
ECOLOGICAL CULTURE: THE CONTENT OF THE CONCEPT, ITS STRUCTURAL COMPONENTS, AND FACTORS OF DEVELOPMENT

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ABSTRACT

The article provides a comprehensive analysis of the content of the concept of ecological culture, its structural composition, and the main factors shaping it. The author explains ecological culture on the basis of philosophical, pedagogical, psychological, and sociological approaches, substantiating the interconnection between ecological consciousness, thinking, ethics, and practical-behavioral components. It is emphasized that the education system, family and social environment, mass media, and state policy play an important role in this process. Along with international experience, the state of ecological initiatives being implemented in Uzbekistan is analyzed, and practical recommendations for deepening ecological culture are presented.

KEYWORDS: Ecological culture, ecological consciousness, ecological thinking, ecological ethics, sustainable development, ecological education, ecological upbringing, social environment, state policy, ecological competence, system of components.

INTRODUCTION

At present, the technogenic stage of human development faces not only economic achievements but also serious environmental problems that cause significant damage to nature. Air pollution, degradation of water and soil resources, reduction of biodiversity, and global warming demand a reconsideration of society's ecological consciousness. Under such conditions, solving environmental issues cannot be limited to technical or economic measures alone, but also requires socio-cultural approaches. In particular, a conscious attitude toward nature, responsible behavior, and a lifestyle based on the principles of sustainable development have become a necessity. This, in turn, necessitates a deep study of the content, formation, and development of the concept of ecological culture.

Ecological culture is not only a body of ecological knowledge but also a complex social phenomenon that encompasses moral values, emotional attitudes, and practical activity. Strategies developed by UNESCO and other international organizations recognize ecological education and culture as key tools for sustainable development. In developed countries such as the European Union, Japan, and South Korea, long-term programs for the formation of ecological culture are being implemented. In the Republic of Uzbekistan, in recent years, the nationwide initiative "Green Space", the concept of ecological education, and the legislative framework aimed at protecting the environment have served as important steps in enhancing ecological

culture. Nevertheless, the level of ecological culture among the population—particularly among the youth—remains insufficiently understood and inadequately applied in practical activities, which highlights the relevance of the issue.

The main purpose of this article is to define the content and structural components of the concept of ecological culture, to scientifically analyze the main factors shaping it, and to develop practical recommendations based on a comparison of international and national experiences. The scientific novelty of the research lies in explaining ecological culture as an integrative concept on the basis of philosophical, pedagogical, psychological, and sociological approaches, analyzing its structural composition, and identifying mechanisms for its improvement in the modern social context. This research contributes to enriching theoretical views on ecological culture and forming practical measures.

The concept of ecological culture emerged as a complex socio-cultural phenomenon in the second half of the 20th century, when ecological crises intensified. Initially, this term was used within the framework of ecological consciousness, nature conservation ideas, and moral approaches to human–environment relations. The 1972 United Nations Conference on the Human Environment in Stockholm was an important stage in the development of ecological culture. From this period, attention to studying the ecological consequences of human activity and the mechanisms of their reflection in social consciousness increased. In the 1980s and 1990s, international documents on ecological education and culture (such as the Our Common Future reports and the Rio de Janeiro Declaration) enriched the scientific and theoretical foundations of this concept and brought forth the necessity for its further expansion.

Theoretical approaches to ecological culture have formed at the crossroads of multiple sciences. From a philosophical perspective, ecological culture is interpreted as a system of harmony between humans and nature, moral responsibility, and existential views. It reflects the individual's ability to understand their life within the context of the entire natural world and, based on this, to choose a sustainable lifestyle. In particular, the movement of ecological existentialism played a significant role in creating the ontological and axiological foundations of this culture. At the same time, the pedagogical approach views ecological culture as an integrated part of the educational process. Strengthening social responsibility by fostering ecological values, ecological awareness, and an active civic position in education forms the basis for the development of ecological culture. The sociological approach, on the other hand, analyzes ecological culture as a social phenomenon shaped through social institutions, traditions, norms, and systems of social relations. In this approach, ecological culture is studied in connection with the level of ecological awareness in society, the processes of ecological socialization, and the forms of ecological activity.

