

## ECOLOGICAL EDUCATION OF PRIMARY SCHOOL STUDENTS (9-10 YEARS) THROUGH ORGANIZATION OF CLUB ACTIVITIES

Lubov Grigorieva<sup>1\*</sup>, Alina Okoneshnikova<sup>1</sup>, Nadezhda Okoneshnikova<sup>1</sup>, Ekaterina Pavlova<sup>1</sup> and Anna Sakerdonova<sup>1</sup>

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Today, when there is a huge influence of society on the natural environment, environmental education has an ever-increasing importance. The purpose of this paper is to identify and justify the pedagogical conditions that ensure an increase in the effectiveness of the process of ecological education of primary school students (9-10 years). Methodological literature of foreign and Russian authors and general characteristics of ecological education of primary school students are examined based on the theoretical analysis of the philosophical and psychological. The author's interpretation of the concept of ecological education as a process of awakening the ethnoecological consciousness of the children of the peoples of the North under the influence of modern forms and methods of after-hour time is offered. Levels of formation of ecological education of primary school students (9-10 years) are revealed. The pedagogical conditions for the formation of the ecological education of schoolchildren (taking into account the age characteristics of children of primary school age, ensuring the formation of environmental knowledge and experience of environmental activities, implementation of ethno-pedagogy of environmental education) are grounded.

**Keywords:** ecological education, primary school students (9-10 years), ethno-pedagogy of the educational process, club activity.

### I. INTRODUCTION

The urgency of the study is due to one of the main contradictions of our civilization, which consists in the discrepancy of the increased intellectual and technocratic capabilities of mankind with its moral and ethical consciousness. In modern conditions, when there is a huge influence of society on the natural environment, environmental education has an ever-increasing importance. After all, a human being is the only biological species in the world that disturbs the ecological state of nature and the planet as a whole. At the moment, it can be said without exaggeration that most people on the planet do not have any knowledge and skills about the state of the environment. Moreover, many people do not even try to acquire this knowledge, skills and knowledge to improve the ecological state of the world.

We entered the third millennium, in an era of new relationships with the environment. And the statement of N.N. Moiseev "In an era when people, in order to survive, have to start thinking differently than they have so far" [33] is becoming relevant.

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<sup>1</sup> Department of Primary Education, Federal State Autonomous Educational Institution of Higher Education "North-Eastern Federal University named after M. K. Ammosov". Pedagogical Institute, E-mail: \*lubov-grigor2011@mail.ru

The world of material production appears as a real life, and the world of spiritual values - the soul, nature, cultural heritage of the people - is not sufficiently embodied in the minds of people. Among everything, it is a question of insufficient, in the sense of compulsion, the effect of ecological consciousness as a form of public consciousness on the formation of an individual ecological culture of people. In the implementation of this task, environmental education takes on special significance.

The issues of ecological education of the younger generations have always excited outstanding teachers. Thus, the need to solve the problem of conservation of nature is justified in pedagogical science even in the days of Ya. A. Komensky in his principle of naturalness. He drew attention to the nature of all things, i.e. that all processes in human society proceed like the processes of nature. The pedagogical value of strengthening the humane feelings of the child by means of nature was emphasized also by such great teachers as J.-J. Rousseau, G. Pestalozzi, F. Diesterweg.

K. D. Ushinsky noted that nature is the most accessible and most useful tool for students, since the logic of the surrounding nature consists in the interconnection, the interaction of various constituent components. Studying the same existing in the world of communication serves as one of the main links in the formation of ecological education of schoolchildren. Sukhomlinsky repeatedly noted that nature itself brings up, especially educates the active impact in it.

Ideas of pedagogical heritage of the great teachers of the past were reflected in modern theories of ecological education and education. The theory, practice and tendencies of the development of ecological education and education were studied by I. D. Zverev, A.N. Zakhlebny, I.T. Suravegina, et.al. The problem of organizing a system of continuous environmental education and education was considered by S. V. Alekseev, N. V. Voronkov, S. N. Glazachev, N. V. Gruzdeva, G. A. Yagodin, et.al. Within the framework of ecopsychological problems, there should be noted papers by Yu. T. Abramova, S. D. Deryabo, V. A. Yasvin, et.al. Features of the organization of environmental education and education in institutions of additional education were studied by V. L. Teplov, O. G. Tavstukh, E. G. Sharonova, E. V. Ekzertseva. The problems of the formation of ecological education of schoolchildren were substantiated in the studies of L. S. Glushkova, T. N. Malovidchenko, T. A. Markova, O. I. Saltykova, et.al. The problems of environmental education in Russia and in foreign countries are considered in the studies of E.A. Ripacheva. Ethnic approach in the organization of ecological education and education is revealed in the studies of L. I. Grigorieva, A. Khalimov, and M. V. Emelyanova.

Foreign studies give attention to a sympathetic approach, to the personal participation of everyone in the conservation of nature. For example, J. Davis addresses people with such slogans: How can we cope with the major global social and environmental problems we are facing? What can we do when our relationship with each other and our relationship with the Earth change rapidly?

