

UDC 37

## Formation of environmental awareness of schoolchildren subject to the selection of the features of consciousness

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### Abstract

A characteristic feature of the last century was the rapid unrestrained desire for economic and technological development. Ignorance, and in most cases ignoring the laws of nature leads to terrible consequences, proof of this is the ecological crisis of our time, due to the depletion of vital natural resources. Planetary cataclysms, such as the intensification of volcanic activity or icing, soil degradation or desertification of fertile lands, entailed a significant change in the biosphere and from time to time put the human community before the choice – to die or change the way of life: to migrate, resort to cultivation and move to settlement or to introduce some other new forms of management. Earth did not face such changes, as a result of which nature would be in a state of unstable equilibrium, and people has to choose between death and a fundamentally different way of life. Over the past 50 years, there has been a deterioration of most ecosystems of the biosphere, catastrophic depletion of soils, mineral resources, a significant decrease in bio-productivity and biodiversity, unprecedented pollution of the Earth's surface, hydrosphere and atmosphere associated with the intensive growth of the planet's population and the development of scientific and technological progress. The need to meet the growing needs of human society has led to a huge expansion of economic activity, changes in the proportions of the world economy, in technology and technology, production capacity, product range, production and personal consumption. There are models of production and consumption in the world that do not meet the conditions of normal coexistence of man and nature.

### For citation

Karandaeva T.S. (2019) Formation of environmental awareness of schoolchildren subject to the selection of the features of consciousness. *Pedagogicheskii zhurnal* [Pedagogical Journal], 9 (2B), pp. 657-664.

### Keywords

Consciousness, nature management, formation, dynamics, stratification.

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## Introduction

One of the most powerful levers of overcoming the crisis, which has developed in the relationship of man with nature, is environmental education. Noting the social orientation of environmental problems, N. Reimers pointed out that one of the ways out of the ecological crisis is regulated coevolution in the system "society – environment".

At the present stage, humanity must understand its inherent nature, reconsider its principles and beliefs, evaluate the truth, which was formulated 400 years ago by the English philosopher F. Bacon "We can not control nature except by obeying it".

In connection with the expansion of human activity, social ecology is actively developing – a science that studies the laws of society's influence on the biosphere and changes in it that affect each individual and society. The purpose of social ecology is the formation of knowledge about the harmonious relationship between society and nature, the principles of rational nature management, ideological beliefs, that the nature that surrounds us is our home, and its preservation is a condition for the survival of mankind. Ecological consciousness and culture is formed through the use of principles and methods of ecological education and upbringing.

### Environmental awareness of schoolchildren

Ecological ethics plays an important role in man's awareness of his place in nature. Environmental ethics is the doctrine of the foundations of relations with nature, based on the recognition of the moral status of nature, high appreciation of its values, respect for the right to a harmonious existence of all components of natural ecosystems. The subject of environmental ethics is the study of the foundations of human moral attitude to nature, the analysis of human behavior stereotypes that lead to environmental problems, the search for ethical ideals of human attitude to nature, which will overcome the environmental crisis. Environmental ethics is designed to identify new principles and new approaches to the relationship in the system "man-nature", new behaviors that will contribute to the solution of environmental problems. Aldo Leopold was one of the founders of environmental ethics. Ethics in the ecological sense is a restriction of freedom of action in the struggle for existence. The basis of environmental ethics is based on the principle of Albert Schweitzer, the German philosopher of the XX century, – the principle of reverence for life, the central thought of which is the postulate: all life is worthy to live." The great humanist wrote: "The more we look into nature, the more we realize that we relate to all living things in nature. Man can not live only for himself – we must realize that any life-value", because ethics, in his opinion, is "unlimited responsibility of man for all life on Earth".

According to V. Stepp, man is the only creature that can control and manipulate the environment, destroy or preserve it. Knowledge of the consequences of environmental impacts is an essential element of human culture. The present and the future are more determined by man. In turn, the actions that a person will do are determined by his education.

In order to understand the essence of the concept of ecological culture and its components, it is worth considering the concept of culture and its relationship with nature in a General sense.

