

UDC 373.3.015.31:502/504]:37.064.1

Alina Sbruieva

Sumy State Pedagogical University
named after A. S. Makarenko
ORCID ID 0000-0002-1910-0138

Alla Kolyshkina

Sumy State Pedagogical University
named after A. S. Makarenko
ORCID ID 0000-0001-9598-1830

DOI 10.24139/2312-5993/2018.03/240-254

PROGRAMME-METHODOLOGICAL SUPPORT OF SCHOOL AND FAMILY INTERACTION IN THE FORMATION OF THE PUPILS' OF PRIMARY SCHOOL ENVIRONMENTALLY EXPEDIENT BEHAVIOR

The article is devoted to the formation of the pupils' environmentally expedient behavior in the interaction between school and family; the problem of methodological support for environmental education of the primary school pupils is being solved. The aim of the article is to substantiate the author's programme "Ecoworld" on the formation of the environmentally expedient behavior of the primary school pupils in the interaction between school and family. In order to achieve the aim of the publication, a set of special diagnostic methods was used, through which separate components of the investigated quality were measured successively: polling students to identify knowledge about environmental behavior and interactions in nature, environmentally expedient behavioral motives, environmental activities. The methodological support for the environmental education of the primary school pupils is developed: the programme-methodological complex "Ecoworld" ("Ekosvit"), which covers the program of the ecological circle "Ecoworld" ("Ekosvit") and methodological guidelines for the organization of its work; methodological guidelines for work with parents regarding the formation of the environmentally expedient behavior of the primary school pupils. It has been proved that activation of interaction between parents and the teacher, diversification of forms and methods of work with parents and pupils, and involvement of parents in the direct participation in the educational process for the formation of environmentally expedient behavior of the primary school pupils showed a qualitatively new level of organization of the environmental education of schoolchildren.

Key words: *environmentally expedient behavior, environmental education, program "Ecoworld", primary school pupils, ecological circle, parents of the primary school pupils.*

Introduction. Man has been and remains an integral part of nature, so its vital activity depends entirely on the well-being of the natural environment. Harmonious relationships between man and nature are the key to the viability and health of human civilization. An essential condition for the harmonization of human actions with the laws of nature is, for today, the formation of the personality of the ecocentric type and creation of a new order and rules of coexistence of man with nature. Therefore, environmental education of citizens is one of the priorities of our country. Accordingly, in the Law of

Ukraine “On the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period up to 2030” is emphasized on the necessity of “inclusion of the issues of the ecological culture formation and environmental education in state target, regional and local development programs”. The importance of environmental education is defined in the Laws of Ukraine “On Education”, “On General Secondary Education”, the National Strategy for the Development of Education in Ukraine for the period up to 2021, the National Program for the Upbringing of Children and Youth, and other normative documents. Formation of one of the key competences – “Environmental Literacy and Healthy Life”, defined in the Concept of the New Ukrainian School, – is one of the objectives of the educational process in primary school.

Analysis of relevant research. The complex of issues related to environmental education was the subject of the comprehensive study by the native researchers. Thus, scientific approaches to environmental education in modern conditions have been developed in the studies of A. Zakhliebnyi, H. Pustovit, whose works highlighted the conceptual foundations of the research and proposed appropriate methods.

The problem of environmental education of schoolchildren has been studied in various aspects, in particular: N. Pustovit considers formation of the environmental competence, the issues of value attitude to nature are revealed in the studies of O. Kolonkova, ecologically motivated behavior of students is reflected in the works of I. Trubnik. The study of the essence of this problem was also conducted by considerable efforts of the foreign scientists who view the main role of the environmental education in the formation of the environmentally expedient behavior and responsibility of the individual for the preservation of nature in the process of learning knowledge, attitudes, value orientations, ability to make decisions and solve local environmental problems [4; 5; 6]. Scientists believe that it is necessary to form ecologically oriented attitudes and values, to form knowledge and skills of a research character, which promote the development of creative and business activity in solving environmental problems and related life situations, to involve students in practical activities to solve environmental problems in their area.