R. Hart argues that the environmental education program will be effective if it supports children in developing personal relationships with their environment. L. G. Legault, L. G. Pelletier, Impact emphasize the importance of family education, they believe that environmental education provides not only learning the environmental facts and concepts of different generations of people, as well as adopting a more environmentally sympathetic approach and behavior among students and their parents

Bioregionalism calls on a person to be closer to nature, to closely monitor it, to take responsibility responsibly to the place of residence, introducing deep respect for the native place in environmental education. C. Vaughan, J. Gack, H. G. Solorazano R. Ray in their study, consider intergenerational and intercommunity training as an approach to environmental education in a rural community in Costa Rica. This approach to environmental education in America is the result of a personal relationship to nature, an awareness of the priority of nature. American ecologist B. Commoner generalized the systemic nature of ecology in the form of four laws. These laws express the person's relationship to nature. The wording is as follows: "Everything is connected with everything", "Everything must go somewhere", "Nature knows best", "Nothing is given for nothing". These expressions became eloquent.

In Yugoslavia it is believed that teachers and teachers play an important role in the development and formation of the ecological consciousness of students. Therefore, they must have appropriate erudition in this area. Environmental education should be accompanied by knowledge in the field of natural and public environmental systems. In Sweden, a greater role in the ecological education of students is given to the involvement of children in nature. Creation of natural schools in Sweden is a response to the needs of the population, brought up on the feelings of respect for nature. Swedish teachers believe that environmental education can be presented in the form of a pyramid, based on the possibility of being in nature, followed by observations and studies of natural objects, resulting in an understanding of nature. Thus, students' understanding and awareness of their place in nature are achieved. That is why the initial stage of school education is so important in environmental education, when natural knowledge about the culture of relationships with the natural environment is systematized and generalized.

I. V. Tsvetkova, G. V. Bukovskaya consider environmental education to be broad (management of interaction of children as active subjects of activity with the surrounding natural and social environment, in the process of which their personal formation and adaptation to natural and social conditions takes place) and narrow sense (creation of pedagogical conditions conducive to the development of an ecological culture of the individual).

I. D. Zverev, I. T. Suravegina, L. P. Saleeva, L. V. Moiseeva consider environmental education as a component of environmental education, the essence

of this process is reduced to the formation of personal qualities that ensure responsible attitude to the natural environment [2].

The analysis of the literature on the subject of the study shows that the issues of environmental education of schoolchildren are studied quite widely and at different levels. However, environmental problems, as a rule, are of a global nature, and every person, every people lives in certain natural and geographical conditions, therefore, the need for global thinking is added to the requirement to act specifically based on real national and regional conditions. Therefore, we mean “ecological education” as a process of awakening the ethnoecological consciousness of the children of the peoples of the north under the influence of modern forms and methods of after-hour time.

In the North, environmental education of the younger generation is based on the inclusion of ethnoecological views and traditional experience with nature in the content of education of younger schoolchildren.

The world outlook of the Yakuts is reflected in the works of contemporary researchers B. N. Popova, I. I. Moiseev, I. S. Portnyagin, K. D. Utkin, A. S. Savvinov, et.al. I. S. Portnyagin notes the peculiarity of the education of the Sakha people, which is characterized by the high involvement of the man of the North in the world of nature and the education of a close connection with the high morality of the laws of nature. The ecological culture of the indigenous peoples of the Russian North has been elaborated on the sensory perception and awareness of the nature’s animation.

The purpose of this study is to identify and substantiate the pedagogical conditions that ensure an increase in the effectiveness of the process of ecological education of primary school students (9-10 years).

The hypothesis of the study was the following: ecological education of primary school students (9-10 years) will be effective if the following conditions are met:

- age features of children of primary school age are taken into account;
- formation of ethnoecological knowledge and experience of nature protection activity is ensured;
- ethnopedagogical education of ecological education is carried out.

Tasks of the research:

- On the basis of an analysis of theoretical material, to characterize environmental education.
- To identify the levels of the formation of ecological education of primary school pupils (9-10 years).
- To justify the pedagogical conditions for the formation of the ecological education of schoolchildren (to take into account the age characteristics of children of primary school age, to ensure the formation of ethnoecological knowledge and experience in environmental protection, and the ethno-pedagogy of environmental education).

The following basic research methods were used to solve the problems:

- 1) methods of theoretical research: study and analysis of philosophical, psychological, pedagogical, ethno-pedagogical and ecological literature;
- 2) analysis and systematization of information-pedagogical and educational materials on environmental education and enlightenment in Russia and foreign countries;
- 3) empirical methods: observation, conversation, questioning, psychological-pedagogical and statistical-mathematical analysis of experimental research.

The methodological basis of the study is fundamental research in the field of environmental education (I. D. Zverev (1983), S. N. Glazachev (1996), N. N. Moiseev (1996), I. N. Ponomareva (1998), E. A. Reimers (1992), I. T. Suravegina (2002), G. A. Yagodin (1984), J. Davis (1998), R. Hart (1994), L. G. Legault-Pelletier, L.G. Impact (2000), C. Vaughan, J. Gack, H. G. Solorazano, R. Ray (2003), S. V. Alekseev (2006), et. al.). General philosophical issues of ecological education and the formation of ecological culture (E. V. Girusov (2000), V. I. Danilov-Danilyan (1997), N. M. Mamedov (1996), N. N. Moiseev (1996), A. D. Ursul (1996), et. al.). Ideas of ecological education in extracurricular and after-hour activities (A. N. Zakhlebny (2001), S. V. Alekseev (2000), R. M. Nurizyanov (2000), et. al.). The problems of ecological education and ethnic approach of schoolchildren were justified in the studies of L. I. Grigorieva (2000), A. Khalimov (2004), and M. V. Emelyanova (2006).