The concept of ecological culture is closely connected with notions such as ecological awareness, ecological thinking, and ecological ethics. Ecological awareness is the conscious perception of the relationship between humans and nature, the understanding of ecological problems, and the adoption of a responsible stance toward them. Ecological thinking is the ability to systematically analyze ecological issues, comprehend cause-and-effect relationships, and find innovative solutions to achieve ecological sustainability. Ecological ethics, in turn, reflects a person's moral

responsibility toward the environment, directing behavior based on ecological values. These structural elements constitute the main pillars of ecological culture, and their development plays a crucial role in shaping an individual's ecological competence. Therefore, in the theoretical understanding of ecological culture, these concepts are regarded as interrelated, complementary, and reinforcing elements. This creates the necessity of studying it as a complex, multifaceted socio-cultural system.

Ecological culture, as a complex and multifaceted system reflecting human attitudes toward nature, consists of several structural components. These components ensure the interconnection of elements such as ecological awareness, knowledge, values, actions, and social relations. Each component is considered an important criterion determining an individual's ecological activity, and together they form the complete content of ecological culture.

The cognitive (knowledge) component is the foundation of ecological culture, representing an individual's level of knowledge about nature and ecological problems. Through this component, a person understands concepts such as ecological systems, principles of sustainable development, types of pollution, and the rational use of resources. The modern education system plays a key role in shaping ecological knowledge, as raising an ecologically aware generation primarily depends on the systematic and consistent transmission of ecological knowledge. This knowledge is not merely a collection of facts but serves as an essential tool in analyzing ecological conditions, understanding cause-and-effect relationships, and searching for solutions.

The emotional-axiological component encompasses an individual's system of ecological values and emotional attitudes toward nature. Within this component, it is important that a person appreciates nature, treats it with care, and accepts environmental protection as an inner necessity. Ecological ethics, ecological responsibility, and the ideas of living in harmony with nature are formed precisely on the basis of this component. The family, school, mass media, and cultural environment directly influence the development of the emotional-axiological aspect. For an individual with a high level of ecological culture, this component becomes not only an emotional response but also an inseparable part of the system of social values.

The practical-behavioral component defines the real-life manifestations of ecological culture. This component includes the individual's application of ecological moral knowledge and values in practical activity, such as maintaining ecological safety, properly disposing of waste, conserving water and energy resources, and adhering to ecological norms. Therefore, in the process of ecological education, it is necessary not only to limit oneself to theoretical knowledge but also to develop this component through practical exercises, eco-events, and project-based activities aimed at environmental protection. It is precisely through this component that ecological culture transitions into the stage of becoming a part of social practice.

The interactive-communicative component determines the level of socialization in ecological activity. This component includes an individual's participation in collective ecological events, exchanging views on ecological problems, developing solutions in cooperation, and actively disseminating ecological awareness. Through social networks, mass media, connections with non-profit organizations, and interpersonal communication, an individual demonstrates ecological culture in a social context. This component is significant not only as a means of transmitting

information but also as a tool for popularizing ecological values in society. These structural components of ecological culture form a system that complements and reinforces each other. The development of each component plays an important role in shaping an ecologically conscious, responsible, and active citizen. For the sustainable development of ecological culture, it is essential to develop these structural elements in harmony.

The formation of ecological culture is a multifactorial and complex process, evolving under the influence of various factors such as individual life experience, social environment, the educational system, information flow, and state policy. These factors are closely interrelated and play a decisive role in the formation of ecological awareness and behavior. Especially in the era of globalization and technogenic development, the effective functioning of these factors in shaping a balanced human–nature relationship becomes one of the main criteria for determining the level of ecological culture.