Of great importance for the disclosure of the psychological-pedagogical characteristics of the behavior of the primary school pupils are the scientific developments of L. Bozhovych and S. Rubinstein, in which it is emphasized that the components of behavior of the primary school pupils are deeds as evidence of the moral achievements of the person. In his studies I. Bekh substantiates that junior school age is sensitive to the formation of conscious behavior.

Together with school for the formation of the environmentally expedient behavior, family is responsible as the real subject of environmental education of the individual. This necessitates the definition of preconditions and development of the ways of increasing the effectiveness of the interaction of

families and schools in the environmental education of schoolchildren. Scientific approaches to family education in modern conditions are highlighted in the studies of T. Alekseienco, who emphasizes the need to harmonize the impacts that carry on children various subjects of the educational process. Certain aspects of the interaction of all the educational structures of the society, the joint activity of school and family in the education of schoolchildren are found in the works of T. Kravchenko.

Aim of the Study. The aim of the article is to substantiate the author's programme "Ecoworld" on the formation of the environmentally expedient behavior of the primary school pupils in the interaction between school and family.

Research Methods. An experimental study was conducted with the primary school pupils (grades 1–4), as well as with their teachers and parents. A total of 282 primary school pupils, 278 parents, and 15 primary school teachers participated in the research-experimental work.

Assessment of the data, which had been obtained using diagnostic methods, was carried out on the basis of the defined criteria and indicators of formation of the environmentally expedient behavior of the primary school pupils. Accordingly, the levels of formation of the environmental behavior are estimated, which are assessed on a four-level scale – environmentally expedient (5 points), environmentally situational (4 points), pragmatic (3 points) and environmentally inexpedient (2 points).

In order to identify the level of environmental knowledge, environmental motives, readiness for environmentally expedient actions and deeds the survey method was used in the study, which we considered as a means of collecting primary material that should be checked by other methods. The survey was carried out both in written (questionnaires) and in oral (interviews) forms. Oral survey was carried out with pupils of 1–2 grades in several stages. This method represented a direct interview with the respondent. Questionnaires that had been developed taking into account the age characteristics of the primary school pupils contained a small number of questions in order not to disperse the attention and allow the pupils to focus on each question.

In the questionnaires the questions were grouped into units, each of which gave an opportunity to get answers according to certain positions. In total, 3 units of questions were developed, each of which was aimed at obtaining diagnostic data on three components: cognitive, emotional-value, action-activity.

Responses of pupils were compared with answers of parents to similar questions received during parental meetings. This comparison was aimed at corresponding knowledge, attitude and behavior of parents with the same characteristics of children, identifying further directions of work with parents on the formation in children of the environmentally expedient behavior. After all, only if the actual picture of a certain phenomenon is found out, it is possible to

identify those aspects that require further elaboration, to identify possible ways of increasing the effectiveness of the upbringing impact on the primary school pupils.

Questionnaire for pupils of the 3–4 grades contains the following logically related question units:

1. “Environmental knowledge”.
2. “Environmental motives”.
3. “Environmental behavior”.

The survey was aimed at obtaining the necessary information for a relatively short period of time. The questionnaires were developed on the basis of research of the environmentally expedient behavior of the primary school pupils conducted by O. Kriukova and adapted to the purpose of our work.

At the next stage of the experiment, were held such conversations: “The role of nature in my life”, “Nature and my family”, “My behavior in nature”. They gave an opportunity to explore deeper the psychological characteristics of the child, the nature and level of his/her knowledge, interests, motives and actions by analyzing the data that contained their answers to the proposed questions.

During the observation there was accumulated a significant number of facts that characterized the attitudes of the primary school pupils to nature, their behavior in different situations, emotions, and expressions related to the assessment of their behavior and behavior of others.

In order to find out the peculiarities of the environmental behavior of pupils in nature, imaginary and real problem situations were also created. This made it possible to immerse a child in specific circumstances, marked by certain contradictions that had to be resolved. When choosing one or another way of solving the problem, the child showed his/her attitude, gave an assessment that showed the level of formation of the environmentally expedient behavior.

