

## SPECIFIC ASPECTS OF THE ECOLOGICAL EDUCATION PROCESS AT PRESCHOOL AGE

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Environmental education is a matter of educational policy and requires international cooperation on nature conservation issues in the development and implementation of global strategies in this field. In this respect, the aims and objectives of environmental education are to: educate environmental awareness, which implies a sense of responsibility and solidarity between individuals for the preservation and improvement of the environment; develop the ability to take decisions, identify and implement solutions to prevent and solve specific problems relating to the individual's relationship with the environment; prepare citizens to positively influence political, economic and social decisions on the environment.

**Keyword:** *environmental education, environmental competence, environmental actions, environmental perception, environmental education, environmental literacy, environmental action, education/ learning.*

### ASPECTE SPECIFICE ALE PROCESULUI DE EDUCAȚIE ECOLOGICĂ LA VÂRSTA PREȘCOLARĂ

Educația ecologică constituie o problemă de politică educațională și necesită o cooperare internațională în problemele ocrotirii naturii în elaborarea și aplicarea unor strategii globale în domeniu. În acest sens, finalitățile și obiectivele educației ecologice urmăresc: educația conștiinței ecologice, ce presupune simțul responsabilității, a solidarității dintre indivizi pentru păstrarea și ameliorarea mediului; dezvoltarea capacității de a lua decizii, de a identifica și a pune în practică soluții pentru prevenirea și rezolvarea problemelor concrete legate de relația individului cu mediul său de viață; pregătirea cetățeanului pentru a influența pozitiv deciziile politice, economice și sociale cu privire la mediu.

**Cuvinte-cheie:** *educație ecologică, competența de protecție a mediului ambiant, acțiuni ecologice, percepția ecologică, educație/ învățământ.*

#### Introduction

The researcher Crețu, N. mentions that the 1972 UN Conference on the Environment made the following appeal: „Protecting and improving the environment for present and future generations has become a primary objective of humanity”. People need to acquire the attitudes, knowledge, motivation, commitment and tools to take action, individually and collectively, to solve current problems and prevent new ones’

The identification of the major themes for reflection has led to the development - at the educational level - of specific responses, by enhancing „new education” with new types of content, mentioned in UNESCO documents, one of which is environmental education [10, p. 39].

To the question „How would you define the notion of ecology to a pre-school, a pupil and an adult?”, Academician I. Dediu states: „To a pre-school child I would explain this notion as follows: the environment means the family, the kindergarten, human society, the surrounding nature (air, flowers, animals, geese, butterflies), which are to be protected. To a pupil I would say the same things plus ecological instruction deep study of ecology and environmental protection.

To an adult - all of these taken together plus the responsibility towards the growing, rising, and future generations” [17, p. 9]. Thus, the basis of ecological behavior at the pre-school age is the cultivation of love for the nature of the native land and the basic skills of its protection.

Therefore, the approach to the problem of environmental education of pre-school children aims to develop appropriate environmental behavior and actions to protect the environment. Preschool children must be taught to understand nature, appreciate its value, see its beauty, approach it and protect it.

To this end, the actions organized with children of pre-school age will pursue objectives that are accessible and achievable through content and teaching strategies, according to an appropriate thematic focus: actions of getting to know the inert and living nature characteristic of the native land, their characteristics; fostering the acquisition of ecological knowledge and skills through experimental and demonstrative activities; training the 6-7 year old preschoolers in carrying them out; educating and developing the ability to protect, protect the fauna and flora of Moldova; to train children in activities designed to contribute to the care of animals and plants; to learn, by means appropriate to the age of the pre-school, some rules for the protection and protection of flora and fauna of the native land; to visit nature reserves where flora and fauna are protected by law.

These activities carried out with children will reveal: the danger of extinction of some plant and animal species, the harmful effects of hunting rare animals; the danger to insects from water and air pollution.

At the same time, it is important to point out that the issue of environmental education should be made aware of by teachers, who contribute to the formation of a child's integral personality. The implementation of environmental education at the pre-school level requires good training of educators in this field, which should constantly strive to modernize teaching - learning through interdisciplinarity, ensuring sustainable and viable assimilation of information.

Research on the issue of environmental education offers a polarity of conceptions, models of environmental education and training of preschool children (Ia. Gabiev, S. Jurat, G. Chirică, C. Andon, I. Dediu, V. Cecoi, E. Morei, I. Ganea, E. Popov, R. Cucereanu, N. Carabet, L. Gordea, E. Haheu, S. Gînju, A. Teleman, P. Samorukova, S. Nicolaeva etc.).

### **Basic content**

Other researchers note (Ia. Bumbu, M. Mîtcu, D. Roșcovan, etc.) that ecological education of the population is possible only if it contains the following components: the existence of an integrated system of knowledge about the interaction between society and nature; ecological informatization of the population; the existence of a system of norms and rules of behavior in nature.

