Environmental Education: Nurturing of the Humanistic Orientation of a Personality

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Abstract The way to a high ecological culture of a society lies through effective environmental education. Training of citizens with a high level of environmental knowledge, consciousness, and culture based on new criteria for assessing the relationship between human society and nature (not violence but harmonious coexistence) should become one of the main levers in addressing environmental and socioeconomic problems of modern Russia. The research is aimed at analysis of possibilities of environmental education in the upbringing of a humanistic orientation of the personality. Based on an expert survey, the article defines the principles of environmental education, the observance of which is necessary for the correct organization of environmental education in universities, increasing its efficiency in the formation of a humanistic orientation of the personality, and also highlights the structural components of the humanistically oriented personality of a specialist when implementing environmental education. The conclusions drawn can serve as the basis for the development of guidelines for the upbringing of a humanistic orientation of the personality in the process of environmental education. The materials and conclusions of the research can also be used in the practice of teaching pedagogical disciplines at

the university. The scientific novelty of the research lies in the identification of the structural components of a humanistically oriented personality of a specialist and the directions of their formation when implementing the environmental education.

Keywords Environmental Education, Environment, Humanistic Orientation of a Personality, Ecocentric Type of Consciousness, Ecologization

1. Introduction

In the past decade, much attention has been paid in scientific works devoted to the problems of conservation of the environment and harmonious development of mankind to the issues of forming ecological culture and consciousness, informing people about the ecological situation in the world, in the region, in the place of residence, and the awareness of possible ways of solving various environmental problems, with conceptual approaches to the conservation of the biosphere and

civilization [1-3].

The problem of effective environmental education, aimed at nurturing a humanistic personality, is relevant to the learning process, especially for young students, whose professional activity determines the future not only organized, according to the common sense, the environment but also the entire Russian people. It is necessary to teach students to understand the integrity of the Earth's nature and the unity of its processes and to identify the relationship between man and nature.

The harmonious coexistence of man with the natural environment is an essential factor of increasing the level of the humanistic status of society, the formation of the humanistically oriented personality of a specialist, characterized by the predominance of socially valuable and personally significant humanistic aspirations, interests, needs in the motivational structure; awareness of the basic provisions of humanism as the ones being socially significant and personally necessary; readiness for humane behavior; a reasonable combination of spiritual and material values; the desire to use their potential for the benefit of people; humane treatment of people [4-6]. The formation of a humanistically oriented personality is impossible without humanistic education, i.e. education based on respect for the person's personality, his rights and freedoms, aimed at educating a humane and comprehensively developed personality, resulting in the achievement of a humanistic ideal - the idea of a perfect person as the one being comprehensively educated and developed, aware of own individuality, vocation, the right to the free development of own abilities.

Training of the qualified specialist who understands tendencies of development of science and can think logically, i.e. to approach versatily to studying of each phenomenon in nature and society, in perfection knows the nature of the native land — is a primary goal of higher school and consists in the formation of the holistic person with a priority of universal values [7-9]. This is possible only with the training of a humanistically oriented specialist. Only humanistically oriented future specialists will be able to solve environmental problems based on scientific knowledge of processes in nature and practical experience, guided by universal humanistic ideals: love and respect for nature — the foundation and condition of human life, peace, and tranquility [10].

Considering the importance of environmental education, its nature and objectives should be defined. Due to the fact that the protection and improvement of the environment require the inclusion of a wide range of the population of different ages, levels of education, and professional orientation, environmental education should be adapted to all these categories of population, develop in them the understanding of the necessity to maintain ecological balance in the environment surrounding humans, and prevent hazards that may threaten humans in case of its violation [11, 12].

There are various interpretations of environmental

education. For example, it is necessary to give knowledge and develop the ability to assess the situation and see complex problems related to the environment [13]. There is also an opinion that environmental education should contribute to the formation of a constructive approach to the environment, both philosophically and pragmatically [14]. There is an understanding that environmental education should address the attitude of people to their natural and artificial environment, covering issues of population, pollution, resource use, and conservation of nature [14]. We can say that there is the same opinion in different definitions: environmental education is education on global conditions of human existence and strategy of preservation of these conditions with constant improvement of quality of life [16, 17].

