

# The model of “School of Ecological Culture”: development of children’s values of environmental ethics

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**Abstract.** Ecological culture of an individual is considered as the goal of education, a set of ecologically developed emotionally-sensual, intellectual, and activity spheres of personality. Approaches to modeling the process of education of ecological culture in the general education school are defined. The methodological basis is formed by axiological and culturological approaches, ideas about the co-evolution of Person and Nature, ecological ethics, ecological values, ideals of harmony of Person and Nature, replacing anthropocentrism, as well as relevant attitudes of consumer culture for competent nature management. The School of Ecological Culture is considered in the article as a development space for schoolchildren of positive ecological experience as being necessary for the development of a creative moral and ecological position in children. The education of ecological culture is a system-forming direction that integrates all the directions of educational activity. The structural-functional level of the model, approaches to the organization of the educational process are also reviewed by the paper. The main indicators of the effectiveness of the implementation of the model of education of the ecological culture of schoolchildren.

The design of the educational process is, as of today, one of the main functions of teachers in accordance with the requirements of a number of professional standards [1] and strategic documents in the field of education [2]. The current year of 2018 opened the Decade of Childhood in Russia in accordance with the Decree of the President of the Russian Federation No. 240 of May 29, 2017. It is no coincidence that the ideas of the childhood ecology [3], childhood conservation [4], which are grounded by the scientist-educators as the main vector of education for the sake of childhood. The design of the model or the modeling of the educational process refers precisely to the mechanisms of developing the upbringing, which, being subject to the realization of the subject approach, allows to take into account the interests of all subjects of upbringing, the interests of children, their characteristics, the development stages of the school collective, the problems and positive experience, best traditions, features of the region, the surrounding nature and society, the subject potential of the family, and other social partners of the educational organization. We

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have repeatedly said that it is impossible and not necessary to design a parenting program in a “parallel format” so that all areas of education are planned and deployed in parallel, and the program is turned into a set of programs, with hundreds of pages and duplication of activities. It is obvious for every teacher-practitioner that any event with children, whatever the topic, solves simultaneously a set of tasks, even if the teacher designates one leading task. The fact is that in joint activities within the framework of any event, a new socio-cultural experience is formed among the children. And regardless of the subject matter of the event, no matter what subject is studied at the school lesson, children always receive certain experience of interpersonal relations, role interaction, the embodiment of moral values, observance of moral norms, evaluation and self-esteem in the course of it, and still very much other types of socio-cultural experience, which, according to the conclusions of psychologists, is the foundation of the personal position of a growing person, and which is a number of our special works.

Education of ecological culture is one of the actual directions of upbringing in the conditions of modern civilization with its environmental problems based on anthropocentrism, ideas about nature as a source of human well-being, with its consumer attitude towards nature – nature management, whose values do not allow overcoming the predatory destruction of endangered species of animals and plants, cruel attitude to animals, hunting as an entertainment and other phenomena being based on the idea that a person is the highest value for all life on Earth, that a person is supposed to be given with the free gifts of nature, reign and rule at his/her discretion, consume with no limitations, destroy, kill ... because he/she is “the crown of nature.” Obviously, in what direction this anthropocentric picture of the world has already led and continues to lead.

Ecological culture is considered by us after B. T. Likhachev [5] and S. N. Glazachev [6] as a new quality of personality, a set of ecologically developed emotionally-sensual, intellectual, and activity spheres of personality and as a new quality of culture being oriented to the values of harmony with nature, the surrounding world, new eco-cultural values. In our opinion, these are, above all, the values of environmental ethics – the value attitude to Life as a phenomenon, as a unique phenomenon – Life on the planet, human life, the life of every living being, nature; that a person is born not to consume, but to create, protect, store his/her living planet; that a person, while being in the biological sense “the crown of nature,” is endowed with only one right, which is to bear responsibility for the prosperous existence, development, and nature. More than that, every living being also has the right to life. From the standpoint of ecological ethics, the ideals of harmony of Person and Nature, holism, co-evolution [7], having the moral, value attitude to nature instead of the ideology of the superiority of one life over another.