In order to process the results, the Monte Carlo method was used for verifying the effectiveness of the pedagogical conditions for the formation of the environmentally expedient behavior of the primary school pupils in the interaction between school and family.

Results. The natural basis for the formation of the environmentally expedient behavior is age periods during which develop the child’s various relationships with the natural and social environment. Each age in the progressive formation of the environmentally expedient behavior as a process of acquiring experience and achieving a definite result of education is important in its own way. In the primary school the foundations of the outlook are laid, the elementary knowledge about nature is accumulated, and ethical feelings are formed. Great attention in primary school is paid to the formation of children’s knowledge of human-nature relationships, the upbringing of a value relation to nature, care for its preservation and multiplication, and the ability to recognize nature, because the junior school age occupies a special place in the system of education as a sensible to socio-natural influences.

Researchers of the ecological psychology and pedagogy S. Deriabo and I. Yasvin note that at junior school age the natural objects are becoming increasingly subjective: for many primary school pupils they become “significant others”. The attitude towards nature, first of all, is manifested in the cognitive sphere, but still dominates the cognitive component, which is a kind of “residual” from the pre-school period [1].

The analysis of psychological-pedagogical literature allowed to reveal the structural components of the environmentally expedient behavior (knowledge of objects of nature and norms and rules of behavior in nature, interest in objects of nature, the relation to objects of nature as subjects of interaction, experiences in relation to objects of nature, conscious actions and actions, predetermined by the goal of nature preservation), as well as to formulate its definition for primary school pupils.

Consequently, environmentally expedient behavior of the primary school pupils – are actions and deeds in the direct and indirect interaction with nature, linked to each other by the purpose of preservation of nature, conditioned by the habitual to the primary school pupils non-pragmatic subject-subjective attitude to objects of nature or externally regulated by adults (teacher, parents). The study of the problem of formation of the environmentally expedient behavior of schoolchildren makes it possible to distinguish the features of this process for the primary school pupils.

The realization of this goal will not be successful without conscious pedagogical position of the parents, who must see in the communication of children with nature not only the goal – formation of a humane attitude to it, but also a means of harmonious development of the child’s personality. Therefore, it is necessary to investigate the possibilities of the family in forming the environmentally expedient behavior of the primary school pupils, as well as to identify how the school, on the one hand, manages this process, and on the other – uses the experience of parents in the process of environmental education in extra-curricular time.

Thus, the results of the pedagogical experiment convincingly show that the issue of forming environmentally expedient behavior in primary school is paid some attention, but work in this direction is not always systematic; pedagogical education of parents on this issue is not widely reflected in the work of teachers; forms of interaction with families are monotonous. In regards to the study of the influence of families on the formation of the environmentally expedient behavior of schoolchildren (Table 1), the most numerous is a group of parents inclined to episodic interaction, who understand the need for environmental education, seek to raise the level of pedagogical culture, but not always adhere to the proper conditions.

Table 1

Groups of parents concerning the interaction with school in the case of environmental education of the pupils, %

Groups of parents	Number
Active interaction	14,0
Episodic interaction	58,5
Autonomous-detached interaction	27,5

According to results of the survey, the number of parents, set up for autonomous-detached interaction, in percentage terms was 27,5 %. This shows that a significant proportion of families do not pay attention to the environmentally expedient behavior, their attitude to interaction with school is negative or indifferent. The smallest was the group, which included parents who on the basis of the results were assigned to the group of active interaction. Consequently, the last two groups of parents require skilled pedagogical assistance.

Thus, the results of the experiment indicate that there is an urgent need to develop a programme for teachers on organization of the educational extra-curricular work with students and increasing the preparedness of parents to form the environmentally expedient behavior of junior pupils. According to many scholars, extra-curricular work contributes to the development of cognitive interests, creative skills of the pupils and organization of their activities by interests. By sharing this view, we believe that circle work is the optimal and effective form of organization of interaction between school and family in order to form an environmentally expedient behavior of the primary school pupils.

The circle work was carried out according to our programme-methodological complex "Ecoworld" (author A. Kolyshkina), which includes programme-methodological guidelines for organizing the work of the ecological circle. The programme is scheduled for 36 hours (2 hours per month), of which: 13 hours of theoretical and 23 hours of practical classes.

