolve problem situations;

- the formation of an emotional and value attitude to any environmental situation, the development of emotional and sensory perception of the world;

- development of communication skills to engage in dialogic communication in the process of joint problem solving.

The most promising areas for the formation of environmental competence of students include [4]:

- a research direction, which is implemented by involving students in the activities of a scientific society and environmental public associations. Research activities are organized in the form of a sequence resolution of interrelated problem

situations of ecological content. At the same time, a single problem situation included the stages of recognition, examination and resolution, and acted as a module of a holistic pedagogical process.

– design and production activities: conducting comprehensive research in the field of nature management, developing recommendations for their resolution; ensuring the resource -producing function of the natural environment; environmental impact assessment; development and implementation of monitoring in the field of nature management; analysis of particular and general problems of the use of natural conditions and resources;

– control and expert activities: development of practical recommendations for the use of the natural resource potential of the territories; development of systems of rational nature management; conducting an environmental assessment of economic projects;

– practice-oriented direction: consolidating and deepening the theoretical knowledge gained by students in the process of studying at a university, based on a deep study of research, design , production, control and expert types of professional environmental activities; mastering the basics of management in the field of nature management and nature protection; systematization and analysis of the collected empirical materials in order to write a term paper or a thesis; education of performing discipline and the ability to independently solve emerging environmental problems; obtaining knowledge for the subsequent choice of professions; formation of sustainable interest, sense of responsibility and respect for the chosen profession; development of skills for independent analysis of the results of work; performance of a specific study in accordance with the individual task of the head of practice; acquisition of professional qualities of a future specialist in environmental issues .

The concept of environmental competence takes on a universal, interdisciplinary, integral and sociocultural character. The construct of environmental competence is an integrative combination of abilities, attitudes and experience of creative activity. Their component relationship allows you to establish ecological relations in the system society- nature-man. A specific combination of various abilities of the subject of activity forms the basis of professional behavior aimed at solving environmental problems. Thus, environmental competence is a fundamental element in the success of environmental activities.

Environmental competence is associated with the self-organization of active, creative subjects capable of unexpected solutions in a difficult environmental situation.

The basis for designing a system for the formation of environmental competence among students can be based on general system principles:

1. The principle of integrity implies the dependence of each element, property and relationship of the system on its place and function within the whole.

2. The principle of hierarchy means that the system under study or its element is one of the elements of a wider system.

3. The principle of structurality indicates that the connections and relations of the system are organized in a certain structure. The behavior of a system is determined by the behavior of its elements and the properties of its structure.

4. The principle of interconnection and interdependence of the system and the environment is expressed in the fact that the elements of the ecological system are in complex relationships of interaction.

5. The principle of plurality means the construction of many models, each of which reflects certain properties.

6. The principle of historicism takes into account past experience.

7. The principle of dynamism - the system requires study in constant development. The problems of the formation of environmental competence, its typology, the features of interaction with other environmental constructs have not been fully developed.

The prerequisites for the phenomenon of environmental competence were formulated in ancient philosophy. Plato, Aristotle, Zeno from Kition, Lucretius, Marcus Aurelius, in accordance with the theory of geographical determinism, believed that a person should live in accordance with the laws of nature, strive to merge or harmonize with it. The prototype of environmental competence is nature-inspired knowledge.

In modern times, according to R. Descartes, people must "become the masters and masters of nature." Consequently, environmental competence was understood as a utilitarian-consumer problem.

Supporters of environmentalism (J. Pinchot, O. Leopold, R. Emerson) called for the creation of a new ethic, corresponding to both human nature and the laws of the environment. Of particular importance is the ethics of reverence for the life of A. Schweitzer.

V.S. Barulin, P.S. Gurevich, A.G. Sabirov emphasize the importance of ecological consciousness as a factor in harmonizing the relationship between man and nature as an important component of human spirituality. At present, the issues of environmentally safe development of civilization are of particular relevance. The situation of the ecological crisis requires the comprehension of new approaches to the analysis of the interaction between nature and society, taking into account the formation of a certain environmental competence, the establishment of new spiritual and moral ideals.

Thus, environmental education at the level of higher education should be aimed at preparing future specialists for the practical solution of the problems of the surrounding socio-natural environment and be determined by specific practical tasks facing society in connection with the transition to sustainable development. Each of the milestone goals of environmental development within the framework of the concept of sustainable development poses a number of urgent tasks for specialists:

- development of a criterion for the optimal state of the environment and society;
- obtaining a formalized description of their dynamics;



- development of procedures for optimizing the system "man - society - environment";
- obtaining a formalized description of the dynamics of its state;
- development of criteria for assessing the state of the system and development of an assessment procedure;
- development of a control algorithm based on the selected criteria.

An analysis of the characteristics of environmental activity showed that it is considered not only as a part of socio-economic practice, but also as an incentive and direction for overcoming the environmental crisis, that environmental competence, like other types of professional competencies, is divided into key, basic and special, that readiness to environmental activity is an integral component of environmental competence and represents the orientation of the individual to achieve harmonious interaction with the environment at the level of the individual and society.

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