It is the eco-centered picture of the world, the values of ecological ethics, ecological culture that make up the axiological basis of the model of “School of Ecological Culture,” which determines the idea of the paramount importance of the culturological approach to the development of ecological education and upbringing. In environmental education, we see the need for the development of the humanitarian component, as it is shown in a number of other works, such as [8] and [9]. The culturological approach determines the priority value of the spiritual component in the system of human relations to the world, nature, as well as the moral imperative of the ecologized consciousness, the dominant of eco-cultural values. As a humanitarian field of environmental education, we proposed a course of environmental ethics [10], which is closely interrelated with the content of contemporary education.

In the model of the “School of Ecological Culture,” the development of ecological culture is seen as the leading goal, which leads the direction that integrates all other directions of upbringing. We also emphasize that the peculiarity of this model is the humanistic one, as well as subjective and activity-based approaches that determine the

concept of the “School of Ecological Culture” as a development space for children of positive environmental experience, the dynamic, adaptive, open nature of the model, its synergy, i.e. the possibility of self-development.

Modeling is a continuous process, the work of all subjects of upbringing, and it begins with modeling the simplest situations to solve the available problems, which is stipulated in the following content by describing it in a format of exemplary environmentally oriented projects, in which there is always a place for children’s initiative and goals. The development of the model is possible as a result of expanding the experience of its subjects in the implementation of eco-cultural values in practice. The content component of the model is conditioned by value orientations and can be presented in the form of several interrelated modules, thematic cycles of children’s projects, in which all the directions of educational activity are traced. For example, the “School of Environmental Ethics” (cognitive, creative, research projects in the framework of the corresponding supplementary education program or after-hour activities); “Information world for a living planet” (information projects involving children’s creation of media products, information exchange, information dissemination, publication of an environmental newspaper, etc.); “Green Ambulance” (working on practical environmental projects); “Save the beauty of the world” (a creative component: artistic, musical, and other projects that reveal the beauty of the nature and call for its saving); “Pets” (projects that expand the positive emotional experience of interaction with animals and plants, domestic animals bring the joy of communication being reflected in photographs, video clips, etc.); “Ecology in my world” (projects affecting the theme of the ecology of a person, safety, ecology of the soul). It is obvious that in every direction of upbringing, which is available in the educational standards, there is a place for environmental issues, which means that the education of an ecological culture can be a leading vector.

The next stage of designing the model is an organizational one, as a result of which a structural-functional model is formed. Its main components may be the following modules:

1. The module “Basic Education” is a structure that provides the educational process, the translation of the eco-cultural values through school lessons. In this module, the structures of pre-university training of children, based on the system of interaction with higher educational institutions.

2. The module “Additional education” is a structure with the function of creating additional spaces for self-realization of adolescents during extra-curricular time. These structures strengthen the specificity of the school, its orientation towards the formation of an ecological culture of the particular individual. In this module, there may also be structures being integrated with other social institutions (for example, the Institution of Supplementary Education Collaborating with the School), a vocational guidance system based on interaction with vocational education institutions.

3. The module “Socio-ecological creativity.” These are the structures of school self-government, perhaps the children’s environmental organization acting on the basis of the school, other amateur profile associations that include children and adolescents in extra-curricular time in socially and personally significant environmental activities.

4. The module “Information” includes the structures that form the information field of the educational institution, providing information exchange between other structures of the school team, participants of various environmental projects, and also between the school and other social institutions. The function of these structures is the output of the school collective into the broad information space, obtaining information necessary for effective activity.

5. The module “Monitoring” focuses on the structures that perform the functions of a system analysis of the effectiveness of the process of ecological education, the effectiveness of the environmental activity of the school collective, the ecological state of the school, and

the surrounding socio-natural environment.

6. The module “Leisure” is a structure with the function of organizing leisure activities for the subjects of the upbringing process in accordance with the ideas about the ecological way of life, holding creative evenings, other mass events, organizing children’s employment during vacation time, school ecological camps, etc.