Figure 1. The System of Main Factors Shaping Ecological Culture.

First of all, the education system and the means of ecological upbringing are recognized as leading factors in the formation of ecological culture. From preschool to higher education, one of the main tasks of the modern education system is to increase ecological literacy, form ecological values, and develop ecological competences. The ecological education concepts developed by international organizations such as UNESCO and UNEP have provided scientific and pedagogical foundations in this direction. In Uzbekistan’s experience as well, consistent efforts are being made through state programs, educational-methodological materials, and ecological projects to shape the younger generation into ecologically conscious and responsible individuals. Ecological upbringing, in turn, is aimed at the emotional and moral development of the individual, seeking to elevate love for nature, its protection, and friendly interaction with it to the level of a vital need. The family and the social environment within society provide the natural context for the formation of ecological culture. The family is the first place where ecological values are instilled, and the methods of upbringing, daily behaviors, and habits of resource use directly affect children’s ecological attitudes. Furthermore, ecological awareness is socialized through communities such as the mahalla (neighborhood association), social groups, the school community, and circles of friends. When the level of ecological culture in society is high, individuals also develop strong ecological responsibility and an active civic position. Therefore, the development of ecological culture requires a comprehensive approach, not only through the education system but also through the entire social environment.

The role of mass media and popular culture is also a significant factor in the formation of ecological culture. Television programs, documentaries, social networks, and advertisements

disseminate ecological awareness to society and help shape certain moral norms. Especially in today's digital information environment, content that influences the ecological consciousness of the younger generation quickly and directly proves highly effective. In addition, ecological issues are also raised through popular culture, art, literature, and cinema, attracting collective attention to their solutions. This demonstrates that mass media are a powerful social instrument in communicating ecological values to the wider public.

Legislation, state policy, and ecological institutions form the institutional foundation of ecological culture. Through the state's ecological policy, adopted laws and decrees, and ecological regulations, the boundaries and obligations of ecological activity for individuals and society are defined. For example, the Law of the Republic of Uzbekistan "On Environmental Protection," decrees on "The Development of Ecological Education and Upbringing," and the "Green Space" project are part of systemic efforts aimed at creating a sustainable ecological environment in the country. Ecological movements, non-governmental organizations, ecological agencies, and international cooperation platforms also strengthen the socio-institutional foundations of ecological culture. Stable results in the formation of ecological culture can be achieved only if the above-mentioned factors act in harmony and within a systematic framework. Each factor, with its own role and function, strengthens the foundation of ecological culture and contributes to shaping a socially conscious society directed toward ecological sustainability.

At present, the empirical analysis of the level of ecological culture is being evaluated through studies conducted in many countries, including Uzbekistan and others. Such analyses are mainly carried out on the basis of indicators such as ecological awareness, behavior, access to information, and participation in ecological activities. Through this, a real understanding of the ecological cultural state of the population, especially the youth, is formed, and shortcomings and needs in this field are identified.

Some studies conducted in the context of Uzbekistan show that although pupils and students have a general understanding of ecological problems, their level of ecological awareness and behavior is still insufficient. For example, according to the results of social surveys conducted in several higher education institutions in 2022, while students possessed theoretical knowledge on ecological topics, it was found that these knowledge were not sufficiently applied in practice. In particular, among students, the rate of waste separation, rational use of water and electricity, and participation in ecological campaigns was around 40–50%, which indicates that the practical-behavioral component of ecological culture is underdeveloped. In addition, the results of transboundary surveys conducted in 2021 with the participation of youth from Kazakhstan, Russia, and Uzbekistan showed that although the level of ecological awareness was relatively high, the degree to which ecological values were reflected in personal life was low. Indicators used to assess ecological literacy in Russia (based on Greenpeace and WWF data) revealed that only 25–30% of the population considered themselves ecologically active citizens. In Kazakhstan, this figure was around 20%, while in Uzbekistan it dropped to 15–18%.