The scientific novelty of the research consists of the following:

- the essence is revealed and the concept of “ecological education” is justified, we understand this as a process of awakening the ethnoecological consciousness of the children of the peoples of the north under the influence of modern forms and methods of after-hour time;
- ethnopedagogical education ethnoecological cultural identity involves the inclusion in the content of education of traditional knowledge and experience of interaction and coexistence with the surrounding nature of the peoples of the North, i.e. the awakening in children of historical memory of information messages about the relationship with nature.

The theoretical significance lies in the fact that the ethnopedagogical process of ecological education contributes to the awakening of the ethnoecological consciousness of children 9-10 years old; the developed criteria, indicators, levels of ecological education of pupils of 3-4 classes allow operatively supervising process of ecological education of children, to estimate results of pedagogical activity.

Practical significance of the research is that research materials can be used by teachers, methodologists, and teachers of additional education in the practical provision of environmental education.

## II. METHOD

O. I. Saltykova in her dissertation study identifies two main approaches to the construction of specific diagnostic techniques for studying environmental well-being [26]. She emphasizes that these approaches differ in the nature of the diagnostic subject. In one group of studies, methods are proposed that are not based on a conceptual approach to the problems of studying the levels of ecological education. The subject of diagnostics in them is the level of assimilation of ecological knowledge, principles, rules of ecological behavior, as well as the direction of selected acts of behavior in ecologically significant situations. Along with this, she emphasizes that in the works of the second group, the methods developed by the authors are closely related to the theoretical, conceptual vision of the problem. In this case, the subject is the identification of data on two (or three) components of environmental activities. The methods (Saltykova, 1999) considered by O. I. Saltykova were developed and used mostly for middle school students, that is, the age of 14-15 years, which, in our opinion, should reflect and reveal the level of a certain component of the activity of ecological education.

The Ecological Encyclopedic Dictionary defines environmental education as the formation of a person's conscious perception of the natural environment, the conviction of the need for careful treatment of nature, the wise use of its resources, natural resources. In his textbook, B. T. Likhachev considers the term "ecological education" as a purposeful systematic pedagogical activity aimed at the development of ecological education and education of children, the accumulation of ecological knowledge, the formation of skills and activities in nature, the awakening of high moral and aesthetic feelings, the acquisition of highly moral personal qualities and a firm will in the implementation of environmental protection [13].

In our opinion, the methodology for detecting the level of ecological education of children of 9-10 years should correspond to their psychophysiological features of development. Thus, we used the methods of diagnostics, which is the study of the content of individual components of environmental activities, cognitive and behavioral. The nature of ecological knowledge of students of 9-10 years, their understanding of some environmental problems and a conscious value attitude to nature have been studied and evaluated.

In the course of the methodological study of the ecological education of children, we determined the role of psychological features of the development of children in it. Logical in the issue of environmental education of children believe that it should be based on their early development and the possibility of diagnosing their ecological education. Thus the theoretical material for diagnostic tasks has been studied to determine the level of knowledge of children about animals and plants; diagnostics of the development of labor activity in the care of living objects, diagnostic tasks for determining the attitude of children to nature, N. F. Vinogradova believes that if one is based on the three main components of the pedagogical

process of “knowledge - attitudes - behavior”, then we should pay attention to two principal provisions: 1. the level of ecological education of a person is determined not by the fact that he knows the rules of behavior in nature, but by the way he observes these rules; 2. taking into account the psychological characteristics of children under 7 years of age, emotional feelings related to the process of communication with the object of nature, rather than information about it, received from adults are more relevant for them.

Agreeing with the opinion of N. F. Vinogradova, we think that it is necessary to emphasize the special importance of organizing the conditions for establishing emotional ties between the child and nature and its various activities in it (i.e., the two components of the pedagogical process - “attitude - behavior”). The presence of ecological representations does not determine the positive result of educational influences. Knowledge is only a means of forming an ecological education. Therefore, not only the level of knowledge is diagnosed, but also the relation of children to nature [26].

To carry out the experimental work, a joint activity was organized to investigate the problem of ecological education of children with primary school teachers of municipal general state-financed education institution “Yakutsk City National Gymnasium” in Yakutsk, the Republic of Sakha (Yakutia). Participants in the experimental work were children aged 9-10 years in the number of 72 primary school students: 3rd grade - 35 students, 4th grade - 37 students. Of them, 29 boys: 3rd grade - 14, 4th grade - 15; 43 girls: 3rd grade - 21, 4th grade - 22.

To determine the level of ecological education of children, we chose psychological and pedagogical methods-pedagogical observation, interviews, questionnaires, questionnaires, essays (written, oral), adapted to the psychophysiological development of children.