According to J.E. Heimlich [18], environmental education as part of learning should contribute to a new approach to human attitude to their environment — as a unity of natural and artificial, linking the knowledge of natural and social sciences about the environment as a single and necessary human living space, which can be preserved with the constant development of science and technology. However, environmental education can contribute not only to the strategy of existence but also to the improvement of quality of life in specific environments.

M.E. Krasny and S.-K. Lee [19] believe that environmental education is aimed at forming environmental consciousness; it contributes to the development of the idea that a disturbance of environmental balance does not necessarily accompany an activity attitude towards nature but arises within certain socioeconomic relations. Environmental education should contribute to the understanding that preservation of the human environment becomes an important category in the system of society's values, and it should become a subject of people's ethical attitude towards their natural and social environment.

It is also appropriate, as T.A. Devyatova and co-authors see, to include to the tasks of environmental education the following: 1) the formation of environmental consciousness — the ability to understand the remote consequences of choosing a way of life and the use of technological advances; 2) to teach predicting the consequences of certain projects created by a person [20].

An important result and consequence of environmental education should be the formation of the humanistically oriented personality of a specialist with an ecocentric type of consciousness.

Training of a qualified specialist who understands tendencies and development of science and can think logically, i.e. to approach versatily to studying of each phenomenon in nature and society, in perfection knows the nature of the native land — is a primary goal of higher school and consists in the formation of the integral person with a priority of universal values. This is possible only with the training of the humanistically oriented personality

of the future specialist.

E.M. Nikireev [21] believes that the orientation of a personality is a system of dominant goals and motives of its activity, which determines its self-value and public importance; orientation, together with the worldview, is the highest regulator of human behavior and actions.

Psychologists [22-24] believe that the orientation of a personality as an integrative feature of a personality is manifested in early youth (16-21 years). They have identified such types of personality that are characteristic of this period of personal development: 1) humanistic orientation — positive attitude to oneself and society; 2) selfish orientation — a person is much more significant than society; 3) depressive orientation — a person is not valuable to oneself, attitude to society is conditionally positive; 4) suicidal orientation — neither society nor a person is valuable to oneself.

The pedagogical approach to understanding the direction of the individual is rather special. Scholar-pedagogues [25, 26] believe that orientation is the basis that determines the psychological content of a personality without exception, it is a sort of a core of a personality. Type of personality orientation is the leading direction in which a person asserts oneself and develops one's abilities.

The analysis of scientific literature on the role of environmental education in the nurturing of the humanistic orientation of a personality [27-30] allows making certain generalizations. A humanistically oriented person in the system of environmental education is a universal category regarding individuals irrespective of their professional features. This is a person living in harmony with people and nature; this is a person who treats people and nature as the highest value. It is characterized by the formed ecocentric type of environmental consciousness. It has a right for the development of its abilities, happiness, and freedom.

At the same time, it should be noted that the issues of upbringing the humanistic orientation of the personality in the system of environmental education have not received sufficient coverage, which led to the relevance and necessity of this study.

The objective of the study: the analysis of possibilities of environmental education in the development of humanistic orientation of personality.

Research objectives are as follows:

- to define and reveal the basic principles of environmental education that should be observed in the formation of a humanistically oriented personality;
- to highlight the structural components of the humanistically oriented personality of a specialist when implementing the environmental education;
- to determine the ways and directions of the formation of the main structural components of a humanistically oriented personality.

The research hypothesis: in the process of implementation of environmental education, a personality

of a humanistically oriented specialist can be characterized from the point of view of having formed the ecocentric type of consciousness, ecological thinking, and development of skills for econormative behavior.

According to the research results, we can conclude that the objective set in the research has been achieved.

