

Ecological problems and the role of ecological culture in their solution

Lazizbek Azamatovich Xaitov^{1,1}, Nodir Abdusalimovich Kuziyev¹, Rohila Zakirovna Rajabova¹

¹Bukhara State University, 200100, st. Muhammad Iqbol 11, Bukhara, Uzbekistan

Abstract. In the following article the recommendations on the current global environmental problems and the large-scale reforms being implemented to eliminate them, work related to ensuring environmental stability in our region, ensuring the implementation of priority tasks defined in laws and decrees at the level of state policy, requirements for the ecological culture and education of young people, measures to preserve the ecological environment, as well as specific tasks in providing ecological education to the young generation, the laws of development of society and nature, in-depth teaching of the relationship between them and preparation of a highly enlightened person who can think modernly, the provision by the constitution the information about the environmental duties and responsibilities of citizens determined by law, and the authors discuss environmental problems and the role and development of ecological culture in solving them are presented.

Keywords: ecology, ecological problem, ecological sustainability, ecological knowledge, ecological literacy, ecological culture, ecological education, ecological environment.

1. Introduction

The 21st century has also brought great responsibility to mature scientists, young people, students around the world. Science, life and era develop in harmony. Any progress relies on science and draws strength from it. When Confucius wrote “If you want to feed the people for a year – plant wheat, if you want to feed for ten years – plant a tree, if you want to feed for life – do science”, that making the world lively meant inheriting the existence of a healthy nature for generations[1-6]. It is known that environmental problems are increasing on a global scale, causing great harm to human life and health. Regulation of the impact on the biosphere by man in the current “conditions, when the development of science and technologies is developing rapidly and the geographical and political structure of the world is changing, the problems of harmonizing the interaction of maintaining a favorable natural environment with social progress, achieving balance in the interaction of Man and nature remain more and more relevant”.

2. Materials and Methods

Scientific research carried out in the science of world shows that the main solutions to mitigate the consequences of the global environmental crisis are related to environmental problems and issues of ecological culture, the formation of an aesthetic attitude towards nature in the minds of

¹ Corresponding author: falsafa.phd.1991@mail.ru

young people. In particular, the prevention of a global environmental threat, the elimination of its consequences as an objective necessity, requires a philosophical analysis in a modern style of the possibility of integrating ecological consciousness and culture, in particular eco-aesthetics, with other forms of social consciousness, in the creation of its solid scientific-theoretical, methodological-conceptual foundations. Especially today, humanity puts on the agenda the need for an ecological attitude to nature and a scientific study of the deterministic, synergistic, systematic mechanisms of aesthetic culture of society in a system of criteria that determine the socio-economic, spiritual and cultural development and future.

In our country, at the initiative of the head of state, special attention is paid to the issues of preventing a number of problems in the field of Ecology, mitigating their negative consequences, protecting the environment, increasing the ecological culture of the population and the formation of an aesthetic attitude towards nature in them has become one of the main priorities of state policy. The state's environmental direction is to "prevent the unparalleled use of natural resources, environmental damage, and the deterioration of the environmental situation in the Republic. With the participation of other countries, the rescue of the Aral Sea Basin, the implementation of effective measures to improve the environmental conditions on the island, the elimination of catastrophic consequences in the economic and social sphere of this region" – that it promotes social and economic stability in our country which determined that regulation was an important factor.

"The most important issue is the need to seriously worry about increasing the ecological culture of the population. Of course, such problems cannot be solved only in an administrative way, this can be achieved by nurturing in the soul of the younger generation a feeling of affection for the Mother nature, a sense of belonging to her" [2-392]. From this point of view, it is becoming important in each individual to develop modern criteria related to the formation of ecological consciousness and culture, in them an aesthetic attitude towards nature, ensuring the stability of the natural environment in society as a whole.

Today in our there are new tasks in new Uzbekistan to be settled in order to achieve strong economic and spiritual progress on the basis of science, digital economy, innovative ideas and approaches, raise the position of scientists, create a new generation of modern scientific and educational literature, to educate the younger generation as an original patriot, who, in an educated, ambitious way, concerning the interests for the future of mankind and takes practical work scientifically seriously.