In particular, the article described the results of the questionnaire on L. V. Moiseeva to determine the level of formation in children 9-10 years of the system of knowledge and a conscious value attitude of schoolchildren to nature. The questionnaire consists of 9 statements with which the student should agree or disagree, for each agreement with the correct statement, the student was credited with 1 point if the answer to the statement was incorrect - 0 points. Ranking of the received answers allowed grouping the respondents' answers by points. The author of the methodology suggests the answers of students who have received from 1 to 3 points to a low, from 5 to 7 - medium, from 8 to 9 - high level of formation among pupils of the system of knowledge and a conscious value attitude of schoolchildren towards nature.

Thus, the criteria for assessing the level of formation among pupils of the knowledge system and the conscious value attitude of schoolchildren to nature were: high, average and low levels. High level implies the presence in the answers of children 9-10 years old: knowledge of the interrelations and relationships of

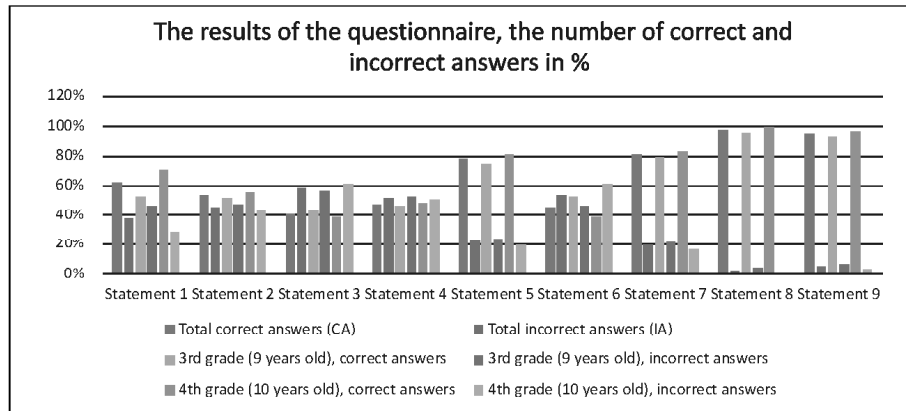
organisms in nature; communication with representatives of the animal and vegetable world, caused by care for them; knowledge and implementation of norms and rules of behavior in nature; ecological knowledge and elements of ecological well-being have been formed quite well. Average level consisted of the answers of the children showing: insufficient knowledge of the ecological interrelationships of organisms in nature; insufficient knowledge and implementation of generally accepted rules in nature; ecological knowledge and ecological education are formed on the average level. Low level consisted of the answers reflecting: lack of knowledge of ecological linkages and interdependence of organisms in nature; children's answers, with a low level of control over their behavior, actions in nature; a low level of the formation of ecological knowledge and education.

The analysis of the obtained results of the conducted questioning is shown in Table 1 and Diagram 1.

TABLE 1: THE RESULTS OF THE QUESTIONNAIRE TO DETERMINE THE LEVEL OF FORMATION OF THE KNOWLEDGE SYSTEM AND THE CONSCIOUS VALUE ATTITUDE OF SCHOOLCHILDREN TO NATURE IN THE CHILDREN OF 9-10 YEARS OLD (PERCENTAGE DATA FOR CONVENIENCE ARE GIVEN UP TO WHOLE INDICATORS)

Statement	Total		3rd grade (9 years old)		4th grade (10 years old)	
	Quantity of correct answers (%)	Quantity of incorrect answers (%)	Quantity of correct answers (%)	Quantity of incorrect answers (%)	Quantity of correct answers (%)	Quantity of incorrect answers (%)
1. We should to take care of animals, because they benefit a human being	62	38	53	47	71	29
2. If I see a garbage dump during a walk in the forest, it will upset me.	54	46	52	48	56	44
3. While in the forest, pick a bouquet of flowers and give them to your mother.	41	59	43	57	39	61
4. If you see a bee, kill it, it can bite.	48	52	47	53	49	51
5. When you come to the forest, do not make noise, you will disturb the birds on the nests with noise, you will scare the animals.	78	22	75	25	81	19
6. Our country is rich in natural resources, these reserves will never end.	46	54	53	47	39	61
7. A human being should take care of plants, since life is impossible on Earth without them.	81	19	79	21	83	17
8. Plants and factories can harm the environment	98	2	96	4	100	0
9. Nature is the environment	95	5	93	7	97	3





Statement “We should to take care of animals, because they benefit a human being”, 62% of the total number of respondents gave correct answers, incorrect answers - 38%. The following answers were received from 3rd grade students (9 years old): 53% - correct, 47% - incorrect. The following answers were received from 4th grade students (10 years old): 71% - correct, 29% - incorrect.

Answers to the statement “if during a walk in the forest I see a garbage dump, it will upset me” showed: total: correct – 54%, incorrect – 46%; among them, children of 9 years old: correct – 52%, incorrect – 48%, children of 10 years old: correct – 56%, incorrect – 44%.

The statement “while in the forest, pick a bouquet of flowers and give them to your mother”, the number of correct answers was 41%, incorrect - 59%. Among them: 43% of 9-year-olds answered correctly, 57% - incorrectly, 39% of 10-year-olds answered correctly, and 61% answered incorrectly.

Primary school students gave the following answers to the statement “if you see a bee, kill it, it can bite””: of the total number of children, 48% answered correctly, 52% - incorrectly, among them: 47% of third graders answered correctly, 53% - incorrectly, 49% of fourth graders answered correctly, 51% - incorrectly.