2. Methods

General scientific methods were used to solve the tasks set in the work:

- a). theoretical: analysis of the reviewed scientific sources on the research problem to clarify the essence and objectives of environmental education, the concept of humanistically oriented personality, and the role of environmental education in the development of humanistic orientation of a personality;
- b). empirical: the expert survey in the field of the research. The experts were offered to fill in a semi-formalized questionnaire voluntarily.

At the first stage of the expert survey, the experts were asked about the basic principles of environmental education that should be observed in the formation of a humanistically oriented personality.

At the second stage of the expert survey, the experts were asked about the structural components of the humanistically oriented personality of a specialist when implementing the environmental education.

At the third stage of the expert survey, based on the responses received during the previous stages of the survey, the ways and directions of the formation of the main structural components of a humanistically oriented personality were determined: environmental consciousness, responsibility, thinking, culture, values, as well as the formation of the principle of environmental ethics.

Experts in the field of environmental education and nurturing (40 persons) and professors of higher education institutions, whose professional activity was related to teaching environmental disciplines for more than 3 years, took part in the survey.

The survey was conducted online in Russian on July 21, 2020; the survey was attended by the employees of the Lomonosov Moscow State University, Sholokhov Moscow State University for the Humanities, Russian State University for the Humanities.

Several questions on the principles of environmental education were put before the experts. Their observance is necessary for proper organization of environmental education in higher education institutions, improvement of its effectiveness in the formation of the humanistic orientation of a personality, and identification of structural components of the humanistically oriented personality of a future specialist in the implementation of environmental education.

All participants were warned about the objectives of the conducted research and that the organizers of the research

were planning to publish the results of the research in generalized form in the future. All quotations of the experts are given in the anonymous form.

3. Results

The experts believed that for correct organization of environmental education in higher education institutions and improvement of its efficiency, the following principles should be followed when forming a humanistically oriented personality (Table 1).

Based on the expert survey, structural components of the humanistically oriented personality of future specialists in the implementation of environmental education were identified (Table 2).

Based on the results of the expert survey, it is necessary to separately highlight the ecocentric type of environmental consciousness, environmental responsibility and new environmental thinking as the main structural components of a humanistically oriented personality.

Table 1. Principles of environmental education

No	Principle	%*
1	the priority task of environmental education is to form scientific ideas about the biosphere as a unique shell of the Earth, where life exists	82.5%
2	environmental problems are closely linked to demographic, energy, food, and raw material problems. Environmental education is at the heart of nature and human sciences. Therefore, the development of questions about the content and forms of work, methods, and methodology of environmental education is based on the fact that it is one of the most important directions to ensure the synthesis of natural and social sciences in the process of training, nurturing, and education	75%
3	environmental education should provide scientific insights into the social roots of global environmental issues. The problems of the relationship between nature and society are closely intertwined with a wide range of ethical and aesthetic issues	70%
4	the environment, all the natural and man-made, should be considered as a whole, approaching its assessment and characteristics of ecological, economic, social, legislative, cultural, and aesthetic positions	67.5%
5	environmental education and nurturing should be oriented towards active interaction between man and nature, based on the scientific basis and the evaluation of man as part of nature	67.5%
6	environmental knowledge, complemented by values, should become the basis of environmental culture and environmental thinking	65%
7	environmental education and nurturing should be continuous and constitute a subsystem in the higher education system	62.5%
8	as a result of the intersectoral nature of environmental issues, training should be provided mainly at the level of specialization	60%
9	goals that are related to understanding and solving problems linked to the environment should be clearly outlined in education goals at all levels and in all sectors	55%
10	there must be an agreement on the contribution that the different branches of science must make to understanding and solving environmental problems with particular emphasis on developing relationships that do not bring harm to the environmental quality	50%

Note: compiled based on the expert survey; * — the percentage of expert references

Table 2. The structural components of the humanistically oriented personality of a future specialist