From this perspective, environmental education must play an active role in the educational process. Hence the question arises: where, when and how can we, as educators, who, unlike teachers, have to deal with the young subject - the young child - who is waiting for information, explanations and conclusions that will help him or her to develop a vision of the world around him or her? Obviously, the basic area of activity is „Science and Technology”, which includes the dimension „Environmental Education”, on the other hand, we could integrate elements of environmental education with the other areas of activity.

The choice of age (6-7 years) for our research was not by chance, because according to the results of research on the age characteristics available (J. Piaget, L. Vigotschi, U. Șchiopu, etc.), it is the most effective age for a basic understanding of the links and interdependencies in nature and for understanding simple concepts. At this age stage children develop rapidly, they have an intuitive-imaginative thinking as well as some elements of logical thinking.

Units of competence for 5-7 year olds:

- Reach and describe specific conditions of human life;
- Identify and argue the role of humans in maintaining an ecological environment;
- Active participation in caring for and protecting the environment;
- Explain, in their own words, the role of plants, animals, natural phenomena in the environment

The following types of activities are recommended:

- Conversation-oriented activities: „Why do we need to save energy resources?”, „What is the impact of means of transportation on the environment?”, „How and why do we need to protect plants, animals?”, „Why do we need plants or animals?” etc.);
- Activities to determine the advantages and disadvantages of environmental protection;
- Practical activities on how to care for and protect the environment by integrating established rules;

- Activities highlighting the human role in environmental protection (e.g. Earth Day, Environment Day, etc.);
- Activities carried out using interactive methods (Dream technique, Famous places, Mystery travel, Picture map, Blazon technique, etc.);
- Activities based on closed/open educational software and interactive games.

Due to the transdisciplinary nature of ecology, Chirică, G mentions, environmental education facilitates the development of complex thinking, involving also a strong social effect, requiring better communication between people, between different generations, between scientists and the general public, having, at the same time, an important ethical dimension [6, p. 43].

For all these reasons, environmental education is considered to be lifelong education, a prerequisite for the formation of a culture with an ecological perspective and global responsibility.

- Examples of content at this age, the curriculum proposes:
  - Nature: sky, air, earth, waters, plains, hills, mountains, forests, animals, people. Earth. Water, sun, air, fire-the basis of the integrity of nature.
  - Main elements of the universe (moon, sun, planets, cosmic vehicles): similarities, differences.
  - Recognizing natural phenomena (wind, blizzard, rain, frost, hail, lightning, storm, thunder, thunder) at the time of their occurrence.
  - Living bodies: they breathe, feed, move, grow, multiply, adapt to conditions. Inert bodies don't breathe, don't feed on the synesthetator, don't grow, don't multiply.
  - Existence of the four seasons, their sequence and specific phenomena.
  - Ways in which living organisms adapt to seasonal changes in nature: decrease in temperature, light intensity, withering of vegetation, disappearance of insects, migration of traveling birds, etc.
  - Particular environmental adaptations of plants: roots, stems, branches, leaves, ways of propagation, their importance in nature and in human life.
  - The environmental adaptation characteristics of animals (fish, birds, mammals, insects).
  - Plants as living organisms: their structure, root, stem, leaf, flower, seed; characteristics, living environments, nutrition, importance.
  - House plants.
  - Animals, as living beings, can be of different groups: insects, fish, amphibians, birds, mammals; characteristics, living environments, nutrition, importance, their life in nature and maintenance in captivity.
  - Human activity in nature.
  - Human growth and care of plants and animals, their living conditions: air, light, warmth, clean water, food, soil, shelter.
  - Application of measures to protect nature and the environment.
  - Civilized conduct in nature [9, p. 22-23].

Curriculum area Science, environmental knowledge and ecological culture Reference objectives:

- To specify the particularities of adaptation of groups of organisms to their living environment, seasonal changes, day-night sequence (children will use the terrarium for observations and identify the adaptations of animals to their living environment).
- To show a caring and participative attitude towards nature (children will participate in the care of plants and animals in the terrarium). Theme of the project: From the world of those who do not speak.
- Nowadays, in many countries of the world, environmental protection education has become a new dimension of the curriculum, with the aim of initiating and promoting a responsible attitude towards the environment, making children aware of the dangers of a sharp degradation of the environment.
- Environmental protection has become a major objective of the contemporary world. That is why mankind is looking for solutions to prevent the pollution of the living environment and create a balanced and life-enhancing environment [14, p. 34].

The logical scheme of approach to environmental education presents several stages that describe a formative path that can be followed by any teacher, by carefully capitalizing on the content and methodology specific to the subject:

1. Perception and observation of nature. This first stage can best be realized through nature outings, excursions, camps. It is the first step of direct contact with the elements of the environment and is the prerequisite for the following stages.

2. Determining sensations, feelings and making children aware of them. As a result of perceiving aspects of the environment, the children's attention is drawn to the pleasure of looking at a clear sky, breathing in the fresh air of a forest, listening to the murmur of a stream, etc. At this stage, it is the role of the teacher to discuss and draw attention to these aspects and to emphasize the benefits of a clean, healthy environment, as well as our belonging to natural life systems and the communication between us and the natural environment.