The correlation of the term's "ecology" and "culture", their interdependence in the manifestations of human activity and society attracts considerable attention of both scientists and the population. The term "ecology" was first proposed in 1866 by E. Haeckel in the book "General morphology". He defined ecology "as the doctrine of the balance between organism and environment".

The formation of ecology as a science began in the twentieth century. It originated as a purely

biological science, but at the present stage its content has expanded significantly. The object of the study of ecology evolved from the relationship "organism-environment" to "Man-nature".

One of the first who began to consider ecology not as a narrow biological science, but an interdisciplinary field of knowledge that explores multi-level systems in nature and society, was an American scientist Yu. Odum. According to his definition, ecology is the biology of the environment. In 1953 he published the first edition of his work "Fundamentals of ecology", which clearly formed the structure of the science of ecology, in which the Central place was given to the ecosystem.

G. Belyavsky defines modern ecology as "the science of the environment of our existence, its living and non-living components, their interrelation, forms the living conditions and development of all ecosystems".

General ecology is divided into four main blocks: bioecology, technoeology, Geoecology and socioecology. Man must know the laws of nature, be able to predict and assess the consequences of interference in natural processes. The third law of B. Komonner "Nature knows better" means that you can not try to conquer nature, and it is necessary to cooperate with it, and do not forget that man is a biological species, that he is a child of nature, and not his master. According to b. Further enormous efforts are needed, ward said, to make man's actions wise, impartial, and prudent. If, as before, dissociation, antagonism, greed prevails in its behavior, then the finest mechanisms that maintain the balance of the forces of nature that surround us will be destroyed. And then it is unlikely that a person will have a chance to survive.

Ecology is an integral part of spiritual culture, a treasure trove of knowledge about the ecosystem, about the consequences of interaction between society and nature over the centuries, about the state of the environment in the era of scientific and technological progress and ways to preserve the natural environment for future generations. Ecology also played a significant role in the development of material culture [Zashchirinskaya, 2017].

Humanity exists not only in certain natural conditions, but also in a cultural environment that is created by itself. In contrast to nature (lat. natura), that is, the material reality that exists outside of man, culture (lat. Siltura – processing) is a product of purposeful activity of people, that is that part of the nature which has undergone influence of this activity (so-called "second", humanized nature). The world of culture is a set of material and spiritual values created in the process of material and spiritual production. However, man not only transforms the external reality, but also forms himself.

The concept of "culture" has many definitions. In the original interpretation, the term "culture" did not mean any object or condition. Later, culture came to be understood as "humanity", which separates man from nature. Originally, the term "culture" meant "cultivation, care, cultivation" and referred to agriculture. In a figurative sense, culture is the care, improvement of bodily-mental-spiritual inclinations and abilities of a person. The ancient Roman orator Cicero formulated the idea that the human spirit (mind) should be cultivated as the soil: "As a fertile field without cultivation will not yield a crop, so the soul. And cultivation of soul is also philosophy: it burns out in soul defects, prepares soul for perception of sowing, entrusts to it-sows-so to speak that seed which, having ripened, brings a generous harvest". He used the expression "culture of the soul" (lat. culturaanimi), which meant the development of the inner world, using knowledge, education.

In ancient consciousness, the concept of "culture" was identified with the concept of "paideya", that is, "education". Paideia, Plato means a guide to change the person, all of its essence. In the subsequent development of philosophical thought in Europe, this cumulative fruit of human activity, as well as its very process, acquired various terminological definitions – "civilization", "education", "education", "formation".

The tradition of contrasting culture as an artificial world with nature originates from the work of the German philosopher-educator S. Pufendorf ("on the right of nature and birth"). In the works of the French enlighteners, culture appears as a process of development of the human mind and intelligent forms of life, opposing the savagery and barbarism of the primitive existence of mankind. German classical works represented culture as the historical development of human spirituality, the evolution of moral, aesthetic, philosophical, scientific consciousness, ensuring the progress of mankind.