No	Components	Content of a component	%*
1	ecocentric type of environmental consciousness	is characterized by an emphasis on harmony, interrelationship, interaction, and mutual development regarding the attitude of man to environment	90%
2	environmental responsibility	appropriate attitude towards nature, summarizes all the main characteristics of such categories as responsiveness, thriftiness, and humanity	85%
3	new ecological thinking	an active process of cognitive activity, aimed at the perception and display of a unified image of the world in its essential links and relationships, in practical and spiritual merging with it, as an awareness of the diverse values of the natural environment, which contributes to the harmonization of relations between man and environment	80%
4	ecological culture	is a measure of a person's moral maturity and, being deeply rooted in the subconscious, appears to be the presence or absence of the common sense of an individual or the whole society	75%
5	ecological values	their formation is reflected in the desire to protect nature from irrational human activity, critical attitude towards those achievements of science and technology that are used for the oppression of nature and manipulation of man, a propensity to find a way out of the environmental crisis, a sense of unity with nature, and refusal to meet pragmatic needs	72.5%
6	environmental ethics principle	considerably deeper reveals the essence of the personality, opens up new horizons of knowledge of the environment, and opportunities for dialogical communication, spiritual enrichment, and sources of "symbiotic" existence	60%

Note: compiled based on the expert survey; * — the percentage of expert references

4. Discussion

As the results of the expert survey showed, one of the components of the humanistically oriented personality of a future specialist is ecological consciousness.

The formation of ecological consciousness, according to one of the experts, "will occur under the condition of a reasonable combination of two ways: direct reflection in the consciousness of the current environmental situation and the formation of ecological consciousness through a targeted impact of society". The experts identified several directions for the purposeful formation of environmental consciousness. The scientific direction is based on the formation of a system of environmental knowledge, theoretical, practical, and constructive and creative knowledge in the field of ecology, psychology, pedagogy, and philosophy.

In the psychological and pedagogical direction, an important means of forming environmental consciousness, according to the experts (65% of respondents), is the change of students' perception of ecology from external knowledge to internal, personally significant one. It is necessary, first of all, that ecology becomes an integral part of mental essence. It means that ecology from an abstract viewpoint should occupy a psychological niche in the minds and feelings of students.

The most negative consequence of the 20th-century technicism, according to the interviewed experts (55%), is the transformation of society from cultural-historical to technological one and change of personality — humane, aspiring to high ideals, to spiritual-less, autonomous by its conscience, whose activity is regulated by technocratic thinking.

The experts stressed the importance of overcoming the technocratic approach in forming the model of a future specialist. In this case, overcoming the technocratic approach to the environment and environmental responsibility can be formed in a person with a new type of environmental thinking.

Considering the above-mentioned, the experts' opinion that all troubles in relations between society and nature begin with the loss of ecological culture at the level of personal values is important. Given this conclusion, it is appropriate to try to characterize the ecological culture. In our opinion, an environmental culture is a measure of human moral maturity and, being deeply rooted in the subconscious, appears externally as the presence or absence of the common sense of an individual or the whole society. According to one of the respondents, "manifestations of a person's ecological culture, first of all, can be seen from the entrance of the house where one lives to the arrangement of common areas, up to the organization of the production process and festive carnival".

The experts noted that today people are beginning to realize the importance of high ecological culture for health and life. According to one of the experts, "everybody

knows about the damage of the polluted environment, poor quality food, but for some reason, everybody thinks that it doesn't concern them specifically, that they can avoid the danger or it will bypass them. All this leads to the fact that each person seems environmentally conscious, but society lives and acts on the principle of suicide".

According to the experts, ecological culture is manifested in the following spheres: cognitive — reflects norms and values of professional activity, style of thinking, and system of ecological relations; emotional — development of spiritual, moral, and emotional manifestations in relation to the environment; motivational and volitional sphere — reflects the social and moral position of the future specialist in solving problems of ecology, their humanistic qualities and beliefs; conative sphere — implementation of ecological worldview in professional, social and cultural spheres, determined by the choice of ways to achieve environmental goals.

The concept of ecological values is inextricably linked to the content of the concepts of ecological consciousness, thinking, culture. The formation of environmental values, as indicated by the experts (70% of respondents) is reflected in the desire to protect nature from irrational human activities, critical attitude to those achievements of science and technology, which are used to oppress nature and manipulate man, the tendency to seek ways out of the environmental crisis, a sense of unity with nature, and refusal to meet pragmatic needs.