During the 20th century, the development of human civilization increasingly revealed the antagonistic contradiction between population growth and the satisfaction of its growing needs for material resources, on the one hand, and the capabilities of ecosystems, on the other. This contradiction, worsening, led to the rapid degradation of the human environment and the destruction of traditional socio-natural structures.

It became obvious that the trial and error method in matters of environmental management, characteristic of previous periods of the development of civilization, has completely outlived its usefulness and should be completely replaced by the scientific method, the basis of which is a scientifically based strategy for the relationship between man and the biosphere, combined with a deep preliminary analysis of the possible environmental consequences of those or other specific anthropogenic impacts on nature.

Great quality changes have occurred in Uzbekistan. Environmental issues have risen to the level of state public policy. This is followed by the hundred aims of the decree of the president of Uzbekistan PF-60 of January 28, 2022 of one hundred goals in the "Development strategy of New Uzbekistan for 2022-2026" [3].

Objective 79: to eliminate existing environmental problems that harm the health and gene pool of the population;

Objective 80: Ecology and environmental protection, improving the environmental situation in cities and districts, implementation of the nationwide project "Green space";

Objective 81: our goals, such as “expanding the area of forests”, have been one of the advanced steps, which we will never exaggerate.

Uzbekistan, looking at its economic, political and spiritual life with a special eye, realized that in order to achieve a new modern world development, strict positive changes are necessary. Updates have been reflected in all aspects of life. Today’s environmental situation dictates a radical change in the attitude of mankind to nature as well, the application of environmental knowledge, consciousness, culture and environmental thought to practice.

The following issues are planned in the implementation of the nationwide project “Green space”. According to him:

- to promote the environmental initiatives in the international arena, including the initiative for the development of the world ecology charter;

- implementation of an automatic sampling system from polluting sources of objects at high environmental risk (category I);

- improving mechanisms for assessing the level of pollution of the environment, monitoring the environment;

- to forecast its pollution levels;

- to continuous information support of state environmental control, monitoring the state of polluting sources and the impact on the environment;

- to conduct a state environmental examination on determining the compliance of economic and other types of activities carried out on the territory of the Republic with environmental requirements;

- to plant at least 200 million saplings of trees every year within the framework of the nationwide project “Yashil makon”;

- to establish an aerobiological monitoring system in 10 regions of the Republic in accordance with the initiatives of the nationwide project “Green space”;

- to bring the collection of household waste to 100%, the level of their processing from 21% to 50% by 2026;

- Completion of the work on the designation of sanitary protection zones and coastal regions of 51 surface natural water facilities (rivers, small rivers and natural lakes) under the Republic;

- To turn the city of Tashkent into an area that is accessible to the population, environmentally friendly and has every opportunity to live, to increase the level of greenery by 30%;

- To establish an additional 500 thousand hectares of green spaces on the dry bottom of the Aral Sea, bringing their total volume to 2.5 million hectares or 78% of the territory by the end of 2026;

- Implementation of projects in Aral Sea worth US \$ 300 million on the basis of international “Green Climate” and Global environmental funds programs aimed at preventing biodiversity, climate change and soil erosion;

- Organization of “public parks” for every 50 - 100 thousand inhabitants in urban and district centers;

- Further strengthening the social support of the population living in the Aral Sea region.

- Expanding the area of forests in the territories of the Republic and the effective use of the lands of the forestry;

- Development of plantations of mountain and upland areas of the forest lands;

- Increase vegetation in desert areas, establish protective young forests in areas;

- Establishment of protective zones to protect irrigated land from erosion and melioration facilities from sand migration;

- Regulation of the use of forests on the lands of the state forest fund, expansion of the forest fund;

- A number of issues awaiting their implementation, such as a radical revision of the mechanism of forest protection and conservation, have been identified.

3.Results and Discussion

We found it permissible to cite through scientific analysis that it is advisable to give special importance to the following as ensuring the implementation of priority strategic directions for ensuring environmental safety (see Figure 1).