Culture is usually defined through opposition to its nature, and this is to some extent true, because one of the most important manifestations of culture is the reflection of the conscious activity of the subject in contrast to the natural existence of natural bodies. However, it is not necessary to absolutize the difference between culture and natural phenomena. In fact, nature and culture are such opposites, the difference of which is the identity. In the process of their development, they assume a growing interpenetration [Chernigovskaya, 2016].

The descriptive definition of culture is based on the concept of the founder of cultural anthropology B. Tylor, according to which culture is a set of all kinds of human activity, customs, beliefs; it covers art, language, customs, etiquette, morality, religion, it is, in fact, adaptation to the social and natural environment, which has evolved over the centuries. Historical definitions emphasize the role of tradition and social inheritance in the cultural development of mankind. Normative definitions emphasize the importance of accepted rules and norms, culture is a way of life of the individual, due to his social environment. According to the value definition, culture is a set of material and spiritual values of a group of people, their institutions, customs, behavior reactions. Psychological definitions of culture emphasize the special adaptations of people to the natural environment, as well as to their material needs. According to structural definitions, culture is a system of certain characteristics, differently related to each other. Material and non-material cultural attributes, organized around basic needs, form social institutions, which are the core of culture.

The most common definition today is that of culture as a secondary, artificial environment, which encompasses language, customs, ideas, artistic process, religious beliefs, social organization, technological techniques and processes, systems of evaluation that man adds to nature. Culture differs from nature in that it concentrates human efforts and is the result of purposeful creative activity.

According to M. Kiselyov, since then "... and there is a beginning of the current educational tendency to interpret culture as education, education of a person". S. Grabovsky believes that it is culture that determines the totality of the meanings of life; in fact, these meanings are born and live only as phenomena of living culture".

Modern researchers, in particular N. Golubets, N. Krymsky, V. Krisachenko understand culture as a set of material and spiritual values created by mankind in the process of social and historical activity, which covers, on the one hand, technical means of production, material values, and on the other – spiritual achievements in the field of science, art, literature, morality and education.

We join the opinion of N. Kiselev, who notes that the prerequisite for the development of culture is the interaction of society and nature.

E. Markaryan distinguishes three subsystems of culture: one – "natural– ecological", which reflects the way society adapts to the biophysical environment, the second – "social-ecological", which reflects the orderly relations of society with other societies with nature", the third – "social-regulatory", which is aimed at maintaining the social system itself as a whole.

In our time, the values of life come first, the search for new ways of survival under the influence of the progressive environmental crisis. Consequently, there is a revision of the traditional attitude to

nature, the establishment of the spiritual connection of man with the natural world, the individual's understanding of his being, worldview, meaning of life, which is manifested in the formation of new ideals of human activity and understanding of new perspectives of man.

Culture as a way of adaptation and organization of people's life is an important indicator of their relationship between themselves and the environment. L. Lukyanova believes that there is a concept of culture and ecology, which has become the basis of a new scientific direction of cultural ecology, or ecological culture. The ecological aspect of culture cannot be separated from the cultural aspect of the ecological situation. Culture is the result of the development of the relationship between man and the environment, and the level of culture depends on the form of relations with the natural environment.

The essence of ecological culture was the subject of research. Khil'ko, M. Drobnokhod. The works of V. Yasvin, I. Zverev, I. Suraveginoy, M. Hilko are devoted to the formation of ecological culture of personality; ecological preparation and formation of ecological culture at students of higher educational institutions of work N. Grady, A. Prutsakov, S. Sovgiri, M. Shapoval, N. Shveda, N. Yasinskaya; concepts of professional training of students developed M. Kozyar, L. Lukyanova, N. Smetanskim, A. Moiseyuk, V. Chess. The problem of ecological culture in the system of universal culture is reflected in the works of E. Girusov, L. Lukyanova, N. Moiseev.

M. Tarasenko in the work "Nature. Technology. Culture" interprets ecological culture as a kind of worldview "image of the world", which reflects such a state of social and natural dependencies, which characterizes their harmonious unity, rational development of natural and social reality by man and the assertion in this process of their own individual identity.