Currently, projects such as "Green Space," "Ecological Footprints," and "Eco-Marathon" in Uzbekistan play an important role in increasing social activity aimed at developing ecological culture. However, the popularization and continuity of these initiatives depend on the active

participation of the education system and local communities. Although there is a willingness among young people to participate in ecological initiatives, the weakness of incentive systems limits their activity. For instance, while 62% of respondents believed participation in ecological events to be beneficial, only 28% reported actual participation in such activities.

The state of ecological culture among the general public also reveals certain contradictory indicators. Despite increasing attention to ecological issues through information technologies, the majority of the population perceives ecological problems mainly as the responsibility of the government and relevant agencies. This reflects the insufficient level of personal ecological responsibility. The analysis of the current situation shows that while the theoretical foundations of ecological culture are significant, there are notable gaps in their practical application, in turning ecological values into real actions. Therefore, in order to enhance ecological culture, it is necessary not only to deliver information but also to strengthen motivational, organizational, and normative mechanisms. Based on empirical data, it can be stated that the formation of ecological culture must rely on the systematic cooperation of continuous education, family upbringing, state policy, and civil society institutions.

In today's conditions of globalization and technogenic development, the development of ecological culture is recognized as one of the pressing tasks facing not only individual social groups but the whole society. The organic cooperation of the education system, civil society institutions, state policy, and mass media is considered a crucial factor in the formation of this culture. In this regard, effective proposals and recommendations aimed at the development of ecological culture must be developed on the basis of a systematic approach.

First of all, it is necessary to develop and implement modern pedagogical strategies for the development of ecological culture in educational institutions. In this context, it is advisable to integrate ecological education into the content of all subjects, rather than teaching it as a separate course, in order to shape ecological thinking among students. Project-based learning, interactive methods, and cross-curricular approaches (for example, integrating ecological topics into biology, geography, and technology lessons) aimed at developing ecological competences deepen students' ecological worldview. The establishment of ecological laboratories, nature schools, eco-tourism projects, and green space areas in educational institutions serves to directly form practical-behavioral skills. In addition, extracurricular activities related to ecological upbringing—such as quizzes, seminars, ecological theaters, and debates—can attract young people's attention to the issue.

Using ecological technologies and types of activities in the education and upbringing system is of particular importance for deepening ecological awareness. Through activities such as “eco-observation,” “eco-experiment,” “eco-audit,” “eco-problems,” and “eco-quest,” students and pupils develop the ability to analyze ecological problems, find solutions, and feel ecological responsibility. At the same time, the effectiveness of delivering ecological knowledge increases through digital technologies—such as ecological mobile applications, virtual laboratories, interactive maps, and online platforms. Ecological routes with QR codes and AR (augmented reality)-based ecological visualizations provide students with opportunities to visually perceive

ecological problems and imagine their consequences. Such approaches serve to deepen ecological awareness not only theoretically but also emotionally and morally.

Ensuring effective cooperation between educational institutions, mass media, and state bodies plays a special role in developing ecological culture on the basis of social partnership. The role of mass media in promoting ecological awareness is invaluable—they highlight ecological problems, popularize successful ecological initiatives, and involve citizens in ecological activities. State policy, in turn, must create the necessary legal and regulatory framework for these processes and provide financial and organizational support. In this regard, the model of an “ecological alliance” between the state, media, and education can be proposed as an effective solution. In such a model, the state develops ecological legislation and programs, the education system shapes ecological upbringing and skills, while the media participate in raising public awareness and covering initiatives. Moreover, involving ecological NGOs, enterprises, and entrepreneurs in this partnership can help shape a broad-based sustainable development strategy. Only when the proposed pedagogical strategies, technologies, and institutional mechanisms for deepening ecological culture function in harmony can society achieve the formation of ecological responsibility and a philosophy of sustainable living in social consciousness. Therefore, in this process, every institution—from schools to mass media—must have its own clear strategic task.

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