In work of the circle "Ecoworld" according to the programme, which we had developed, took part all the pupils of the class. The circle as a logical continuation of the educational subject "Natural Sciences" was aimed at generalization and systematization of environmental knowledge, formation of the environmentally expedient motives and habits of the environmentally expedient behavior, as well as organization and coordination of the interaction of school and family (at the class level) concerning formation of the environmentally expedient behavior of the primary school pupils. The work of the ecological circle "Ecoworld" involves the subject-subject relations of the teacher, parents and pupils and aims at actualizing the creative potential of the child.

The consideration of the personality-oriented approach involved providing the teacher, parents and pupils with the status of active interaction

subjects. They were not passive performers of the beforehand prepared proposals by the organizer of the circle, but positioned themselves as independent creative individuals. The study of each topic was necessarily aimed at ensuring that circles learned to analyze the consequences for the nature of their activity or inactivity, that is, to take into account the environmental feasibility of their behavior.

The program included 20 topics and provided various forms of work: excursions, practical work, research workshops. Various methods were used at the classes of the circle: audiovisual, verbal, methods of heuristic learning (heuristic observation, forecasting), project method, etc. The choice of methods in each case was determined by the type of interaction between parents and pupils (Table 2).

Classes of the circle “Ecoworld” were held twice a month. Influence on the intellectual, emotional and volitional spheres of the personality of the primary school pupils facilitated the integrated approach to the formation of their environmentally expedient behavior: learning of the rules of conduct in nature, awareness of the relationships in nature, contradictions in the interaction of mankind and nature.

Table 2

Types of interaction between parents and children

Acquiring ecological knowledge	Formation of environmental motives	Practical ecological activity
Conversations, reading and discussion of literature on nature, telling story about the need to review every person’s habitual norms and rules of conduct in nature and in life, phenological observations, their discussion	Taking photos, drawing of the objects of nature (plants, animals, landscapes, etc.); discussion of actions of people in nature and their consequences for nature, common definition of norms and rules of human behavior in nature	Preparation of feed for birds and their feeding in winter, care of pets, indoor plants, work on a land plot (kitchen garden, preschool area), manufacturing of products from natural materials and wastes; formation of skills and habits of the environmentally expedient behavior in everyday life: saving water, electricity, sorting garbage

Taking into consideration the effectiveness of the pedagogical influence, the most effective method is a conversation. So, during the conversations, children were introduced to the ecological situation in the region, examples of non-constructive behavior in nature, the interrelationships of living and inanimate nature, the need to preserve nature and protect the objects of living and inanimate nature; the need for ecological knowledge for practical activity of people were emphasized; the essence of the content of natural concepts was disclosed.

The content of the conversations was determined in such a way that, due to the involvement of the pupils in the proposed topic, a positive emotional attitude toward environmental behavior, a desire to adhere to its norms and rules, and a negative attitude to those who violate these rules arose.

Simulation and role-playing environmental games were used in order to expand and deepen knowledge about the norms and rules of behavior in nature, to correct the daily behavior of the primary school pupils in relation to nature, and to form proper motives for behavior. This choice was due to the fact that the game is positively perceived by pupils of this age category and at the same time is important for the formation and development of the personality. The game affects the emotional sphere of the student, promotes formation of arbitrary mental processes. The conditions for its implementation require concentration on the content of the action and the plot, on the characters of the actors involved in the game situation. The latter influences the thinking of the child, contributes to the development of his/her reflection and gives the opportunity "to develop the ability to comprehend their own actions, to predict the reaction of other people" [2, p. 20].

Role-playing and simulation environmental games refer to the type of environmental games, based on the simulation of the social and substantive content of environmental activities. These games belong to active methods and allow simulating or solving a particular environmental situation when pupils are finding ways to solve the problem through joint efforts. Role-playing and simulation environmental games play an important role in the current practice of environmental education and are suitable for any age group and student groups as an effective method of environmental education [3].