Krisachenko considers ecological culture the most widely – as the ability of a person to feel the living being of the world, to try on and adapt it to himself, instead of his own needs and the way of the natural environment. That is, ecological culture, in his opinion, is human activity (including the consequences of such activities), aimed at the organization and transformation of the natural world (objects and processes) according to their own needs and intentions. Ecological culture is aimed at overcoming one's own limitations as a natural being (biological species) with respect to adaptation in the biosphere in conditions of constant competition from certain forms of living matter.

Thus, M. Drobnokhod distinguishes between the functioning of ecological culture as a form of adaptation of an ethnic group to natural conditions and the way of organization of living space, which covers the system of ideas, moral and ideological institutions.

It is necessary to refer to the idea of M. Kagan, regarding the fact that ecological culture is a new type of culture with rethought values, focused on the development of harmonious relations of the individual and society with nature.

Ecological culture at the level of personal values is the degree of moral maturity of a person who is deeply rooted in the subconscious.

In addition, the researchers M. Fedorak. Moskalik consider ecocultures as the behavior and life of a society or an individual based on knowledge and rational use of the laws of nature development, taking into account the near and distant consequences of changes in the natural environment under the influence of human activity.

The influence of ecological culture on the nature of human activity was investigated by N. Nazarova, who characterizes ecological culture as a part of the general culture, which determines the compliance of social activity with the requirements of the viability of the natural environment. V. Bondarenko, revealing the content of ecological culture, notes that "these are scientifically grounded methods of rational nature management, norms of ecological behavior in relation to nature".

I. Zverev and I. Suravegina hold the opinion that "a person who has an ecological culture

subordinates all kinds of his activities to the requirements of rational nature management, takes care of improving the environment and does not allow its pollution".

## Conclusion

Research of mutual influence of social and natural in human life allows to speak about specific manifestations of culture in the ecological direction. Ecological culture can be defined as one of the forms of culture, the ability of mankind to understand the structure of the natural, to adapt it to itself, in return for its own needs and the way of the environment and all life [Zashchirinskaya, 2010].

We agree with the opinion of the researcher that ecological culture is a human activity aimed at the organization and transformation of the natural world according to his personal needs and intentions. It draws attention at the same time to the natural environment and the inner world of man. In other words, it is a necessary basis for human existence, which makes it more possible and rational expedient and efficient use of natural resources, worried about the further development of events relating to the state of the environment. The welfare of future generations depends on how we manage today.