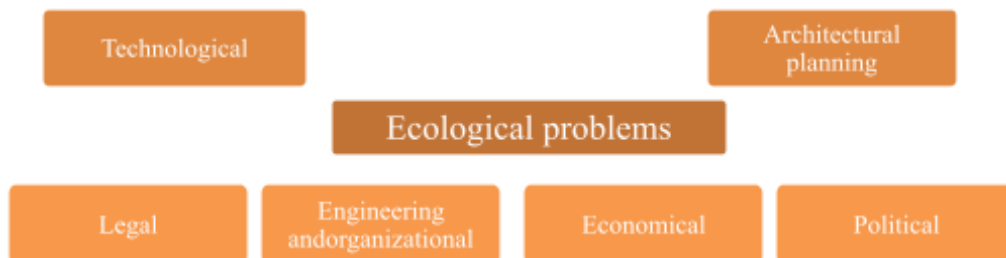


Figure 1. The main strategic directions of the settlement of the ecological problems[4.126-128].

Table 1. The main strategic directions of the settlement of the ecological problems

№	Strategic directions	The sources of the fulfillment of the strategic directions
1.	Technological	<ul style="list-style-type: none"> - introduction of resource-saving advanced innovative technologies and waste-free production, renewable energy sources, implementation of programs directed at alien species and genetics modified organisms modified in terms of, environmental concerns to limit the distribution of goods and products and implementation of large-scale aimed at attracting investments conducting research and design work; - environmental services, including ecotourism, environmental clean products, technology and equipment markets development; - development of new technologies; - construction of cleaning facilities; - changing fuel types; - production, daily life, electrification of transport.
2.	Architectural planning activities	<ul style="list-style-type: none"> - Development and implementation of measures aimed at reducing the level of environmental pollution at the level of environmental, hygienic and sanitary standards in all the municipalities of the Republic; - expansion of zoning of the territory of the settlement; - improvement of settlements; - establishment of greenery protection zones.
3.	Economic	<ul style="list-style-type: none"> - improving the economic mechanism for regulating the interaction of state bodies of different levels and users of nature and implementation, introduction of environmental requirements into the procedure for assessing the socio-economic effectiveness of management decisions; - the formation of a system of economic measures that encourage the environmentalization of production, the rational use of natural resources, the gradual transition to a “green” economy based on the comprehensive assessment of the anthropogenic impact on the state and Environmental Quality of research and design work

4.	Legal	<ul style="list-style-type: none">- to form, develop and improve the system of environmental education, culture and upbringing of the population, especially young people;- to develop new legislative documents, improvement of existing ones, and strict control of their implementation in order to preserve the quality of the environment.
5.	Engineering and organizational	<ul style="list-style-type: none">- development and implementation of a system of rational and comprehensive use of natural resources, including water, land, mineral and biological resources;- improving a unified system of environmental monitoring, forecasting and information;- in the zone of ecological disaster - the Aral Sea region, as well as in other ecologically unfavorable regions of the country, the adoption of complex measures to ensure the localization, restoration and improvement of the ecological state
6.	Political	Deepening the cooperation with the world community in solving environmental problems

At the same time, considering the globalization of environmental problems having received, the priority of the national security concept of the Republic of Uzbekistan to ensure environmental safety, which is one of the directions and an integral part we believe that it is advisable to form a complex approach system. This system prevents, eliminates environmental threats and risks in Uzbekistan allows the comprehensive application of coordinated and effective (including prophylaxis) measures to achieve and eliminate them and improve the environmental situation.

For this, it is necessary to consider the vital interests of the individual, society and the state as environmental protection against threats and environmental at regional, national and local levels to form a national strategy to ensure sustainable development in terms of the focus requires making the necessary decisions[5-32].

We think it is necessary that this strategy fully systematizes and reveals the depth and scope of unresolved problems in the field of Environmental Protection and rational management of nature, classifying sources and threats hazardous to the environment by degrees (global, regional, national, local (Figure 2).

