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IMPROVEMENT OF THE METHOD OF FORMATION OF ENVIRONMENTAL COMPETENCE IN STUDENTS BASED ON NATIONAL AND SPIRITUAL VALUES
(In the Example of Teaching Biological Sciences)

Turakulova Visola Xudaykulovna
Teacher of the Department of "Distance Education in Natural and Exact Sciences" of the External Department of Jizzakh State Pedagogical University

Abstract
The importance of preserving natural ecosystems in the conditions of modern ecological crisis. The analysis of the problem of development of the concepts of "environmental competence" and "environmental competence" is given. The structural components of environmental competence, the conditions for its formation on the basis of the activity approach are considered. The dominance of the subjective attitude to nature among university students has been practically studied.

Keywords: biodiversity, ecological competence, ecological competence.

The relevance of changing the relationship between man and nature is clearly seen in the report of the international program
Millennium Ecosystem Assessment (MA): “Over the past 50 years, humans have changed ecosystems faster and more than at any other time in the history of civilization. At the same time, the driving factors that lead to the loss of biodiversity and changes in ecosystem services are either constant, or do not lose their strength over time, or even increase [4; 8].

- During the last century, the well-being of many people has improved due to the transformation of natural ecosystems into fully human-transformed ones and the exploitation of biodiversity. However, this increase has come at a high cost, with significant loss of biodiversity, degradation of many ecosystem services, and increased poverty among other groups of people.
- The most important direct drivers of biodiversity loss and changes in ecosystem services are habitat change (including land-use change, physical diversion and withdrawal of water from rivers, degradation of coral reefs and damage to seabed by trawlers), climate change, invasive species introductions, overexploitation and pollution”.

The 57th session of the UN General Assembly declared the decade 2005–2014 Decade of Education for Sustainable Development. The decision “On the participation of

Uzbekistan in the implementation of the Strategy for Education for Sustainable Development of the United Nations Economic Commission for Europe" notes that favorable conditions have developed in Uzbekistan for the development of this new direction of education, which are based on existing scientific schools in the field of environmental education [9].

At the same time, a number of problems of environmental education currently continue to be relevant. One of them is the formation of skills, attitudes, values, motivation for personal participation in solving environmental problems in order to improve the quality of the environment. The main documents defining the modernization of general secondary education set a task that should be formulated and solved within the framework of a competency-based approach, which implies the orientation of education not only on the assimilation of a certain amount of knowledge by students, but also on the development of personality, cognitive and creative abilities.

D.S. Ermakov defines environmental competence as a meaningful ability, potential and experience of a person in the implementation of complex environmentally friendly types of actions, and environmental competence as a corresponding regulatory requirement for the content of this ability, potential, experience [6].

According to A. N. Zakhlebny, environmental competence provides for the ability to design and organize one's educational activities, taking into account the following factors: spatial, subject and temporal conditions; relations between objects of education; requirements of the State Standard and educational paradigm; individual resources of the student; training loads and their impact on health and environmental safety. Environmental competence is the result of environmental education [7].

V. A. Alekseev [1] believes that environmental competence is an integrative quality of a person, which determines his ability to act in the system "man - society - nature" in accordance with the acquired environmental knowledge, skills, beliefs, motives, value ideas, environmentally significant qualities and practical experience in environmental activities. Competence is characterized by the ability to solve problems and tasks of different levels that arise in life situations, based on the formed values and motives, knowledge, educational and life experience, individual characteristics, inclinations, needs.

D. S. Ermakov identifies the structural components of environmental competence: cognitive, motivational-value, activity-practical.

To determine the place of environmental competence in the system of educational competences, it is possible to determine the presence of different approaches to classification. D. Raven believes that there is no environmental competence in the list

of competencies, the closest in content are the tendency to think about the future; study of the environment to identify its capabilities and resources (both material and human) ability to make decisions; personal responsibility [10]. At the symposium "Key competencies for Europe" the following list of key competencies [2].

1. Study - be able to extract benefit from experience; organize the relationship their knowledge and organize it.
2. Search - query various databases; interrogate the environment; consult an expert.
3. Think - organize the relationship of past and present events; be critical of one or another aspect of the development of our societies; be able to deal with insecurity and complexity; take a stand in discussions and forge your own opinion.
4. Collaborate - be able to cooperate and work in Group; make decisions – decide disagreements and conflicts; be able to negotiate; be able to develop and execute projects.
5. Get down to business - get involved in the project; be responsible; join a group or collective and contribute; show solidarity; be able to organize your work.
6. Adapt - be able to use new information and communication technologies; prove flexibility in the face of rapid change.