Let us consider the children’s answers to the statement “when you come into the forest, do not make noise, you will disturb the birds on the nests, you will scare the animals”. Of the total number of children - 78% gave the correct answer, 22% - incorrect. Among them, third graders: 75% answered correctly, 25% - incorrectly, among fourth graders, 81% answered correctly, 19% - incorrectly.

The answers to the statement “our country is rich in natural resources, these reserves will never end” of only 46% of children received 1 point, among them 53% - third graders and 39% - fourth graders, answers of 54% of respondents were not estimated, among them, 47% of 9-year-olds and 61% of ten-year-olds.

“A human being should take care of plants, because life is impossible on their own without them” - for this statement the answers of 81% of all the respondents

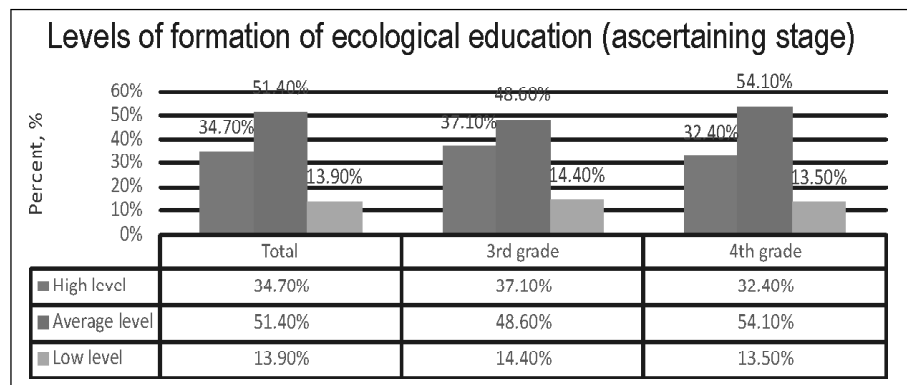
received 1 point, among them, nine-year-olds - 79%, and ten-year-olds - 83%. Incorrect answers were given by only 19% of children, 21% of them are nine-year-olds and 17% of ten-year-old children.

Correct answers to the statement “plants and factories can harm the environment” were given only by 98%, incorrect - 2%. Among them, 96% were correct answers of 3rd grade students, incorrect - 4%, 100% of answers of 4th grade students received 1 point.

Correct answer to the last statement “nature is the environment” was given by 95% and they received 1 point for them, 5% of the answers were not estimated. Among them, 93% of 3rd grade students answered correctly, incorrectly - 7%; 97% of the answers of 4th grade students were rated for 1 point and 3% for zero points.

TABLE 2: THE RESULTS OF THE DISTRIBUTION OF RESPONDENTS' ANSWERS TO THE LEVELS OF ECOLOGICAL EDUCATION

Levels of ecological education	Total (72 children of 9-10 years old)		3rd grade (35 children, 9 years old)		4th grade (37 children, 10 years old)	
	Q-ty of children	%	Q-ty of children	%	Q-ty of children	%
High	25	34.7	13	37.1	12	32.4
Average	37	51.4	17	48.6	20	54.1
Low	10	13.9	5	14.3	5	13.5



The questionnaires of children who answered correctly, that is, received 8 to 9 out of 9 possible answers, were grouped and assigned to a high level: a total of 25 student responses (34.7%), including: 3rd grade (9 years old) - 13 (37.1%), 4th grade (10 years old) - 12 (32.4%). Average level of the formation of ecological education showed, the questionnaires of children estimated and received from 5 to

7 points: Total of 37 children, which amounted to 51.4%. Among them, 3rd grade - 17 (48.6%), 4th grade - 20 (54.1%). The questionnaires of children who answered correctly and received 1 to 3 points for them were identified as having low level of environmental development: total of 10 children (13.9%), among them, 3rd grade - 5 (14.4%), 4th grade - 5 (13.5%).

Thus, from the analysis, the obtained results show that 34.7% of children 9-10 years old (high level) showed in their responses: knowledge of the interrelations and relationships of organisms in nature; communication with representatives of the animal and vegetable world, caused by care for them; knowledge and implementation of norms and rules of behavior in nature; ecological knowledge and elements of ecological well-being have been formed quite well. In the answers 51.4% of students (average level) the following can be traced: insufficient knowledge of the ecological interrelationships of organisms in nature; insufficient knowledge and implementation of generally accepted rules in nature; ecological knowledge and ecological education are formed on the average level. Answers of 13.9% of students (low level) showed: lack of knowledge of ecological linkages and interdependence of organisms in nature; children's answers, with a low level of control over their behavior, actions in nature; a low level of the formation of ecological knowledge and education.

To implement the above-mentioned goal, we have developed the program called "Young Ecologist". In developing the "Young Ecologist" program, whose goal was to create conditions for the formation of ecological education in children (9-10 years old), the age characteristics of students were taken into account. To implement the program, we determined the forms of the club activity:

- intraschool: environmental games, quizzes, organization of exhibitions, photo exhibitions, presentations;
- extracurricular: excursions, observations, experiments, experiments, protection of projects, joint activity of students and parents.