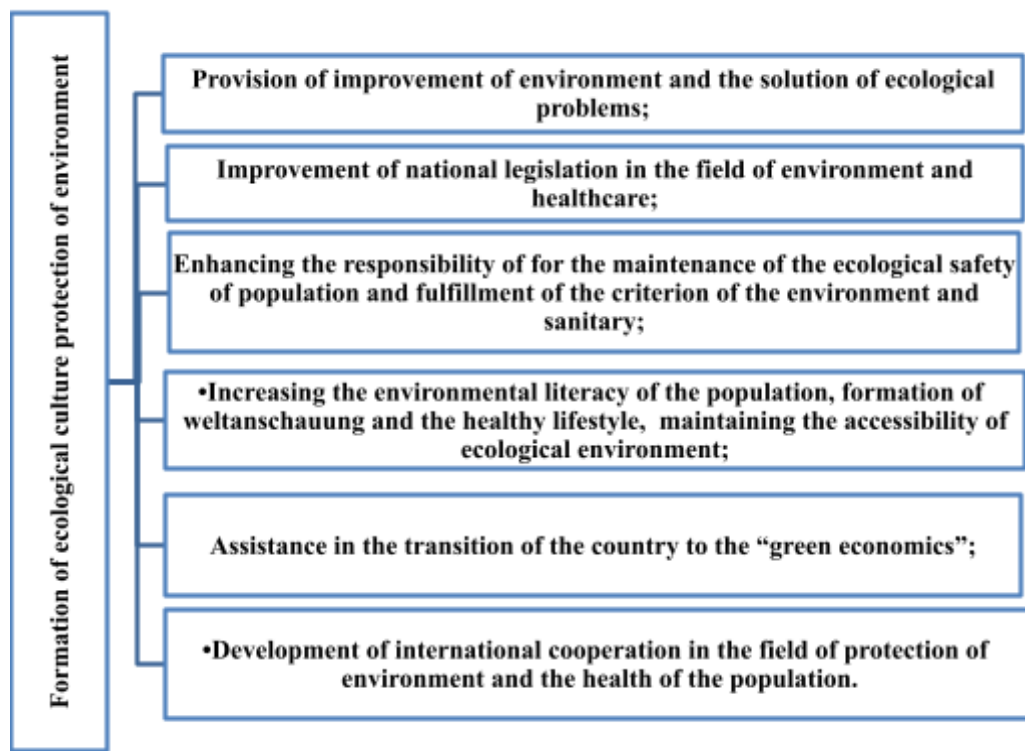


Figure 2. The tasks of the formation of an ecological culture and the protection of the environment

Environmental safety in the cross section of territories in the Republic in recent years provision, rational use of natural resources, as well as sanitation of areas and the policy in the field of improving the environmental condition is being implemented consistently. A new state in the field of environmental protection under the leadership of the president the management system has been formed, receiving a number of important regulatory legal acts were, strategic and software documentation projects updated. A new state in the field of environmental protection under the leadership of the president the management system has been formed, receiving a number of important regulatory legal acts were, strategic and software documentation projects updated.

