AMERICAN JOURNALS
Open Access, Peer Reviewed Journals

American Journal of Technology and Applied Sciences
ISSN (E): 2832-1766| Volume 19, December, 2023

A MODEL OF ECOLOGICAL EDUCATION IN A HIGHER EDUCATION INSTITUTION

Savriyeva Iqbol Bahodirovna,
Scientific Researcher
Bukhara Engineering Technological Institute

A B S T R A C T

In this article, a model of providing professional-personal environmental education to students in a higher education institution has been developed. Also, in the process of acquiring theoretical and practical knowledge, concepts such as a holistic attitude towards nature, a responsible attitude towards one's professional activities, and the feeling of being a part of nature are illuminated. In particular, the continuous professional-personal education model was used in practice.

K E Y W O R D S

Ecological education, ecological competence, ecological knowledge, ecological culture, traditional pedagogical model.

Introduction

Бугун кунда бутун дунё миқёсида техника,технология ва саноат юқори даражада ривожланган бир пайтда экология билан боғлиқ глобал муаммолар биринчи даражали муаммо сифатида куннинг асосий масаласига айлангани хаммамизга маълум.

Measures to effectively organize a continuous environmental education system in the decision of the Cabinet of Ministers of the Republic of Uzbekistan dated May 27, 2019 "On approval of the concept of development of ecological education in the Republic of Uzbekistan", the President of the Republic of Uzbekistan dated October 30, 2019 "Environmental protection of the Republic of Uzbekistan until 2030" In the Decree on approval of the concept of "Educational programs at all levels, the introduction of issues such as improving the continuous environmental education system by introducing issues of ecology, environmental protection and sustainable development into educational programs at all levels of education, a new special program on ecology that teaches environmental problems and the proper use of nature specific tasks were defined in the implementation of educational plans and programs and measures to improve the existing ones.

A comprehensive study of the problem of improving the traditional system of environmental education at technical higher education institutions revealed the need for further development of the educational environment on a new technological basis using innovative technologies in the educational process [1].

Technological innovations led to a significant expansion of pedagogical methods and methods, influenced the nature of pedagogical activity. The function of the teacher has also changed, and his task has become to support the student, to help him assimilate large and diverse information [4].

In order to further develop the educational environment of professional-personal ecological education, it will be necessary to develop teaching on a new technological basis, to organize a flexible educational process oriented to the future specialty [2].

Sodelization is one of the methods of scientific research.

A model is an artificially created object in the form of schemes, physical constructions, symbolic forms or formulas, which is similar to the studied object (or event) and reflects the structure, properties, connections and relationships between the elements of this object in a simpler and rougher form [3].

Models are usually conventionally divided into three types: physical (having a nature similar to the original); material-mathematical (their physical nature differs from the prototype, but the character of the original can be described mathematically); logical-semiotic (made up of special signs and structural schemes). There are no strict boundaries between the specified types of models. Pedagogical models mainly belong to the second and third groups of the listed types [5].

A traditional pedagogical model refers to a model that summarizes knowledge that reflects abilities that turn into skills. The final product of the pedagogical model is a skill.

Modeling combines empirical and theoretical developments in pedagogical research, that is, in the process of studying a pedagogical object, it combines experience with the creation of logical constructions and scientific abstractions. In the scientific works of G.V. Sukhodolsky, modeling is described as "the process of creating a hierarchy of models, in which a certain real system is modeled in different aspects and using different tools" [6].

The aggravation of the environmental situation determined the social order for environmentally competent engineers. The construction of the level hierarchy of the educational process and the formation of ecological culture should begin with the analysis of the existing requirements set by the State educational standards for the graduate of the educational institution. The state educational standard for each specialty includes requirements for specialists who have graduated from technical higher education institutions. Requirements also include environmental criteria. The study showed that preparation requires certain conditions of the educational process and its organization [7].

E.E. Smirnova in the work "Ways of forming a model of a highly educated specialist" includes the following in the model:

- tasks to be solved by the specialist in his professional activity;
- methods and methods used to solve problems;
- basic obligations according to professional requirements;
- theoretical and practical knowledge that the specialist uses in his work;
- abilities and skills that help to achieve the desired results;
- personal characteristics that ensure success in the chosen field;
- value orientations and guidelines.