The selected forms of work were due to the peculiarities of the development of the psyche and the cognitive activity of children of 9-10 years old. As studies of psychologists show, at this age, abstract-logical thinking is formed, which is associated with the knowledge of natural and social laws reflecting the essential relationship between objects and phenomena in the surrounding world. The motivational sphere of children of 9-10 years old also has its own peculiarity, expressed in a sharp change of interests. If 9-year-olds have a typical interest in adults, then at 10 years their interest in peers increases. 9-10 years old children are characterized by grouping, communities with a clear structure, organization, rules. Consideration of the age characteristics of 9-10 year old children suggests the organization of an ecological club in their interaction with the gradual complication of various forms of work. Education with regard to the age characteristics of children observes the principle of naturalness of education.

Even in antiquity it was supposed that education should have a natural basis and, despite the long ignoring of this idea, a significant and bringing up role of nature was revealed by Ya. A. Komensky. As ever, the saying of the great teacher is relevant: "To properly teach youth is not to drive the mixture of words, phrases, sayings and opinions gathered from the authors, and this means - to reveal the ability to understand things, so that from this ability, as if from a living source, brooks flowed, just as from buds of trees grow leaves, fruits, and the next year from each kidney will grow a whole new branch with its leaves, flowers and fruits" [5]. According to the principle of Komensky's naturalness, man and nature are inseparable and the "natural method" of education is aimed at the development of the child's personality in its natural process of development "from within".

K. D. Ushinsky believes that the essence of the principle of naturalness is concluded in the following judgment: "The teacher must look at the desire for spiritual activity as the main life requirement of the soul... every human soul requires activity and, depending on the kind of activity that the educator and the environment gives to it and which it finds for itself, this direction And will accept its development" [8]. Ushinsky also attached great importance to the "internal" basis of the laws of personal development, ethnic originality. Observance of the principle of naturalness of ecological education is in relation to children as a part of nature, reliance on individualization of the educational process, the use of nature as an enabling environment for the development of children.

Among the peoples of the North, a respectful attitude to the surrounding nature is inherent from time immemorial, which has unique ethnoecological opportunities for education of the younger generation. Even V. A. Sukhomlinsky singled out the important significance of nature in the education of children, when a child is experiencing, he himself comprehends the secrets of nature and is attached to it. Ethno-ecological education is based on the development of folk traditions and customs, the dignity of which lies in their connection with life in practice.

Based on the foregoing, in organizing the club activity on the ecological education of children (9-10 years old), the following tasks were identified:

- formation of ethnoecological knowledge aimed at understanding the environmental laws of peoples living in the North;
- formation of ethnoecological consciousness based on the traditional way of life of northern peoples;
- acquisition of experience of nature protection and creative activity taking into account ecological traditions and customs of the peoples of the North.

The program of the club activity was developed in such a way that during the ethnoecological education of children a complex impact on the cognitive, emotional and volitional spheres of children's development was realized. The substantive part of the club activity was developed with the inclusion of

ethnoecological world outlooks and world outlooks of peoples living in the Republic of Sakha (Yakutia).

The cognitive block of the contents of the program of the club includes scientific knowledge about the properties of objects and phenomena of nature, their diversity, the connections between them, and forms a scientific picture of the world. The values block of content reveals to children the significance and value of the natural environment, assesses the facts of human-nature interaction in accordance with the norms of morality and the worldview. Behavioral activity block of content is the observance of rules of behavior in nature, participation in environmental activities. Each studied block is based on the study of folk traditions and customs of its people and peoples of the North.

Specificity of ethnoecological views of the peoples of the North lies in its system of genetic memory, which is explained by the historically formed way of life activity, based on the centuries-old experience of previous generations in nature management, in respect of the environment, in the representation of a human being as part of nature. Ethnopedagogical education of the ethno-ecological cultural personality implies the inclusion of traditional knowledge and experience of interaction and co-existence with the surrounding nature of the peoples of the North in the content of education, that is, the awakening in children of historical memory of information messages about the relationship with nature.

### III. RESULTS

The final data of the results of experimental work convince us that the effectiveness of the formation of ecological education of children 9-10 years old will significantly increase with the assimilation of ethnoecological knowledge, the awakening of ethnoecological consciousness on the basis of the traditional way of life of northern peoples; acquiring experience of nature protection and creative activity.

1. Students from a young age are capable of perception of the world, which helps them to orient themselves in value principles. This is evidenced by a conversation among students "What exactly attracts nature?". As it turned out, for students of lower grades, nature is "the place where we were born," "nature is beauty," "nature is where you can swim," "many flowers," "wild animals," "clean air", etc. From the data obtained follows the diversity, brightness, beauty of nature, the visibility of its connections and dependencies ensure the accessibility of their understanding by children and have a significant impact on the improvement of their conscious activity. Therefore, teachers choose for the presentations of students such topics as "Nature's wonderful vision".
2. How do you act if you become an eyewitness of an inhuman attitude to nature?
  - a) I do not react, b) Internally outraged, c) I will tell adults about it, d) I will make a comment by myself, e) I will discuss it in the family, with friends.