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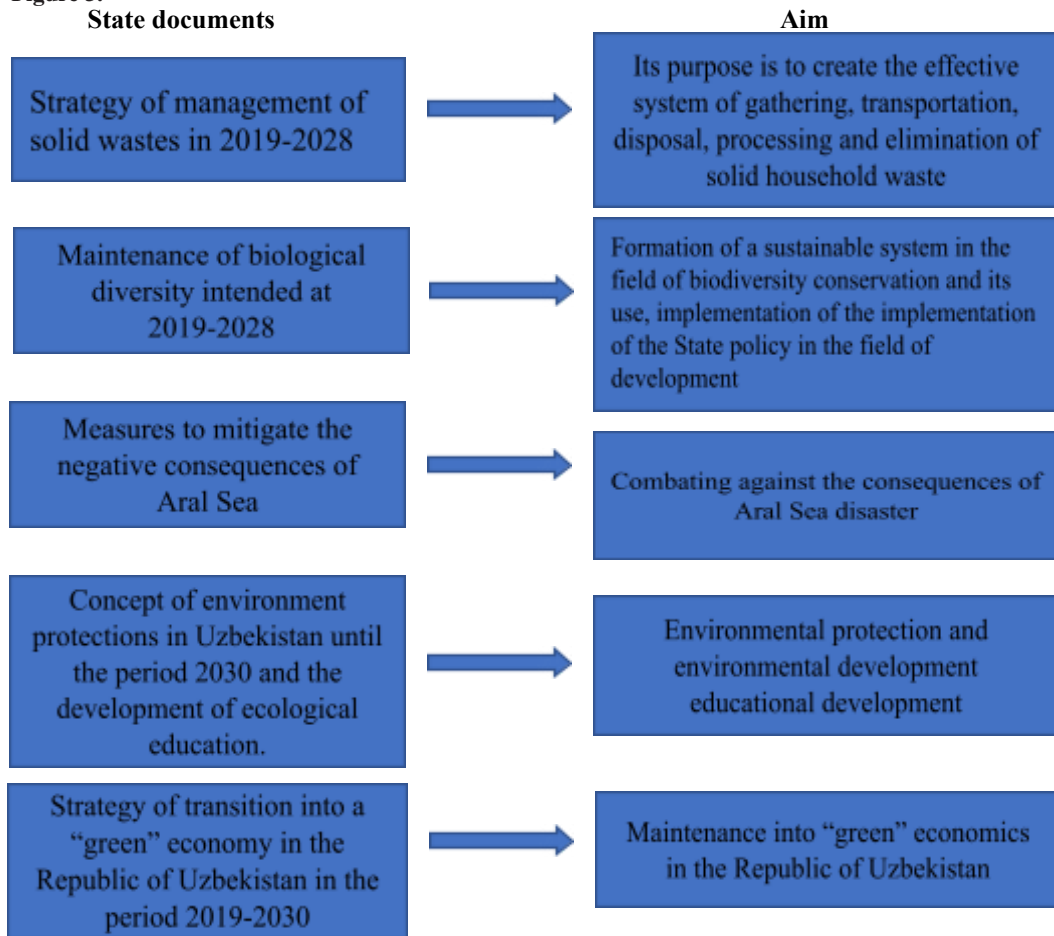
The following strategic documents are adopted to solve the current crisis situation in the field of environmental protection and rational use of natural resources made: in particular, in 2019, the concepts of environmental protection and development of ecological education Uzbekistan until 2030 were adopted [6].

Also in 2019 year Solid household waste implementation of work related to 2019-2028 period in Uzbekistan in the period 2019-2030 and “The transition strategies of the Republic of Uzbekistan to a “green” economy were also approved.

Concept of environmental protection in Uzbekistan in the period up to 2030 as well as the development of Environmental Education adopted in Uzbekistan one of the program documents. It is the country’s environmental in the medium term determines the development of

its policy (Figure 3). Its purpose is to create the effective system of assembly, transportation, disposal, processing and elimination of solid household waste.

Figure 3.



The urgent task of environmental sustainability in the formation of an ecological environment is inextricably linked with the socio-economic development and progress of our country, and not on its moral side. It is important to note that in today's era of globalization and global processes, economic-political, cultural-educational relations between the regions are expanding, the place, reputation, honor of New Uzbekistan in the world community, and in Central Asia. its value is constantly increasing. The youth of the country also have a role in achieving these opportunities. The ever-increasing influence of the Republic of Uzbekistan in the international community is reflected in its efforts to find solutions to global, national, regional, and territorial environmental problems, as well as in the practical work carried out to stabilize the region's ecological environment, as well as the large-scale environmental reforms implemented in this field [7.25-28].

In fact, in order to study the topical issues of the environmental situation in our country from a scientific point of view by young people, students, to create projects aimed at solving environmental problems, to develop mechanisms for conducting scientific research, cooperation with prestigious organizations belonging to the international community has been widely established.

Young people, including students, play an important role in the implementation of social and economic reforms in the new Uzbekistan. In this regard, special attention is paid to their ecological education system. In the process of formation of civil society, the solution of issues of environmental education of students requires the active participation of officials of educational institutions and representatives of public organizations. Also, work is being carried out to increase the environmental culture of young people, including students, and to deepen their environmental knowledge. The educational system for training highly educated specialists and their environmental education has been perfected. In this regard, it should be noted that the participation of bachelors and masters with higher education, doctoral students, and those interested in this field in the environmental movement, their suggestions and comments on finding solutions to environmental issues, and the presentation of scientific conclusions are part of the ecological movement. is one of the most effective activities. [8]

The process of environmental education and the acquisition of an ecological culture is usually carried out with the elimination of attitudes and their characteristics that arise as a result of the individual's self-education, self-re-education, negative connection with one or another phenomenon in society. [9]

As a result, self-education helps to generate and improve the qualities of the individual that have social value in them. The content of the skills of ecological culture in young people is considered the main task of social education, and in the process of its organization a number of tasks are solved (See Figure 4).