Role-playing behavior during the game is complicated. There is an example that directs the child's behavior and which is a benchmark for control; it is assumed that the actions determined by the model are foreseen; takes place comparison with the sample, i.e. control. By taking on a particular role, the child is guided by its rules, subordinates his/her behavior to their observance.

Actions during role-playing and simulation environmental games are focused on the rules of human-nature relations, norms and rules of environmentally expedient behavior. While playing, the child appears to fall into the realm of human relations with nature. The norms and rules that make up their foundation, are becoming the source of the formation of the environmentally expedient behavior of the primary school pupils.

Thus, the game of ecological content contributes to the realization of the child's behavioral potential in relation to nature, provides an understanding of his/her own activities in nature. Based on the fact that the game always takes place in an imaginary situation, we tried to create it not only during classes, but also on excursions.

An excursion as a form of organization of the educational process promotes the convergence of school and family, the positive emotional mood of the participants in the interaction. Determining the content of excursions, we were guided by the recommendations of T. Baibaria, L. Narochna, H. Kovalchuk. The parents of the pupils of the experimental classes took an active part in preparing for excursions and conducting them.

During the excursions were used various types of work: explanation of the leader, purposeful observation of pupils, their arbitrary observations, games, problem situations, sketches, etc. Conducting of excursions envisaged taking into account the following conditions:

- perception of children as researchers, which contributes to the development of their observation ability, helps them understand the relationships in nature;
- observance of the norms and rules of the environmentally expedient behavior in nature;
- provision of effective assistance to natural objects;
- reasonable collection, which provided for a complete refusal to collect living objects of nature.

In further work there was used the method of solving problem situations, which included the acquisition of knowledge about nature, the formation of skills of saving natural resources, environmentally expedient behavior in nature, finding the most optimal ways to solve the problem. In choosing the situation, we took into account the recommendations contained in the pedagogical literature on the relevance of the problem embodied in the situation, its realism and its typology [8] and relied on the following criteria:

1. Inclusion of the processes, phenomena, actions of characters in the content of the situation, which can be understood by the pupils of primary school.
2. Reflection of deeds and actions related to observance (violation) of norms and rules of the ecological behavior.
3. Incitement to specific actions and deeds that would involve the display of the environmentally expedient behavior.

In the basis of the plots of the problem situations were laid the stories and fairy tales, as well as examples from the real life. Thus, situations connected with reproduction of the actions of a friend (colleague of the father or the mother) contributed more to the formation of assessment skills. After all, the ability to evaluate others helps to evaluate somebody's own actions, that is, to carry out self-esteem, which is an indicator of personal development. In the assessment and self-assessment the link between world outlook and human behavior is evident; they are regulators of behavior and activity.

According to A. Zakhliebnyi, I. Zvierev, T. Kucher, and L. Simonova, participation of the primary school pupils in various forms of nature-saving activities contributes to the formation of the environmentally expedient behavior.

Therefore, the programme of the ecological circle "Ecoworld" envisaged creation of the environmental projects, doing practical works, conducting experiments with the elements of nature saving and other types of environmental activities.

The project activity was aimed at acquiring knowledge about nature, stimulating the interest of the primary school pupils to the problems of animate and inanimate nature, solving certain problems of interaction with nature. The project method offers wide opportunities for the development of creative abilities of the individual. In psychological literature it is emphasized that every child needs to open life as a space for creativity, a permanent combination of existing ones and creation of the new forms of behavior. By developing projects, primary school pupils meet their own needs and interests, solve contradictions in the interaction with the natural world.

Primary school pupils participated in projects with pleasure and interest, showed initiative, made their own choices and decisions at the affordable level. Work on the environmental projects "Domestic animals", "Save electricity!", "Save water!", "Do not miss!" provided understanding by each pupil of the purpose, designing the plan, developing a plan, working on it, presenting the results (newspaper, album, staging). Practical project activity is focused on solving current day-to-day issues and household problems, for example: "Caring for indoor plants", "Growing Flowers", "Preparation of Seeds for Birds", "Making and Setting up Feeders", "We clean at home, at school and around" and so on.