Students' answers, taking into account age characteristics of children 9-10 years old, shows that students of 9 years are more dependent on adults. And the education of an ecological personality directly depends on the continuous purposeful work of the teacher in preventing a heartless attitude to everything living, manifestations of cruelty, callousness, disregard for nature; facts of rude attitude to nature. Therefore, it is important to teach children to admire nature, respectfully look at everything that grows, blooms, moves. When studying the formation of ecological education, we applied the following criteria:

- personal beliefs, environmental responsibility;
- practical actions in a real situation;
- the combination of ecological knowledge with the post-apex component of behavior in nature;

From this it follows that the formation of a belief based on that morality, in which ethnic and universal moral values are reflected, the development of the ability to critically evaluate the value of one's right behavior in the natural environment can bring up an ecological person.

3. From the obtained data it was revealed that in children the mercantile interest prevails. In the first question they all went on about the fact that the animal world is necessary for a human being. The question "Take flowers for mother" is more agreeable to students of the 3rd grade. On the 6th question, they answered that "the country will never run out of natural resources", because we live in a relatively pure natural environment, where, in their opinion, the endless resources of nature. We can partially agree with this. They are aware of the main global problems of the environment. Thus, summing up the survey, it can be concluded that the ecological education of the majority of students in the fourth grades participating in the experiment is at an average level. Therefore, our task will be to raise the level of the formation of ecological education of children by including them in extra-curricular activities.
4. As for the questions about the customs and traditions of the peoples of the north, the answers of the children were shown by the knowledge, developed by life experience, by observations of adults: this is a treat of Mother Earth, a treat of the Spirit of Fire, "Baai Bayanai" of the Spirit of Hunting, prohibitions "Do not shout in alas", use of amulets made of horse hair, etc. Education as the assimilation of skills in traditional culture is directly related to nature. The specificity of the traditional northern culture is that it as a system is a "code" - suitable for transferring information to other codes.

Therefore, education in the traditional northern culture is primarily the transfer and assimilation of vital information messages through rituals and games organically built into household practices.

According to the custom of many northern peoples, a woman is considered to be “unclean”, so there are many restrictions: she should not step over the hunting things of a man, step on them, should not eat meat of a swan.

Boys from an early age go with fathers to hunt and fish, for berries, learn to catch deer with a lasso, they can build homemade huts from tree branches, take care of horses, ride horses. They learn to navigate in the locality from an early age.

Girls observe, and then learn to be mistresses themselves, acquire the skills of heating the stove, cooking food, preparing thread-veins, making fur products. Girls of 8-10 years old learn weaving from horse hair in clubs. This is a traditional women’s craft. When working with horse hair, children learn the simplest kinds of weaving. Then they use the skills they learned to make different types of headgear. Getting acquainted with horse hair and sewing different products from it is complicated with every year of training. For example, the club “Weaving from horse hair” engages children for 3 years. Such clubs are practiced in many schools in the north.

The acquisition of experience in environmental and creative activities is facilitated by traditional environmental measures: “Autumn Ball”, “Arrive, the Bird”, “Earth Day”, in the arctic regions - “Meeting with the Sun”, competition of posters and drawings, excursions and hikes in May. Not only students participate in these forms of ecological education, but also their parents, the whole school staff. Modern forms and methods are more oriented to the development of the personality of each student. The children from the club “The Wonderful Visions of Nature” share in their speeches observations from life, empathy, awareness of the need for personal participation in environmental activities: how to care for your pet, how to grow vegetables, how to properly harvest medicinal herbs, how to preserve nature.

One of the problems of our time is the problem with the information sphere of development. The substitution of virtual forms of activity by virtual ones, the weakening of connections between children and adults, between peers and children of different ages lead to the isolation of children from collective activities, distorts their socialization, and violates the processes of their development.

To solve the above-mentioned problems in the Yakutsk City National Gymnasium, the joint activity of the student, parents and the teacher to create a self-made local history game “Alaas (small homeland) is famous for its name, the Motherland - achievements” under the initiative of the Yetianov family is organized with local knowledge maintained by a variety of teaching methods, Education and socialization: gaming, practical, research and project activities.

In the course of the local history game, the younger schoolchildren, through own activities, in cooperation with their peers and the teacher, take certain values, moral attitudes and moral norms: family (love and faithfulness, health, veneration of parents, care for seniors and younger ones), nature (life, native land, reserved

nature, planet Earth), humanity (diversity and equality of cultures and peoples, international cooperation). Teachers find very interesting topics, where even first-grade students can participate: Collective 1 “a” YaCNG and State-Financed Entity Republican Zoo “Orto - Dojdu” signed an agreement on the patronage by a class over hares.

Currently, each child is engaged in educational research work from April 1, 2016, the Department of Primary Education Pedagogical Institute North-Eastern Federal University n.a. M. K. Ammosov with a methodical association of primary school teachers of municipal general state-financed education institution “Secondary School No. 19: and of municipal general state-financed education institution “Yakutsk City National Gymnasium” is holding a republican conference “Steps to Creativity”. The conference is one of the forms of demonstrating the results of the students’ learning and research activities and the form of creating conditions for demonstrating the best achievements of the educational and research activities of students in the general schools of the republic in the directions: “The World of Plants and Animals”, “Nature and a Human Being”, “The World Around Us”, “Healthy Way of Life”, “The History of the Native Land”, “Family History”, “The World of My Hobbies”. Students choose the topic of interest and conduct a real experiment. They explore the entire diversity of the native land.

