

THEORETICAL FOUNDATIONS FOR THE DEVELOPMENT OF PROFESSIONAL AND ENVIRONMENTAL COMPETENCE OF STUDENTS IN VOCATIONAL EDUCATION

A.E.Sharifov

2-year doctoral student of the Institute of Management of Pedagogical Innovations, Vocational Education, Retraining and Advanced Training of Pedagogical Personnel

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Abstract. *In order to analyze the concept and tasks of environmental competence in a professional educational institution, this article divides this term into two parts: "ecology" and "competence". The theoretical foundations for the development of professional environmental competence of students during the period of reforms in the system of vocational education also were discussed.*

Keywords: *vocational educational institutions, ecology, classifier, environmental competence.*

Changes in society lead to a radical change in the attitude towards people. Democratization includes seeing the high value of social life in a person, which is a condition for identifying and developing his creative potential, functioning as an individual. This, in turn, makes the problem of humanization of education, its focus on the individual more urgent. Its development is now a leading trend, one of its aspects is environmental education.

Man, thanks to the intelligence given by nature, strives to provide himself with "favorable" environmental conditions, for example, to be independent from climate, lack of food, etc. Consequently, man differs from other species in that he interacts with nature through the culture he creates. That is, the entire humanity develops, transfers its labor and spiritual experience from generation to generation, and creates a cultural environment on Earth.

For a long time in the field of biology, K. Linnaeus, Malthus, J.B. Lamarck, Ch. Darwin, N.I. Vavilov, V.I. Vernadsky and others dealt with environmental problems. Today, as a result of the development of scientific and technical progress, there is a need to introduce and explain the term "ecological competence". According to the logic of the research, we consider the following necessary:

- analysis of concepts and tasks of environmental competence;
- consideration of environmental competence together with personal characteristics as a quality criterion of professional training;
- to provide a theoretical basis for the formation of environmental competence based on professional and personal competences.

To analyze the concept and tasks of ecological competence, we divide this term into two: "ecology" and "competence". In this case, it will be necessary to analyze each of them separately.

Starting with ecology, the Greek term "ecology" ("oikos" - home, dwelling and "logos" - science, education), first used by Ernst Haeckel in 1866, has many definitions of the concept in literature.

V.I. Korobkin and A.V. Peredelsky consider ecology to be a science that studies living conditions of living organisms and the relationship between organisms and the environment in which they live.

M.F. Reimers defines ecology as a scientific direction that considers a certain set of natural and partly social (for humans) phenomena and objects, which are important from the point of view of interest for the central member of the analysis (subject, living person). M. F. Reimer focuses on the social aspect of the ecological concept: from the direct connection of "man - nature" to "man - society - nature".

The following definitions can be read in several sources at the same time:

- Ecology is one of the biological sciences that studies the interaction of living systems with the environment.

- Ecology - a special scientific approach to the study of problems of interaction between organisms, biosystems and the environment (ecological approach).

- Ecology is the science of interaction of three systems: nature, human society, global ecology.

Until now, these definitions cannot fully reveal the essence of the concept of "ecology". If we return to the literal translation of this term - the doctrine of home, it becomes clear that it is not enough to identify changes in certain systems (natural, anthropogenic, socio-natural). We conclude from this that ecology and even more ecological competence is a pedagogical problem.

Initially, ecology developed as a component of biological science in close connection with other natural sciences - chemistry, physics, geography, geology, soil science, etc. Currently, ecology has interdisciplinary, universal scientific importance and has become general ecology.

T.A. Khvan, general ecology is a methodological science that creates general scientific methods of knowing reality, and its conclusions are used in various fields of practical activity.

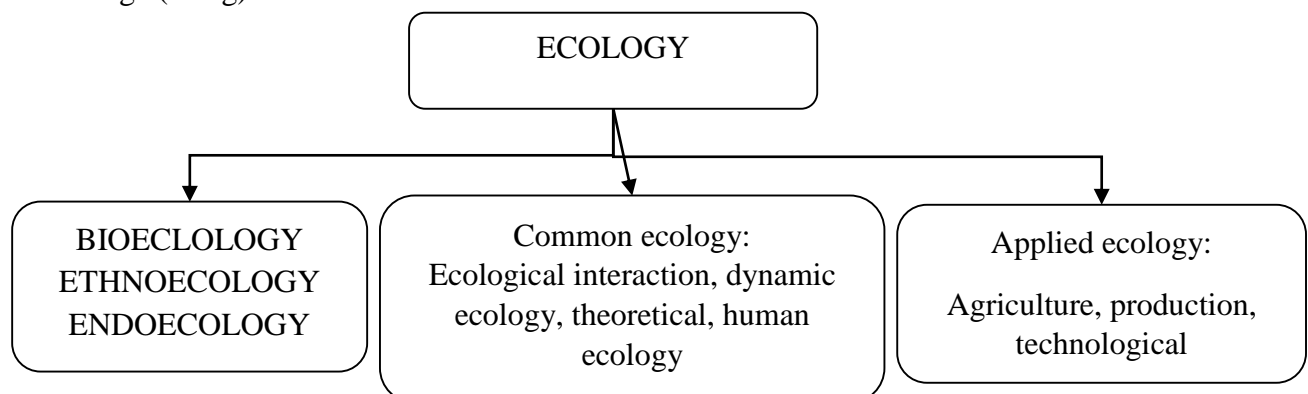
Accordingly, the main tasks of ecology are as follows:

- understanding the laws of functioning and development of the biosphere as a whole system;

- to determine the permissible limits of the impact of human civilization on the environment;

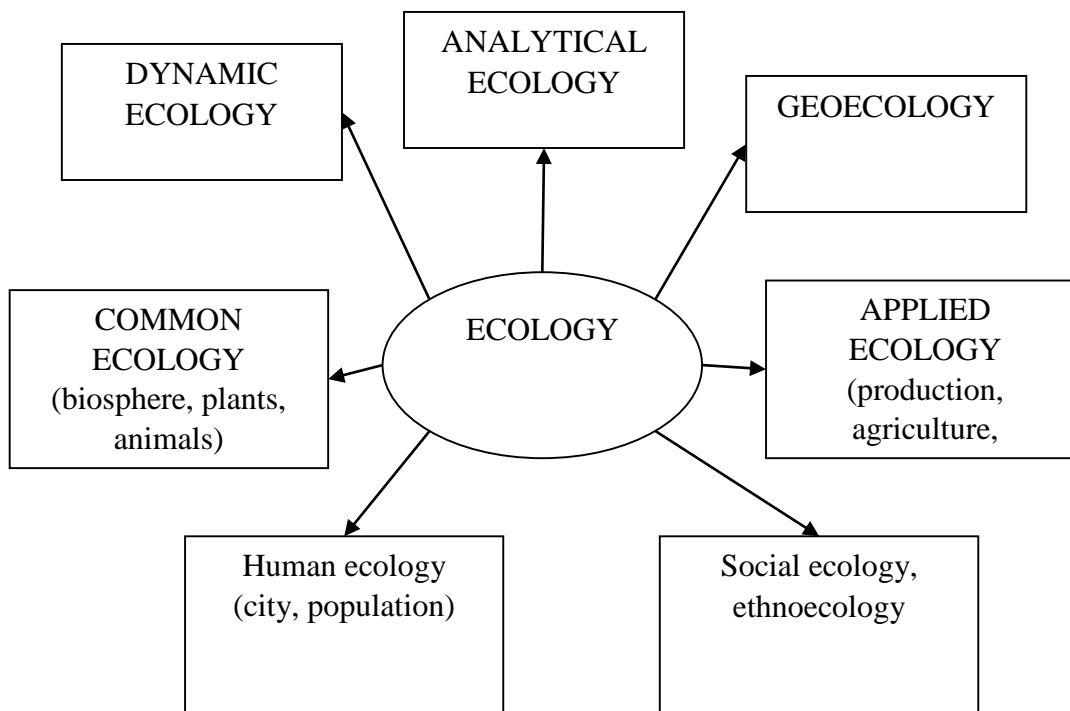
- development of conceptual ideas and recommendations on ways of development of society, which guarantees compliance with environmental impact limits, their existence and development.

Thus, according to A.A. Chelnokov, modern ecology is a problematic system of scientific knowledge (1-Fig):



1-fig. System of scientific knowledge in the field of ecology (A.A. Chelnokov)

T.P.Trushina and V.A.Vronsky distinguish dynamic, analytical, geocology, human ecology and social ecology, combining the concepts of general and bioecology (Fig. 2):



2-fig. System of general and bioecological concepts

In the last century, the nature of sciences has changed compared to the previous period.

In the 19th century, the general background of science was formed by single-subject sciences. A scientific discipline is primarily characterized by its own subject of study. But then physical chemistry, biochemistry, biophysics, bioecology, social ecology, human ecology, industry, medicine, geocology, etc. appeared and developed widely.

On the one hand, we can say that today the era of "narrow" specialists has become a thing of the past. Professional education is the main elements of the system of objective-personal factors that not only affect labor activity, but also determine it.

On the other hand, the nature and content of labor activity is changing against the background of the formation of new production relations and forms of ownership. Competition in the labor market is increasing, so the requirements for a specialist are changing. All this increases the requirements for the professional skills of specialists, including specialists in the field of ecological sciences.

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