Pupils' work contributed to expanding their knowledge of the interrelations in nature, the awareness of the factors of its pollution, the need to preserve plants and animals, energy and water conservation ("How to save energy", "Burning" – how the air becomes polluted, "Acid rain" – how the soil becomes polluted, "Solutions" – how the water becomes polluted). The elements of the environmental activity of the primary school pupils are:

- protection of the environment (feeding homeless animals, making and setting up feeders for birds, feeding birds, fighting garbage, etc.);
- improvement of the natural environment (planting, making flower beds, rational use of electricity, water, careful and economical use of paper, etc.);
- propaganda of nature conservation ideas (talking with friends, parents, other adults, making and distributing leaflets);
- saving of natural resources (collection of natural materials, manufacture of panels, other products, recycling of things, sorting waste).

During the research work much attention was paid to the formation and development of the primary school pupils' interest in nature, because it reveals a value attitude to objects of nature as the subjects of interaction. Interest, on the one hand, is an incentive for the formation of such an attitude to nature, and on the other – its result, which marks the relative completeness of a certain stage of environmental education.

It should be noted that the circle work was carried out with high activity of pupils, who were eagerly expecting each subsequent lesson. This success was facilitated by the fact that the parents who participated in their training had been taught to take classes and were competent in the main issues. Therefore, every lesson did not look like the previous one and it happened in a special emotional atmosphere. The participation of parents contributed to raising the interest of children not only in the work of the circle, but also in the problem as a whole, emphasized its importance.

Preparation of parents for participation in the work of the group was carried out in the process of purposeful motivation to interact with the school. Motivation took place in stages in the following forms of work: during meeting of parents (collective (five times a year), group (twice a month) and individual work (if it is necessary for all the sides of interaction). The step-by-step approach provided a differentiated organization of pedagogical education of parents and their voluntary involvement in the work of the ecological circle.

The purpose of work with parents was to make them realize the relevance of environmentally expedient behavior of every citizen; to improve theoretical and practical training for the environmental education of the primary school pupils; to get acquainted with the content of methodological recommendations and involve those who wish to participate in the work of the circle on certain topics. The programme and corresponding methodological guidelines are laid in the basis of pedagogical work with parents. Methodological guidelines for work with parents contain topics, each of which is aimed at studying the problems in the context of the topics of the circle "Ecoworld".

Classes with parents were directed at:

- 1) increasing their environmental literacy, forming an interest in the environmental problems;
- 2) awareness of the importance of the interaction of school and family with regard to the formation of the environmentally appropriate behavior of the primary school pupils;
- 3) formation of the desire of parents to improve their theoretical and practical preparedness for the environmental education of schoolchildren through pedagogical education and self-education.

Classes with parents were developed taking into account the guidelines concerning:

- the focus on psychological-pedagogical assistance to parents in self-development, which comes not only from the teacher, but mainly from parents themselves;
- presence of a more or less permanent group;
- application of active and interactive methods of work;
- objectification of mutual subjective feelings and emotions of the group members;

- creating relaxed atmosphere, psychological comfort.

Classes were conducted using a variety of interactive methods. As V. Diachenko notes, interactivity means the ability to interact or stay in conversation mode, dialogue with someone. According to the Ukrainian teachers O. Pometun and L. Pirozhenko, interactive methods enable the process of learning, mutual learning (collective, group learning in cooperation). Such a choice was caused by the fact that the interactive activity involves organization and development of dialogical communication of its participants, promotes understanding, interaction during solving common but important for everyone tasks of environmental education.

Communication and cooperation of parents provided for the solution of various problems concerning the ecological upbringing of the child, acquisition of knowledge and experience of the environmentally expedient behavior.

As has been noted above, during classes with parents, collective, group, individual and independent work was gradually carried out.

The first stage involved collective work, which took the form of thematic parent meetings. So, according to the teachers (M. Osipova, H. Butrym, I. Melnychuk), such meetings are devoted to an actual topic, in which a significant part of parents is interested in discussion. They have an educational character and are aimed at expanding the knowledge of parents in the field of their children's education. Parent meetings were characterized by structural clarity: the formulation of the goal; defining tasks; recommendations on the organization of various types of educational work; the final stage (summing up, "homework"). The peculiarity of the meetings was breaks for parents, filled with contests, riddles, "curiosities from the teacher".