7. The module “Coordination: the educational environment” implies the structures that ensure the coordination of the activities of the subjects of the environmental education process, including teachers, parents, and students, as well as the systematic ecologization of the school’s educational environment, its aesthetics, the legal framework for the environmental activities of the school collective, the moral norms of the relationship in the school team, being expressed in normative acts of school life, rituals, and traditions.

8. The module “Interaction: school – society” includes two types of structures: (1) having coordination functions at the level of interaction of the school with the society, (2) integrated structures. The latter include, along with representatives of the school representatives of other government agencies and public organizations that either perform guardianship functions, or they integrate the partners of the school collective in environmental activities or the object of care. Along with the modules that differ in the functions of the structural components of the “School of Ecological Culture” model, there are several levels of the school collective, each of which is present in each module. These are the basic levels of general education: primary school (1-3 (4) classes); basic school (grades 5 - 9); and secondary school (grades 10-11). These are a pedagogical team and the parent community.

A successful variant of organizing the vital activity of the aforementioned “floors” of the school collective is a certain plot-and-play instrumentation. For clarity, we give an example of the game structure “SHKER” - the School Ecological Republic, which unites both children and educators, as well as children’s parents. Its assets are the students of (9)-10-11 classes and substructures – “City of Ekograd” (unites students of 5-8 (9) grades) and the constellation of the Green Planets (primary school). Structural allocation of the primary and secondary level allows to take into account the age characteristics of children, to realize the programs and projects available to them, which is reflected in the structure of the governing bodies of the School Republic (in particular, in the bicameral parliament, the lower chamber in which is the House of Representatives of Ecograd).

The “constellation of green planets” structurally includes class-planets, each of which has its own name and a real corner of nature, which the children care about (on the school or adjacent territory, in the nearest forest park). Each “Planet” delegates its representatives to the “Star Headquarters,” in which children learn to perform coordination functions, which they would later have to perform in the bodies of school self-government. Each “Planet” has its own game symbolism, a map of the locality, and its inhabitants, namely their assignments, posts, and honorary titles. The implementation of projects in the constellation of the “Green Planets” allows children to get a “pass” to the city of Ekograd, whose search (based on the fairy tale about the Wizard of the Emerald City) is the plot-and-game basis of their activity throughout the primary school. A number of city structures operate: the Press Agency, the Education Department, the Culture Committee, the Sports Committee, and others; their representatives are part of the same units of the School Ecological Republic, and the City Hall of Ecograd is the lower house of the School Parliament. The Ecograd has its own traditions, laws, and honorary titles. Dedication to citizens of Ecograd, taking place in the 7-8 grade individually, provides adolescents the right to be elected to the upper house of parliament and to the role of heads of the school district units ahead of schedule (before entering the 9th grade and consecrating to the citizens of the Republic).

The “School Ecological Republic” unites all students, but its leading link is the students of grades 9-11. Representatives of these classes make up the upper house of parliament,

which has the right of decisive vote, represents the School Republic in other organizations, and delegates their representatives to the School Council. The school ecological republic interacts with institutions of additional education, for instance, (1) with the media of their city, district; (2) with the ecological committee of the city (district) administration, which provides social order to the republic; (3) with the forestry of the nearest forest park; (4) with employment services and landscaping services of the city (district), which also provide schoolchildren with a social order for performing ecologically significant works; (5) with children's libraries; (6) with clubs in the community, and other organizations. The System of Social Interactions of the School is formed and with the aim to ensure the early professional orientation of schoolchildren. Every citizen of the School Republic (the initiation into the citizens of the republic is one of the school rituals) receives a "work book" (play or real), in which the children can mark their projects and functional duties. At the end of the school, every graduating student is given a certificate of acquired knowledge and skills in the process of implementing social and environmental projects, being certified by those social institutions in the framework of cooperation with which the teenagers carry out their projects. The Constitution of the Republic is drawn up in such a way that the laws of the "Constellations of the Green Planets" and the laws of the "City of Ecograd" are reflected in its main provisions. Senior pupils (usually pupils of 8-10 grades) occupy leading positions in self-government bodies, are leaders in profile associations, and simultaneously (more often children from 10-11 cells) perform the functions of consultants.