3. Personal involvement. Through discussion, after establishing one's place and role in space and time, in the social framework, ways of individual involvement and how we can be of help can be revealed.

4. Assuming responsibility. This stage is essential in forming an appropriate behavioral structure. Where there is involvement, there must also be responsibility. The above-mentioned stages of environmental education ensure, according to the level of this age, the adoption of environmental behavior [p. 39].

- Environmental education is based on five objectives:

- Awareness. Children are helped to develop an understanding and sensitivity to the whole environment and its problems.

- Knowledge. Children gain knowledge about how the environment works, how children interact with the environment, how environmental problems arise and how they can be solved.

- Attitude. Children acquire a set of values and feelings of caring for the environment and maintaining its quality.

- Learning. Children are guided to acquire the skills needed to identify and investigate environmental problems and contribute to solving environmental problems.

- Participation. Children gain experience in using the knowledge and skills acquired to take positive and well-considered actions that will lead to the eradication of environmental problems.

- It is implicit that the information motivates, accompanies and supports sensory perception, the analysis of sensations, the integration into the natural system of life, the definition of personal roles, individual involvement and taking responsibility.

- Building an action strategy. This stage is the transition to concrete action.

The fact that, as teachers, we organize various actions with children is not enough. The really important thing would be to give children the interest and skills that will enable them to understand how to organize such actions and to act on their own impetus [12, p. 8].

In order to train children to behave in an environmentally friendly way, we can start with a simple idea, but one that is quite effective in terms of emotions and feelings: putting the child in the place of the element in nature that has suffered human aggression.

Educational project developed and implemented at the level of the educational institution ECO-GINDERGARTEN. The aim of the project is for children to learn to act as members of the society, to adopt individual and community eco-protective behavior, forming their skills of participation and initiative in eco-protective community actions.

### **Project objectives:**

1. To study the specialized literature, to research the didactic strategies favoring the sensitization and training of children's affective and volitive behaviors in an ecological sense.

2. To select ways and forms of working with pre-school children in the realization of activities that would develop ecological beliefs and behaviors of good educational practice.

3. Elaboration of an action plan, including a variety of quality, attractive and formative activities, which would allow children to promote a positive attitude towards the environment.

4. Create a favorable and stimulating educational environment to motivate children to protect nature.

5. Realization of a strategic partnership with parents, teachers in the institution in order to develop innovative results and to support the exchange of best practices.

6. Evaluation of the educational project with the aim of improvement and valorization.

**Action plan implemented** (What? When? How? Responsible, resources)

## Planning

1. Literature review;
2. Selection of research and observation instruments;
3. Equipping the educational environment;
4. Partnership with EIT parents and teachers;
5. Planning activities (play activities, experiential activities, learning activities, watching environmental movies, nature observations, open discussions, workshops, visits, etc.).

## Implementation of planned actions:

- Thematic projects: „We learn, we play, we protect nature!”, „I do great things as a child!”, „Little ecologists in action!” „Let’s love the earth and nature”!
- Pollution of Planet Earth!
- Educational activities: „Water - the source of life!”, „Fire-friend or foe!”, „We’ll plant beautiful flowers, we’ll decorate the plot!”, „We’ve planted a little tree, fresh air to breathe!”, „We sort the rubbish and put it in boxes!”, „We play, together we recycle and save the planet!”.
- Extra-curricular activities: „Nature’s cry”, „Autumn through the eyes of a child”, etc.
- Exhibitions in partnership with other groups: „We collect, we select, we make toys for the Christmas tree”, „We recycled, we made trinkets”, etc.
- Experiential activities: „From buds to petals”, „It’s raining outside”, „It’s raining outside”, „The air”, „The rainbow in splendor”, „The properties of water”, „The volcano”.
- Creative art workshops on environmental themes (albums, collective works, posters, etc.).
- Direct and guided observation of natural phenomena;
- Role-play; didactic games;
- Exercises to form beliefs/behaviors in relation to nature;
- Open discussions;
- Competitions: „Parade of costumes made of recyclable materials”.

Theoretical and experiential foundation of environmental education for children aged 6-7 is an imperative of the day.

The issue proved to be complex and topical, demonstrating the timeliness and necessity of developing a formative approach to the organization of environmental education of pre-school children. Thoughtless and sometimes cruel attitude to nature - the result of moral uneducation of children, when they are deaf especially animals and plants, are incapable of empathy, sympathy, pity, can not understand other people’s pain and come to the aid. Preschooler is characterized by imitation, due to which he borrows patterns of behavior, easily succumbs to external influences. Borrowing can be both pedagogically valuable and negative, because critical thinking is underdeveloped in children. They imitate the behavior of adults in nature, their actions, attitude to animals, plants. Adults, with intent or unwittingly wounding children’s souls with cruel treatment of nature, harm the cause of education of humanity in children, traumatize their immature psyche.

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