The second stage was implemented in group work. The motivation of the parents was facilitated by counseling aimed at providing advice on environmental education, awareness, support and development of their children's environmentally expedient interests in the world of nature. As P. Jakobson noted, it is extremely important for parents to understand what they really care about and their children worry about, to which they are indifferent or disrespectful.

During group work were used exercises, conversations, discussions of the problem situations, etc. Organizing work in the groups, the following tasks were chosen, which included activity of all the participants, their interaction with each other and with all the members of the groups, led to the production of ideas, creative approach to solving the pedagogical or environmental problem. Consultations were conducted both on the initiative of parents and teachers.

The third stage of parents' motivation took place in an individual form. Parents needed to clarify the nature of the problems that arose, and possible ways to overcome them, and teachers found out certain points related to the behavior of the child or the parents themselves, which had a purely individual manifestation.

During the development of a program of work with parents, preference was given to forms and methods that provided not only the broadcast of certain information (stories, conversations), knowledge acquisition, response to a specific question, but also induced them to search independently for the problem solutions (exercises, analysis of problem situations, etc.).

Therefore, the fourth stage was implemented in the form of independent work through the selection of the content of “homework” (observing with the child the objects of nature, selection of “environmental issues”, implementation of joint tasks, testing of advice received during the study, an appeal to parents with a request to provide help for the child in something) that gave parents the opportunity to test the expediency of their knowledge in the conditions of their families, help the child in learning nature and environmental activities.

Thus, after the implementation of the identified forms and methods of formation of the environmentally expedient behavior and on the basis of the obtained cumulative results on the structural components, the levels of formation of the environmental behavior of the primary school pupils (in control and experimental groups) were determined and their dynamics was traced. The dynamics of the levels of formation of the environmental behavior of the primary school pupils from the beginning to the completion of the experimental work in experimental groups was: for the environmentally expedient level – $28,9-12,0=+16,9$ %, for the environmentally situational – $40,8-28,9=+11,9$ %, for pragmatic – $25,4-36,6=-11,2$ %, and for the environmentally inexpedient – $4,9-22,5=-17,6$ %. In the control groups, insignificant changes were found in the levels of formation of the environmental behavior of the primary school pupils: the environmentally expedient level – $14,3-11,4=+2,9$ %, the environmentally situational level – $32,8-29,3=+3,5$ %, the pragmatic level – $34,3-37,2=-2,9$ %, the environmentally inexpedient level – $18,6-22,1=-3,5$ %.

Thus, final assessments aimed at determining formation of the indicators of the structural components of the environmentally expedient behavior among the primary school pupils showed their improvement at the environmentally expedient and environmentally situational levels and decrease at pragmatic and environmentally inexpedient levels.

Conclusions. The introduced author’s programme-methodological complex “Ecoworld” includes the programme of the ecological circle “Ecoworld”, methodological recommendations for its organization, methodological recommendations for work with parents in relation to the formation of the environmentally expedient behavior of the primary school pupils and showed a qualitatively new level of organization of the environmental education of schoolchildren. In its structure there were outlined the forms and methods of work with parents and pupils, involving parents in direct participation in the educational process on the formation of the

environmentally expedient behavior of the primary school pupils, and intensification of the interaction between parents and the teacher.

In this study the formation of knowledge about behavior in nature, the desire to preserve objects of nature, skills and habits of the environmentally expedient behavior is realized on the conditions that determine the appropriate content, organizational forms, and methods (techniques) ensuring their continuity and interconnection, take into account the specifics of the means used to form the environmentally expedient behavior of the primary school pupils in the interaction between school and family. The results of the diagnosis of the levels of formation of the environmentally expedient behavior of the primary school pupils allowed to verify the effectiveness of the identified and tested forms and methods of work and to confirm their influence on the formation of the structural components of the pupils' environmental behavior.

The conducted research has not exhausted all the aspects of the problem of the primary school pupils' environmentally expedient behavior formation in the interaction between school and family. We consider perspective the study of the problem of continuity in the formation of the environmentally expedient behavior of preschool children and primary school pupils.