Thus, the process of awakening the ethnoecological consciousness of the children of the peoples of the North is possible on the basis of: empathy, complicity, personal participation in various nature conservation activities, and awareness of the conservation of wildlife.

#### **IV. DISCUSSION**

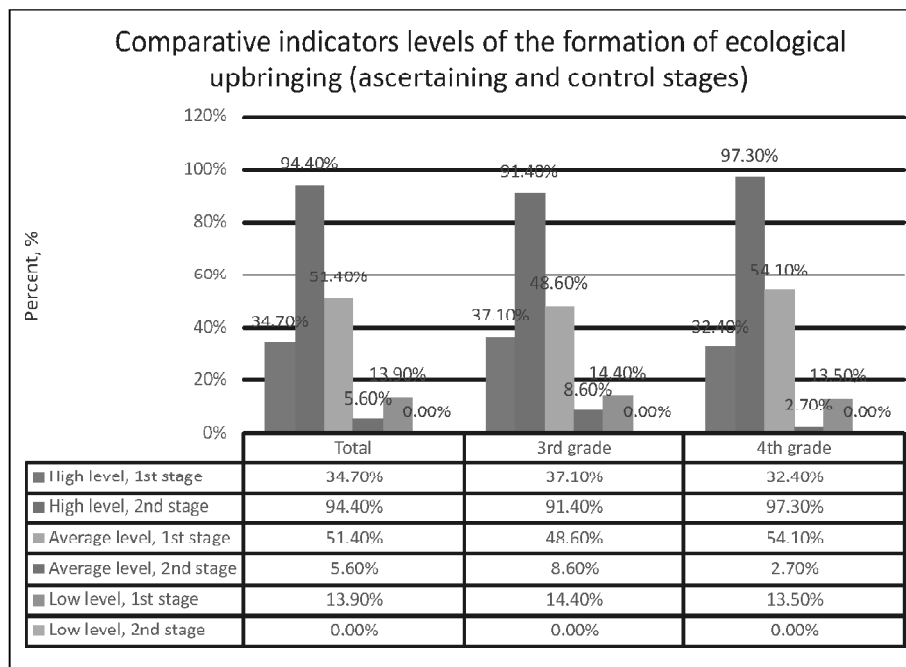
Based on the theoretical analysis of the philosophical and psychological, methodological literature of foreign and Russian authors, the general characteristics of ecological education of primary school students (9-10 years old) is singled out. Inclusion in the world of nature of the peoples of the north is noted. All traditions and customs of the peoples of the north are closely connected with nature. In connection with the severe 7-month winter and cold, the peoples of the north are totally dependent on the favors of nature, the realization of this is transmitted on a genetic level. An understanding is made of ecological education as a process of awakening the ethnoecological consciousness of children of the peoples of the north under the influence of modern forms and methods of extracurricular time.

The dynamics of formation of ecological education of junior schoolchildren testifies that in the course of experimental work in the experimental classes the number of children with a low and below average level has gradually decreased, which is shown in Table 3 and Diagram 3.



TABLE 3: COMPARATIVE INDICATORS OF THE RESULTS OF DISTRIBUTION OF RESPONDENTS' ANSWERS TO THE LEVELS OF ECOLOGICAL EDUCATION

Levels of ecological education	Total (72 children of 9-10 years old)		3rd grade (35 children, 9 years old)		4th grade (37 children, 10 years old)	
	Ascertaining stage	Control stage	Ascertaining stage	Control stage	Ascertaining stage	Control stage
High	25 (34.7%)	68 (94.4%)	13 (37.1%)	32 (91.4%)	12 (32.4%)	36 (97.3%)
Average	37 (51.4%)	4 (5.6%)	17 (48.6%)	3 (8.6%)	20 (54.1%)	1 (2.7%)
Low	10 (13.9%)	0	5 (14.3%)	0	5 (13.5%)	0



High level: before - 25 (34.7%), now - 68 (94.4%), 3rd grades: from 13 (37.1%) increased to 32 (91.4%), 4th grades: before 12 (32.4%), now 36 (97.3%).

Average level: in total before - 37 (51.4%), now - 4 (5.6%). Including, 3rd grades: before - 17 (48.6%), now - 3 (8.6%), 4th grades: before - 20 (54.1%), now - 1 (2.7%).

Low level: In total, before - 10 (13.9%), including 9 years old: before - 5 (14.3%), 10 years old: before - 5 (13.5%). During the visit to the club, the children's

level of ecological education has increased, so at the control stage no one showed a low level.

The pedagogical conditions for the formation of ecological education of schoolchildren are grounded:

- consideration of age features of primary school age schoolchildren;
- under the influence of modern forms and methods of after-hour time, the formation of ethnoecological knowledge and experience of environmental protection is ensured;
- the process of ethnopedagogy of ecological education presupposes the inclusion of traditional knowledge and experience of interaction and coexistence with the surrounding nature of the peoples of the North in the content of education; the awakening in children of historical memory of information messages about the relationship with nature.
- the completion of the study opens up opportunities for new scientific research, in particular further research on the problem of ecological education of children in rural areas and the urban environment.

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