The effectiveness of the implementation of the School of Ecological Culture is tracked by two groups of indicators.

The 1st group: indicators characterizing the conditions being created for the development of an environmental culture of the individual. The effectiveness of management decisions on the implementation of the model, the quality of the functioning of its main components, the state of information, personnel, program-methodical, financial and other types of support for the process of environmental education are analyzed. In the process of this analysis, there are facts such as the number and subject of the educational courses introduced in the school, their sequence, the enrollment of students; as well as the presence or absence of environmental topics in the content of teaching other subjects. The content of the ecological projects are carried out by children during off-hour time, the range of creative associations of children in the school center of additional education and the employment of students in them are analyzed. Studies are being conducted to assess the content of children's leisure, their participation in the activities of public environmental organizations, summer ecological camps, ecological expeditions, etc. That is, a formal account is taken of everything that "works" to expand the positive ecological experience of children, and it is a condition for the development of their ecological culture.

The 2nd group: indicators that characterize the level of ecological education proper, the formation of ecological culture of children of different ages. The range of these indicators is quite wide, as is the variability of those diagnostic technologies with which they can be identified. Note that in the field of pedagogical diagnostics and the method of pedagogical observation never lose their value; moreover, the results of conducted questionnaires, tests, and other types of "diagnostic slices" cannot be compared with the results of pedagogical observation. Indicators of upbringing are not precisely measurable indicators, which does not allow to have standards of upbringing of the person in general and ecological upbringing, in particular. However, there are a number of easily identifiable aspects of upbringing, the defining importance of which in the process of personality development has been repeatedly proven in pedagogical and psychological science.

First of all, this is the child's personal experience. Intensive accumulation of various types of ecological experience by the child is the guarantor of his/her progress in mastering of ecocultural values, the formation of his/her moral and ecological position. This is the

experience of observation, environmental activity, observance of moral and ecological norms of behavior, emotional experience, the experience of realizing one's emotions in various types of environmentally oriented creative activity, the experience of understanding environmental phenomena and assessing the environmental situation, and many others. Second, it is moral and ecological knowledge, ideas about the norms of ecological ethics, received by children in the process of ecological education and general education, interaction with the surrounding world. Third, this is a manifestation of a personal moral-ecological position by the child and its qualitative aspect, which reflects either the negative-destructive nature of the attitude, behavior, activity of the child in a socially acceptable environment, or an indifferent contemplative setting, at which emotional reactions to ecological phenomena are weakly expressed, and there are no active ecological actions; or passive-sympathetic one, in which the presence of empathy, emotional reactions to natural phenomena is not confirmed by behavior, activity, or, finally, an active creative position, in which the whole complex of environmental properties of the personality is realized.

The analysis of the results of the implementation of the model is carried out on the basis of a subject approach, with the participation of schoolchildren: an "independent incentive system" is an independent section of the environmental education program (its "children's sections" – the programs of the activities of children's profile associations, programs of project activities and activities of the children's environmental organization, etc.) Or, as it is also called, "steps of personal growth" of the child. It is in this system that children's positions in collective activities (positions of "active participant," "leader," "master of one's own business," "instructor," "pioneer," and others), their projects. The system has a gaming instrumentation. For example, students cut out from paper patterns of leaves of different trees symbolize different positions, and their color corresponds to certain areas of environmental activity. They are attached to the "branches" painted on the wall of the tree, and all together the trees serve as a wonderful decoration of the school building. After all, this is more than just a design, when this marvelous garden denotes the "flowering of the ecological culture" of adolescents, their real contribution to the ecological well-being of their planet, the need for self-development, and their readiness for independent choice in favor of eco-cultural values.

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