## References

1. Chernigovskaya T.V. et al. (2016) Psikhofiziologicheskie i neirolingvisticheskie aspekty protsessa raspoznavaniya verbal'nykh i neverbal'nykh patternov kommunikatsii [Psychophysiological and neurolinguistic aspects of the process of recognition of verbal and non-verbal patterns of communication]. Saint Petersburg: OOO "Izdatel'stvo VVM" Publ.
2. Danilova T.V. (2017) Organizatsiya professional'nogo vzaimodeistviya budushchego pedagoga vo vneshnei pedagogicheskoi srede [Organization of professional interaction of the future teacher in the external pedagogical environment]. In: Sbornik nauchnykh statei "Strategiya i taktika podgotovki sovremennogo pedagoga v usloviyakh dialogovogo prostranstva obrazovaniya" [Collection of scientific articles "Strategy and tactics of the preparation of the modern teacher in the dialogue space of education"]. Bryansk: Novyi proekt Publ., pp. 54-59.
3. Lamminpiya A.M., Zashchirinskaya O.V., Shelepin Yu.E. (2015) Psikhofiziologicheskii analiz protsessov chteniya i ponimaniya tekstov [Psychophysiological analysis of reading and understanding of texts]. Fiziologiya cheloveka [Human Physiology], 41. № 2, pp. 23-28.
4. Poletaeva Yu.G. (2013) Spetsifika eticheskoi normativnosti v kontekste stanovleniya tsivilizatsii [The specifics of ethical normativity in the context of the formation of civilization]. European Social Science Journal, 7 (35), pp. 27-34.
5. Rutsinskaya I.I. (2011) Putevoditel' kak instrument konstruirovaniya regional'nykh dostoprimechatel'nostei (vtoraya polovina XIX – nachalo XX v.) [A guidebook as a tool for constructing regional attractions (second half of the 19th – the beginning of the 20th centuries)]. Vestnik Moskovskogo universiteta. Seriya 19: Lingvistika i mezhkul'turnaya kommunikatsiya [Bulletin of Moscow University. Series 19: Linguistics and Intercultural Communication], 2, pp. 53-64.
6. Rutsinskaya I.I. (2012) Desakralizatsiya rossiiskogo provintsial'nogo prostranstva v protsesse formirovaniya turistskikh praktik (vtoraya polovina XIX – nachalo KhKh v.) [Desacralization of the Russian provincial space in the process of the formation of tourist practices (second half of the 19th – the beginning of the 20th centuries)]. Teoriya i praktika obshchestvennogo razvitiya [Theory and practice of social development], 4, pp. 221-224.
7. Rutsinskaya I.I. (2012) Obrazy rossiiskikh regionov v kul'turnom prostranstve Rossii vtoroi poloviny XIX – nachala XX v. Dokt. Diss. Abstract [Images of Russian regions in the cultural space of Russia in the second half of the XIX – the beginning of XX centuries. Doct. Diss. Abstract]. Moscow: Lomonosov Moscow State University.
8. Rutsinskaya I.I. (2018) Syuzhet "pokhorony vozhdya" v sovetskoii zhivopisi 1920-1950-kh godov: poiski ikonograficheskogo kanona [The plot of the "funeral of the leader" in Soviet painting of the 1920-1950s: the search for the iconographic canon]. Kul'tura i iskusstvo [Culture and Art], 10, pp. 36-48.
9. Sokolova A.Yu. (2012) K voprosu o funktsiyakh infinitiva v drevneangliiskom yazyke [To the question of the functions of the infinitive in the Old English language]. Vestnik Orlovskogo gosudarstvennogo universiteta. Seriya: novye gumanitarnye issledovaniya [Bulletin of the Oryol State University. Series: New Humanitarian Studies], 1(21), pp. 194-198.
10. Tonkikh i dr. (1997) Logicheskie igry i zadachi na urokakh matematiki [Logic games and tasks in the lessons of mathematics]. Yaroslavl': Akademiya razvitiyav Publ.
11. Zashchirinskaya O.V. (2010) Psikhogenez stilei obshcheniya [Psychogenesis of communication styles]. Vestnik Sankt-Peterburgskogo universiteta. Seriya 12. Psikhologiya. Sotsiologiya. Pedagogika [Bulletin of St. Petersburg University. Series 12. Psychology. Sociology. Pedagogy], 2, pp. 206-216.

12. Zashchirinskaya O.V., Turchaninov E.E. (2017) Sravnitel'nyi analiz psikhologicheskikh zashchit sredi vypusnikov obshcheobrazovatel'nykh i spetsial'nykh (korrektsionnykh) shkol [Comparative analysis of psychological defenses among graduates of comprehensive and special (correctional) schools]. Nauchnoe mnenie [Scientific Opinion], 2, pp. 29-34.
13. Zueva V.S., Zashchirinskaya O.V. (2019) Vospriyatie doshkol'nikami reklamnykh obrazov skazochnykh personazhei [The perception of advertising images of fairy-tale characters by preschoolers]. Nauchnye issledovaniya vypusnikov fakul'teta psikhologii SPbGU [Scientific research of graduates of the Faculty of Psychology, St. Petersburg State University], 6, pp. 53-57.