The experts believed that only the formed system of ecologically oriented needs, values, and attitudes of future specialists can provide further humanization of their professional activity, humanistic directions of economic and administrative decisions in the field of environmental protection.

An important aspect of the formation of a humanistically oriented personality, according to the experts (60% of respondents,) is overcoming the predatory attitude to nature and environmental ignorance. According to one expert, "today knowledge not illuminated by morality and spirituality, which has not passed through the prism of humanistic values, can bring irreparable harm to humanity. In the hands of an operator with the general low culture, any most perfect technique cannot only instantly turn into a pile of scrap metal but also become a threat to the population and the environment".

As the experts underlined, the important component of a humanistically oriented personality of a future specialist is one's economic behavior, which is based on a set of rules and requirements of rational interaction of a person with the natural, social, and artificial environment of one's existence even in ecologically adverse conditions.

Moreover, one of the priorities of society and education is the prevention of eco-deviant behavior, which is understood by the experts as a behavior based on the traits that damage the natural or anthropogenic environment. According to one of the respondents, "one of the main

reasons for eco-deviant behavior is the psychology of modern man, oriented to immediate results and unable to foresee the distant consequences of one's actions". One expert noted that, paradoxically, in ancient times, humans and nature were the unity, they did not oppose themselves to it and, even without knowing its laws, lived according to it. Having become stronger through their intellectual development, humans have now declared themselves the masters of nature and are seeking to conquer the biosphere instead of learning its laws, forming and adjusting their behavioral strategy according to them.

Another important element in the professional characterization of a future humanistic specialist, according to the experts, is the formation of the principle of environmental ethics. This principle reveals the essence of the personality much deeper, opens new horizons of knowledge of the environment, opportunities for their dialogical communication and spiritual enrichment, and sources of "symbiosis" of their existence to the young man.

Preparing a student for environmental activities includes helping young people to understand the personal and general public importance of environmental activities; confidence in the necessity of environmental self-education and environmental education of other people; the formation of environmental consciousness, ecologization of activities, and ecologization of knowledge. These stages are closely linked to each other. The man, who has only knowledge but in the practice deviates from the requirements of ecologization, certainly does not have ecological culture, and, on the contrary, cannot carry out practical activities without mastering certain knowledge. Ecologization of consciousness, on the one hand, contains both the set of knowledge and the possibility of purposeful activity.

According to the experts (55%), there is a lack of systematic approach to fundamental changes in the environmental education of students. The creation of a single multi-component system of continuous environmental education and nurturing is an urgent need of not only the state but also the international level. Environmental problems are characterized by a rather high degree of transboundary, which determines special and rather high requirements for filling of this system with content. A unified system of continuous environmental education and nurturing is an important and integral component of the set of ensuring the environmentally safe existence of the Russian population.

5. Conclusions

Thus, the results of the study confirmed the hypothesis that in the process of implementation of environmental education, the personality of a humanistically oriented specialist can be characterized from the point of view of forming an ecocentric type of consciousness, ecological thinking, and development of skills of economic behavior.

These components of the structure of humanistically oriented specialist can serve as criterion indicators of the formation of the humanistic orientation of a personality.

The formation of an ecologically safe state of the environment depends on a huge number of different factors, conditions, etc. Among the most important factors capable to influence in certain ways the formation of a safe ecological state of the environment components, or a certain territory, or even object is the humanistic orientation of a personality as an integral reflection of a whole complex of necessary special knowledge, beliefs, behavior, etc., which is based on sufficient information and observance of the main principles of environmental education and nurturing.

Thus, environmental education and nurturing need to be reorganized, significantly improved, and optimized based on deep philosophical and ethical understanding of the problem, considering the structure of environmental knowledge, the current level of environmental science, and the definition of social functions of ecology in society, tradition, customs, and historical experience in this area.

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