

FORMATION OF ECOLOGICAL COMPETENCES IN THE PROCESS OF TEACHING CHEMISTRY IN ACADEMIC LYCEUM STUDENTS

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Abstract. *In this article, the issues of improving the content of education based on the content, components and new approaches of formation of environmental competence among students of natural sciences (chemistry) of academic lyceums are highlighted.*

Keywords: *chemistry, teaching chemistry, environmental competence, content, new approach, educational content.*

At present, it is important to form a sense of environmental responsibility in young people based on a reasonable attitude to the environment, to direct education to the system of preserving natural resources for future generations, and to prevent human impacts. This means that, with the help of environmental education, they can adequately assess the situations occurring in nature, make the right decisions based on global and regional environmental problems are ready to find solutions to environmental problems, and use their environmental knowledge in a purposeful and self-conscious way shows that special attention is being paid to the training of citizens who will use it.

In the process of studying and analyzing the experience of educational institutions of developed foreign countries, the introduction of special courses on ecology and environmental protection into the curricula of all subjects taught to develop environmental education in secondary and special and higher education, o It was found that it is carried out by inculcating environmental knowledge into the system of educational sciences, increasing the importance of scientific research on ecology and environmental protection, and active participation in environmental activities outside the classroom and the auditorium.[1-10]

In the Republic of Uzbekistan, improving the quality of life of the population is considered an integral part of the socio-economic process, and special attention is paid to maintaining the cleanliness of the environment, preventing water shortages, protecting the population's health and gene pool, global and regional environmental problems, and preventing new environmental threats. 'Attention is being paid.

Therefore, in the process of environmental education and training, it is necessary to develop the ecological thinking of learners, improve ecological culture, optimize the content of the pedagogical process aimed at developing ecological competence, and improve didactic support. The analysis of the environment, global and regional environmental problems, prevention of new environmental hazards is considered an important source of socio-economic development in the Republic of Uzbekistan to improve the quality of life of the population "Environment of the Republic of Uzbekistan until 2030" - the concept of environmental protection", expressed in the "Concept of development of ecological education".

The purpose of this study is to develop the scientific-methodical basis for the implementation of environmental education in the process of teaching chemistry in academic lyceums and to develop scientific-methodical recommendations aimed at the formation and development of environmental thinking of learners, environmental competences, through the teaching of chemistry in academic lyceums. is to create didactic support for teaching environmental knowledge.

In recent times, special importance is attached to the competence approach in the implementation of quality education.

In the system of special and general secondary education, students are expected to develop general competencies and basic competencies related to science. The point is that such a classification is conditional and cannot set a sharp boundary between them (M. Nishonov [7]). The reason for this is that the basic competences formed in the students in the process of teaching chemistry lead to the formation of competences related to science, and the competences related to science, in turn, lead to the formation of basic competences and complement each other.

The analysis shows that there is no particular emphasis on environmental competences in any program and the content of environmental education and training has not been developed. They are as follows.

In the competence of working with information:

- to know how to search for and sort the necessary information about ecology from media sources;

- to be able to sort out ecological information from media sources and use them effectively.

In the competence of self-development:

- to improve knowledge of chemistry independently;
- to be able to correctly apply the knowledge of chemical phenomena and processes in daily activities in environmental protection;

- on the basis of what they have studied, to improve their environmental knowledge independently with the help of daily observations;

- on the basis of knowledge and experience, he can understand and solve environmental problems encountered in everyday life, using knowledge and experience throughout his life.

In the competence of socially active citizenship:

- knowledge of environmental protection;
- ability to use natural resources wisely;
- to have information about newly produced daily life products based on chemical processes;

- to know the civic duty to protect the environment in the use of daily life products.

National and universal competences:

- to be aware of the history of the development of chemistry, the development of the chemical industry of our country, the work of Uzbek chemists;

- to learn to be loyal to the country, to have a culture of dressing;

- to have an understanding of the positive and negative effects of chemical products when following a healthy lifestyle;

- to know the importance of the correct use of chemical compounds in the restoration and protection of architectural monuments considered works of art.

Competencies of mathematical literacy, awareness and use of science and technology innovations:

- to know calculations based on learned knowledge and to be aware of scientific and technical news;
- to know the importance of chemistry in environmental protection in the development of techniques and technology;
- to be aware of the scientific and technical innovations and their positive and negative aspects in the field of chemistry, which ease the work of a person in his life;
- to be aware of the positive and negative aspects of science and technology innovations that increase labor productivity and lead to favorable conditions;
- in the teaching of chemistry, it is necessary to inculcate the basics of life safety, concepts related to savings lessons, and topics.

Science-related (SR) competencies are conditionally divided into three:

1. Competence to observe, understand and explain matter, chemical process, events;
2. Competence to express elements and compounds in chemical language;
3. Ability to work with chemical equipment, conduct experiments and use it in practice;

These components are also closely related to each other, and from the outside, it seems that they are not related to environmental problems. Therefore, it is necessary to achieve the formation of scientific competences with ecological knowledge embedded in their content. But this task requires chemistry teachers to work on themselves and continuously improve their scientific-methodical level. The development of methodological recommendations in this field is the demand of the times. It is a special problem to inculcate ecological content in scientific competences.

Thus, in the process of teaching the chemistry course in academic lyceums, creating the scientific and methodical basis for the formation of environmental competences in students is an urgent pedagogical problem of today, and its positive solution is of great importance in preparing young people, who are the heirs of our future, for the future life.

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