As the second aspect of the application of the competence-based approach, it should be noted the personal-activity aspect, when the set of competencies is based not only on structured social experience and the experience of the individual, but also on the main activities of students, allowing them to master social experience, gain life skills and practical activities in modern society. [3].

Five main components can be distinguished in the technology of environmental competence formation: target, content, procedural, organizational, diagnostic.

The overall goal of the formation of environmental competence should be defined as the creation of pedagogical conditions for the formation of an environmentally friendly personality - the bearer of ecological consciousness of an ecocentric type, environmental values and the meanings of an ecological activities, ecological thinking, ecological culture, otherwise - for the formation a person who is able and ready to act as an integral, joint subject of self-development of the “man-nature” system, realizing in its formation both the general natural principles of development and the nature of human being [5].

In a personality-oriented subject-subject pedagogical paradigm, this general goal is specified in the interrelated, agreed goals of the subjects of the educational process, which can be defined as follows:

- for the local community and society as a whole - improving the quality of life, improving the state of the environment; preparation of environmentally literate, educated and competent citizens;
- for the teacher - the creation of conditions for the acquisition of knowledge, skills, development of abilities, motivation, relationships, experience in environmental activities necessary to promote the practical solution of environmental problems and improve the state of the environment;
- for the student - the development of abilities, readiness and experience in environmental activities, increasing their own competence in identifying and solving environmental problems from the level of unconscious incompetence to the level of conscious competence [6].

In the content component of the formation of environmental competence of students in the process of learning to solve environmental problems, two main lines can be distinguished.

The first content line reveals the essence of environmental contradictions, socio-ecological and economic problems and the concept of sustainable development as a management strategy aimed at improving the quality of life of current and future generations.

The second content line includes theoretical and practical methods for identifying, solving and preventing environmental problems, experience in practical environmental activities to improve the quality of life, improve the state of the environment.

The study of the dominance of the subjective attitude to nature among students showed that out of nine components, fourth-year students, future teachers of the basics of life safety, first of all, chose "labor" and "surrounding people"; future primary school teachers - "I am myself" and "the people around me." "Nature and animals" students put on the 6th and 7th place, preferring them to "material values" and "the state". Consequently, the social sphere in the life of students dominates over nature, however, socially significant interests and motives within the state are not taken into account by them. A study using the “ESOP” method [5] revealed that among 2nd year students of future teachers, the “aesthetic attitude” dominates in relation to nature (the average number elections 4.5), followed by “cognitive attitude” (3.5), “ethical” - 2.2, and the last place is occupied by “pragmatic” - 1.8. By the fourth year, the main parameters are preserved with the exception of the "pragmatic attitude" and "ethical", which change the rank to 3 and 4, respectively. Fourth-year students, future psychologists, also have an emotional-aesthetic perception of nature, which is explained by the close interconnection of their inner world with the state of nature,

satisfaction aesthetic needs in union with nature. This implies a low pragmatic orientation, the lack of perception of nature as an object of benefit. The second place in the ranking is occupied by the "ethical attitude", i.e. nature is perceived as an object of protection, which may be the result of environmental education, the emergence of a conviction in the need for practical activities to improve the state of nature.

In our opinion, there is a need to use the facilitation approach to learning in the process of developing environmental competence, where the teacher is not the only source of knowledge, but a guide, adviser, the case study method (English casestudy) or situational analysis (method of cases, situational method). Wider use of discussions, discussion in pairs and groups, as well as methods of stimulating creative activity (brainstorming, decision tree, morphological analysis, dialogic learning, especially in problem-search dialogue, project technology, modular). Thus, the formation of competencies, according to E. Ya. Kogan, will not be a change content, but a change in learning technologies [6].

The results obtained are not sufficient for serious conclusions about the formation of students' environmental competence, however, they can also be a guide for the teacher in terms of improving environmental education at this level of education. There is a need for a university system of work on the environmental education of future specialists, aimed at developing environmental consciousness of an ecocentric type, which in the future can contribute to solving environmental problems, preserving biodiversity on earth.

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