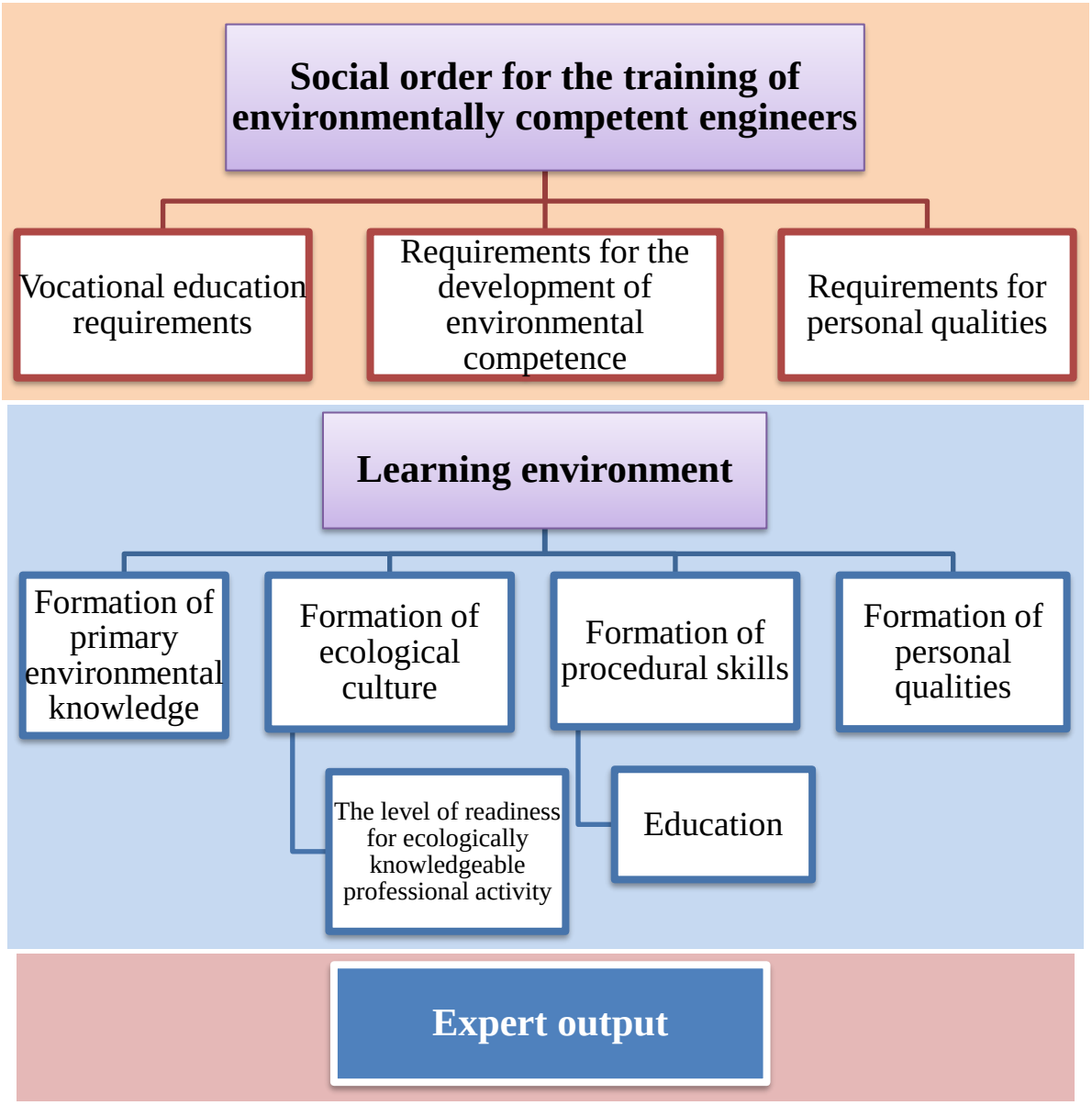

Figure 1. A model of environmental education in a higher education institution

Acquiring environmental knowledge in higher educational institutions has an integral and differential character and occurs at every stage of education. Any course study should be considered from an ecological perspective. Monitoring and evaluation of the effectiveness of environmental education can be done using the modeling method.

Adhering to the general theory of systems, we build a model of vocationally oriented education in technical HEIs. The purpose of creating such a model is to form the ecological competence of the future engineer [8].

Environmental education in technical higher education institutions can be carried out only in the system, only in this case pedagogical actions will be effective. As a set of elements, any system can be divided into parts. It is more convenient to review and study the structure and properties of the system according to its model [9].

The model of the continuous professional-personal environmental education system is given in the form of an integrated unit of the system of educational goals and all the factors of the pedagogical process that help to achieve these goals. The structure, content and functions of this system have a multilevel character. Each joint works for a common goal.

Professional-personal pedagogical technologies are of great importance in the formation of environmental skills and abilities of future professionals.

The uniqueness of this model is the introduction of a controlling moment at each stage, the theoretical presentation of the material and the integration of practice.

Improving the educational process can be achieved not only by using innovative teaching technologies, but also by improving the process of managing the educational environment [10].