REFERENCES

1. Deriabo, S. D. (1996). *Ecological pedagogy and psychology*. Rostov-na-Donu: Feniks (In Russian).
2. Jabre, B. (2003). L'utilisation de la graphie combinée de structure et d'information à l'éducation écologique des écoliers [The use of the combined graphing of structure and information in the ecological education of schoolchildren]. *JDI – JDI*, 7, 20–21 (In French).
3. Kolyshkina, A. P. (2017). Implementation of forms and methods of interaction between school and family in formation of the environmentally expedient behavior of the primary school pupils. *Pedagogical sciences: theory, history, innovative technologies*, 7 (71), 168–178 (In Ukrainian).
4. Rioulti, Jean. (2003). L'éducation de la conscience écologique [The education of ecological consciousness]. *Le Monde de l'éducation – The World of Education*, 319, 35–38 (In French).
5. Troost, G. I. (2002). *Environmental education: A source book*. New York (In English).
6. Naess, A. (1984). A defense of the deep ecology movement. *Environmental ethics*, 6, 265–270 (In English).

АНОТАЦІЯ

Сбруєва Аліна, Колишкіна Алла. Програмно-методичне забезпечення взаємодії школи і сім'ї у формуванні екологічно доцільної поведінки учнів початкових класів.

У статті розв'язується проблема методичного забезпечення з екологічного виховання учнів початкових класів. Мета дослідження полягає в обґрунтуванні авторської програми «Екосвіт» з формування екологічно доцільної поведінки учнів початкових класів у взаємодії школи і сім'ї. Для досягнення мети в публікації використано комплекс спеціальних діагностичних методів: опитування учнів; бесіди; спостереження за поведінкою школярів у природі в реальних умовах та умовах

експерименту; розв'язання учнями проблемних ситуацій взаємодії з природою. Розроблено методичне забезпечення з екологічного виховання учнів початкових класів: програмно-методичний комплекс «Екосвіт», який охоплює програму екологічного гуртка «Екосвіт» і методичні рекомендації щодо організації його роботи; методичні рекомендації для роботи з батьками щодо формування екологічно доцільної поведінки учнів початкових класів. Доведено, що активізація взаємодії батьків із учителем, урізноманітнення форм і методів роботи з батьками та учнями, залучення батьків до безпосередньої участі в навчально-виховному процесі з формування екологічно доцільної поведінки учнів початкових класів засвідчили якісно новий рівень організації екологічного виховання школярів.

Ключові слова: екологічно доцільна поведінка, екологічне виховання, програма «Екосвіт», учні початкової школи, екологічний гурток, батьки учнів початкових класів.

РЕЗЮМЕ

Сбруева Алина, Колышкина Алла. Программно-методическое обеспечение взаимодействия школы и семьи в формировании экологически целесообразного поведения учеников начальных классов.

В статье рассматривается проблема методического обеспечения по экологическому воспитанию учеников начальных классов. Цель исследования заключается в анализе авторской программы «Экомир» по формированию экологически целесообразного поведения учеников начальных классов во взаимодействии школы и семьи. Для достижения цели публикации использован комплекс диагностических методов: опрос учащихся; беседы; наблюдение за поведением школьников в природе в реальных условиях и в условиях эксперимента; решение учениками проблемных ситуаций взаимодействия с природой. Разработано методическое обеспечение по экологическому воспитанию учащихся начальных классов: программно-методический комплекс «Экомир», который охватывает программу экологического кружка «Экомир» и методические рекомендации по организации его работы; методические рекомендации для работы с родителями по формированию экологически целесообразного поведения учеников начальных классов. Доказано, что активизация взаимодействия родителей с учителем, разнообразие форм и методов работы с родителями и учениками, привлечение родителей к непосредственному участию в учебно-воспитательном процессе по формированию экологически целесообразного поведения учащихся начальных классов показали качественно новый уровень организации экологического воспитания школьников.

Ключевые слова: экологически целесообразное поведение, экологическое воспитание, программа «Экомир», ученики начальной школы, экологический кружок, родители учеников начальных классов.