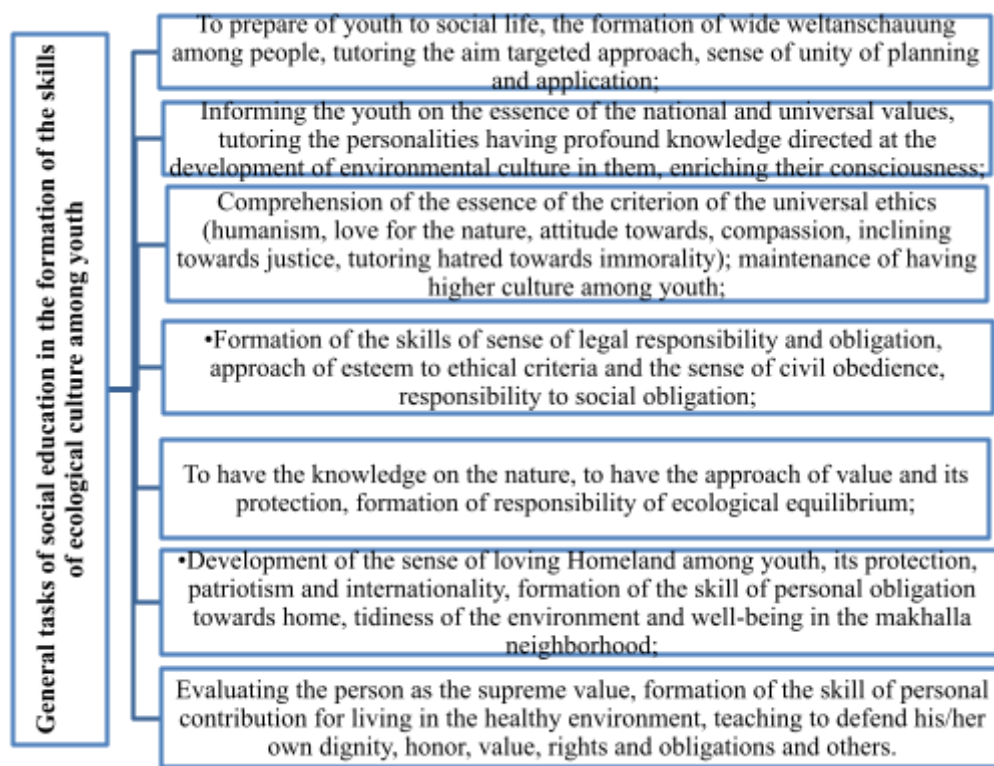


Figure 4. The main tasks of social education in the formation of ecological culture skills in young people

Ecological culture is a high indicator of practical activity aimed at having a deep knowledge of the environment, a sense of preservation of nature, caring for animals in the field of plants,

rational use of nature reserves, concern for their reproduction. A person who can embody these qualities can be called the owner of environmental education. [10.125-134].

The educational processes carried out in educational institutions in ensuring the implementation of the above - established tasks for the development of environmental culture in young people in the educational system of our country are carried out based on modern processes, educational environment, innovative and integrative approaches. [11] After all, ownership of ecological culture requires the implementation of common goals and objectives based on the specific private tasks and objectives of the moral, mental, physical, environmental, economic, legal and political education of the individual [12] (See Table 2).