Formation of ecological culture as a special form of activity organization on the basis of knowledge, abilities, skills, and values determines the need for ecological education. Traditional educational activities, practical activities and discussions on the topic also serve as a form of education of ecological culture.

In the process of acquiring theoretical and practical knowledge, students develop a holistic attitude to nature, a responsible attitude to their professional activities, and a sense of themselves as a part of nature. The level of ecological culture is a reflection of the result of education. The future engineer should not only be ecologically knowledgeable, but also a carrier of ecological culture, ecologically competent [11].

It is necessary to divide the whole process of training an ecologically knowledgeable specialist into stages, the formation of abilities and skills goes along with the qualitative change of the knowledge system and helps to form an ecological worldview, and the achievement of the required level of knowledge requires their application in professional activities [12].

The model of continuous professional-personal education was used in practice. 12 groups of students participated in the experiment. During the entire period of study, students have acquired vocationally oriented environmental knowledge along with basic education. Lectures were combined with laboratory exercises. Constant control over the level and quality of knowledge acquisition was carried out. The developed evaluation criteria helped to assess the environmental competence of the graduate specialist.

In short, the practical application of the model developed by us will serve to increase the environmental competence of future specialists. Students' final tests and surveys showed increased environmental competence and satisfaction with learning outcomes.

References

1. Олимов, К. Т., Назимова, Ф. Р., & Алимов, А. А. (2012). Личностно-деятельностно-ориентированные технологии в непрерывном профессиональном образовании. Образование через всю жизнь: непрерывное образование в интересах устойчивого развития, 10(2), 219-221.
2. Olimov, K. T., Khimmataliev, D. O., Ashurova, S. Y., Gaffarov, F. H., & Karimova, N. N. (2020). Competent training of future specialists on the basis of acmelogical approach. Journal of Critical Reviews, 7(15), 2476-2483.

3. Abdurasulovich, K. J., Abdurasulovich, K. O., Yangiboevich, K. M., Anvarovich, A. A., & Xolmurodovich, G. A. (2020). Opportunities and results to increase the effectiveness of multimedia teaching in higher education. Journal of Critical Reviews, 7(14), 89-93.
4. Олимов, К. Т., Гаффаров, Ф. Х., & Расулов, А. А. (2015). Регистрация качества эффективности учебников по специальным дисциплинам профессионального образования. Молодой ученый, (10), 1244-1246.
5. Anvarovich, A. A., & Faxritdinova, T. S. (2021, October). FOREIGN EXPERIENCES IN MODERN TEACHING OF SPECIALTIES IN ENGINEERING. In Archive of Conferences (pp. 192-198).
6. Maxmudovich, X. M., Kuchkorovich, J. A., & Xo'Jjiyev, M. (2021). Technology of using E-learning modeling programs in teaching special subjects in professional education. Psychology and Education Journal, 58(1), 5403-5411.
7. Alimov, A. A., Olimov, K. T., & Gaffarov, A. K. (2018). Preparing Future Teachers of Vocational Education for Innovative Activity in Uzbekistan. Eastern European Scientific Journal, (2).
8. Abdurasulovich, K. J., Anvarovich, A. A., Mamatkulovich, Y. U., Yangiboevich, K., & Sobirovna, M. M. (2020). The advantages of the methodology of preparing students for innovative activity on the basis of visual teaching of special disciplines. Journal of Critical Reviews, 7(14), 1244-1251.
9. TAMOYILLARI, B. A. O. D. MASOFAVIY TA'LIM ORQALI UMUMKASBIY VA IXTISOSLIK FANLARINI KOGNITIV–VIZUAL YONDASHISH ORQALI, TALABALAR.
10. Алимов, А. А., Тоиров, Б. Б., & Савриева, И. Б. (2020). УМУМКАСБИЙ ФАНЛАРНИ ЎҚИТИШ ЖАРАЁНИНИ ТАШКИЛ ЭТИШ ВА БАҲОЛАШ. Science and Education, 1(8), 199-206.
11. Alimov, A. A., Savrieva, I. B., & Amonov, E. И. (2019). METHODS OF IMPROVING THE QUALITY OF TRAINING OF QUALIFIED ENGINEERING STAFF ON THE BASIS OF PERSONALITY-ORIENTED INNOVATIVE TECHNOLOGIES. Информация и образование: границы коммуникаций, (11), 76-78.
12. Алимов, А. А. (2018). Бўлажак касб таълими ўқитувчиларини шахсга йўналтирилган технологиялар асосида инновацион фаолиятга тайёрлаш: Педагогика фанлари бўйича фалсафа доктори (PhD) монографияси автореферати.