## **Формирование экологического сознания у школьников при условии выделения особенностей сознания**

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### **Аннотация**

Характерным признаком прошлого века было безудержное стремление человечества к обеспечению экономического и технологического развития. Невежество, а в большинстве случаев игнорирование законов природы приводит к ужасным последствиям, доказательством чего служит экологический кризис нашего времени, возникший из-за истощения жизненно важных природных ресурсов. Природные катаклизмы, такие как усиление вулканической активности или обледенения, деградация почвы и опустынивание плодородных земель повлекли за собой значительные изменения в биосфере и время от времени ставили перед человечеством выбор – умереть или изменить образ жизни: мигрировать, прибегать к выращиванию и переезжать в поселения или вводить некоторые другие новые формы хозяйствования. В XXI веке начали происходить такие изменения, в результате которых природа пришла в состояние неустойчивого равновесия, а люди оказались перед выбором между смертью и принципиально иным образом жизни. За последние 50 лет произошло ухудшение состояния большинства экосистем биосферы, катастрофическое истощение почв, минеральных ресурсов, значительное сокращение биопродуктивности и биоразнообразия, беспрецедентное загрязнение земной поверхности, гидросферы и атмосферы, связанные с интенсивным ростом населения планеты и развитием научно-технического прогресса. Именно необходимость удовлетворения растущих потребностей человеческого общества привела к огромному расширению экономической активности, изменениям в пропорциях мировой экономики, увеличению производственных мощностей, расширению ассортимента продукции, производства и личного потребления.

### **Для цитирования в научных исследованиях**

Карандаева Т.С. Formation of environmental awareness of schoolchildren subject to the selection of the features of consciousness // Педагогический журнал. 2019. Т. 9. № 2В. С. 657-664.

**Ключевые слова**

Сознание, природопользование, формирование, динамика, стратификация.

**Библиография**

1. Данилова Т.В. Организация профессионального взаимодействия будущего педагога во внешней педагогической среде // Сборник научных статей Стратегия и тактика подготовки современного педагога в условиях диалогового пространства образования. Брянск: Новый проект, 2017. С. 54-59.
2. Защирина О.В. Психогенез стилей общения // Вестник Санкт-Петербургского университета. Серия 12. Психология. Социология. Педагогика. 2010. № 2. С. 206-216.
3. Защирина О.В., Турчанинов Е.Е. Сравнительный анализ психологических защит среди выпускников общеобразовательных и специальных (коррекционных) школ // Научное мнение. 2017. № 2. С. 29-34.
4. Зуева В.С., Защирина О.В. Восприятие дошкольниками рекламных образов сказочных персонажей // Научные исследования выпускников факультета психологии СПбГУ. 2019. Т. 6. С. 53-57.
5. Ламминия А.М., Защирина О.В., Шелепин Ю.Е. Психофизиологический анализ процессов чтения и понимания текстов // Физиология человека. 2015. Т. 41. № 2. С. 23-28.
6. Полетаева Ю.Г. Специфика этической нормативности в контексте становления цивилизации // European Social Science Journal. 2013. № 7 (35). С. 27-34.
7. Руцкая И.И. Десакрализация российского провинциального пространства в процессе формирования туристских практик (вторая половина XIX – начало XX в.) // Теория и практика общественного развития. 2012. № 4. С. 221-224.
8. Руцкая И.И. Образы российских регионов в культурном пространстве России второй половины XIX – начала XX в.: автореф. дис. ... д-ра культурол. Наук. М.: Московский государственный университет им. М.В. Ломоносова, 2012. 45 с.
9. Руцкая И.И. Путеводитель как инструмент конструирования региональных достопримечательностей (вторая половина XIX – начало XX в.) // Вестник Московского университета. Серия 19: Лингвистика и межкультурная коммуникация. 2011. № 2. С. 53-64.
10. Руцкая И.И. Сюжет «похороны вождя» в советской живописи 1920-1950-х годов: поиски иконографического канона // Культура и искусство. 2018. № 10. С. 36-48.
11. Соколова А.Ю. К вопросу о функциях инфинитива в древнеанглийском языке // Вестник Орловского государственного университета. Серия: новые гуманитарные исследования. 2012. № 1(21). С. 194-198.
12. Тонких и др. Логические игры и задачи на уроках математики. Ярославль: Академия развития, 1997. 240 с.
13. Черниговская Т.В. и др. Психофизиологические и нейролингвистические аспекты процесса распознавания вербальных и невербальных паттернов коммуникации. СПб.: ООО «Издательство ВВМ», 2016. 203 с.