Table 2. Content of tasks in educational processes for the development of ecological culture

№	Processes of education	Meaning of tasks
1	Process of organizing ethical education	Informing people to receive education on the content of socio-moral standards, explaining to them the importance of moral standards in social life, formation of moral consciousness and culture based on the decision-making of a sense of respect for socio-moral norms (requirements and prohibitions)in them; [13]
2	the process of establishing mental education	To inform learners about the achievements, innovations and discoveries in science, technology and technology, formation of thinking, development of worldview in the way of giving them knowledge about the basics of social and natural sciences;
3	the process of organizing physical education	To encourage learners to maintain and strengthen their health, exercise the body, to create a sense of care about the proper physical development as well as increasing his/her performance, to form skills and competencies in them in relation to new activity networks, to arm them with special knowledge, develop the main qualities of action that correspond to the age, gender of students (strength, agility, agility, endurance, perseverance, labor, endurance, willpower and determination of character), educate in them conscious attitudes towards maintaining personal hygiene;
4	the process of conducting aesthetic education	The formation of aesthetic culture, the development of aesthetic feelings, aesthetic taste in Educators, their creative abilities, aesthetic needs and love of beauty, the development of feelings of striving for beauty;
5	the process of environmental education	To explain to students the unity and connection of a person, society and nature based on providing students with ecological knowledge, to determine the concepts of the important place and essence of the ecosystem in the development of man, mankind, and society, to be cautious and responsible towards nature, to establish feelings of concern for nature preservation, as well as to form an ecological culture;
6	the process of organizing economic education	To ensure the economic stability of the country on the basis of imparting economic knowledge to students, following the rules of market infrastructure, filling the domestic market, participation in the process of creating small and medium-sized businesses, formation of skills and qualifications, preservation of material wealth created by human labor, , to resolve feelings of concern for their increase, to form an economic culture;
7	the process of organization of legal education	To teach learners information on the Constitution of the state, the doctrine of the state, citizenship, family, labor, economy, administrative benefits, court proceedings, explain the meaning of the rights in administration, to instill in their minds the concepts of the importance of social and legal norms in the life of an individual and society, to ensure that they have an idea about the essence of legal relations, formation of legal awareness, as

		well as skills and qualifications for organizing legal activities, formation of legal culture;
8	the process of organizing ideological and political education	To provide students with political knowledge, based on ensuring the study of the Constitution of the Republic of Uzbekistan, the foundations of civil society, the structure of the national state, the activities of state bodies, as well as the content of the internal and foreign policy of the Republic of Uzbekistan, to form the students' political activity skills and qualifications, formation of political culture, etc.

If the content of the tasks defined above for the continuous development of the ecological culture of young people during the educational and educational processes is implemented based on the principles of pedagogical education, the effectiveness will be ensured and the indicator of achieving the goal will increase.

The main task to achieve this goal is to educate the elements of general culture in a person, i.e. intellectual, moral, physical, aesthetic, economic, ecological, legal, political and labor culture of a person.

The state of Uzbekistan has great, unlimited natural resources, but the priceless resources presented to us by our nature, no matter how unlimited and powerful they are, must be preserved, protected and guarded.

Ecological culture is a part of universal human culture, a system of social relations, public and individual moral and ethical norms, views, attitudes and values concerning the relationship between man and nature; harmonious coexistence of human society and the natural environment; a holistic co-adaptive mechanism of man and nature, realized through the attitude of human society to the natural environment and to environmental problems in general. [14]

From the point of view of the scientific and educational process, ecological culture is considered as a separate discipline within the framework of cultural studies.

Activities to develop an environmental culture are called "environmental education." Such activities consist of disseminating environmental knowledge, as well as fostering respect for the environment and rational use of natural resources. [15]

Conclusion

The main task of today's youth is to use their knowledge and talent to make sure that future generations can fully enjoy the natural resources, and to fulfill their civic duties and responsibilities. Because it is important not to forget that nature protection is one of the most urgent and important tasks of building our new society.

In the ongoing education and training processes related to the development of ecological culture of young people in the continuous education system:

- observation of natural phenomena and processes;
- determination (measurement) of natural phenomena;
- explanation of natural processes and events and their environmental impact;
- conducting practical work and experiments;
- to be able to apply knowledge of natural sciences in practice;
- it is taken into account that they have such competencies as having environmental knowledge.

The use of scientific views on ecology, which were put forward by natural scientists and helped to develop the attitude of respecting nature for centuries, the formation of a positive attitude towards the environment in the minds of students, the sense of responsibility for environmental protection, and the use of ecological education even today For the effectiveness of education, an important ideological basis for the development of ecological culture among young people is considered.

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