

SUMMARY.....	1
CHAPTER 1. INTRODUCTORY NOTIONS	4
1.1. Argumentation of the choice of theme	4
1.2. Objectives and directions for improvement of primary education	4
1.3. The "Science" curriculum for the 3rd and 4th grades	16
1.4. Knowledge of the environment, a means of developing the psychic processes of knowledge.....	16
CHAPTER 2. METHODS OF EDUCATING CHILDREN IN THE SPIRIT OF NATURE PROTECTION	23
2.1. The scientific foundation of theme	23
2.2. Realization of ecological education for preschoolers through kindergarten activities	30
2.3. Educating students in the spirit of environmental protection, through science lessons	34
2.4. Aspects of the way in which fundamental issues regarding environmental protection are reflected in the education process through the teaching of natural sciences	37
CHAPTER 3. THE CONNECTION BETWEEN MAN AND NATURE	43
3.1. Environmental pollution problems and environmental protection measures	43
3.2. Directions of instructive-educational activities in developing interest in nature protection	51
3.3. Ways of training and developing the active attitude of students towards reality and the protection of the environment	53
CHAPTER 4. METHODOLOGICAL ASPECTS OF "SCIENCE" LESSONS IN III-IV CLASSES	57
4.1. Content and methodical aspects of conducting science lessons in grades III-IV	57
4.2. Learning content	57
CHAPTER 5. CONCLUSIONS	66
5.1. Conclusions	66
5.2. Appendices	72
5.3. Bibliography	84

- # CHAPTER 1

1.1 . ARGUMENTATION OF TOPIC CHOICE

The Education and Training Law establishes schools and the task of ensuring the training and education of children in the spirit of environmental protection.

I chose this theme because now, both nationally and globally, there is more and more talk about the need to protect the environment, an environment that includes air, water, soil, subsoil, living things, etc. I sought that, first of all, I must know as many things as possible in this field, things that I can convey in my lessons, activities and students to convince them of the particularly important role of man in the rational use of resources.

The educational ideal of the Romanian school consists in the free, integral and harmonious development of human individuality, in the formation of the autonomous and creative personality, in a democratic society.

The training and education of children represents a problem of the greatest importance, for the future of all peoples, for the very destiny of tomorrow.

represented by the knowledge acquisition process resides in the fact that this process primarily contributes to the intellectual development of children.

In contact with the objects and phenomena of nature and society, the sensitivity of all sense organs is developed and perfected, and thus the content of sensations and perceptions is enriched.

Through the organized knowledge of objects and phenomena from the surrounding reality, children perceive them through as many senses as possible, differentiate their characteristic features and gradually form their respective representations.

In the process of getting to know the surrounding environment, the spirit of observation develops in children, which contributes to the continuous improvement of the quality of perception. In this way, children are taught the habit of seeing certain aspects, of noticing different characteristic properties of objects and phenomena.

tomato and pepper " observation activity , children are put in a position to perceive color, shape, size, component parts.

In these activities, gradually, children get used to observing more easily what is characteristic of objects and phenomena. Observational activities are the most important source of impressions that children accumulate and capitalize on throughout their lives.

These impressions and knowledge will constitute the starting point of the entire organized process of later knowledge.

Through observation activities, children form simple, correct representations and notions with a scientific content accessible to preschoolers.

Through these activities, preschoolers get to know different plants, animals, natural phenomena, etc. In these activities, children make a sustained intellectual effort, because observing objects and phenomena puts them in a position to analyze, synthesize, compare, and thus their thinking develops.

All these activities directly influence the child's transition from concrete thinking to abstract thinking, which is manifested in the understanding and acquisition of elementary notions, such as: fruit, flower, animal, domestic animal, wild animal, etc. . Under the guidance of the educator, the children's ability to research and reveal the causal relationships between objects begins to develop.

- approaching the sciences as academic disciplines
- the recommendation to use ready-made didactic materials

Current Curriculum:

- the development of objectives focused on the formation of capacities
- the predominance of formative content
- the mention in the curriculum of learning activities aimed at developing skills such as: observation, measurement, use of information, etc.
- the approach to science as learning through experimentation
- the use of objects of current use, known to children from everyday life
- the use and integration of new information into what the student already knows from personal experience

FRAMEWORK OBJECTIVES

Knowledge and use of terms and notions specific to the natural sciences

Developing the abilities to explore/investigate reality and experiment by using appropriate tools and procedures

Development of communication skills, making use of learned scientific terminology

Developing interest in creating a balanced natural environment conducive to life

Cultivating an ecological behavior from an early age, forming appropriate skills and attitudes.

Man has constantly learned from nature, constrained at first and threatened in his own experience; aware then that he can encompass all the wisdom that surrounds him and that he can enrich through his intelligence.

Certain elements of activities outside the classroom also contribute to the formation of the scientific conception of the world: visiting a factory, reading a book, watching a movie, etc. But these elements that contribute to the formation of the scientific conception gathered from such varied sources, are unsystematic, they are not articulated logically. Students can reach a scientific system of explaining the phenomena of nature and society faster and more safely through the educational process.

The systematic study of the basics of the sciences under the guidance of teachers places each notion in its proper place in the general system of knowledge and makes increasingly comprehensive and profound syntheses possible. The process of forming the scientific conception of the world is a complex and long-lasting process, affecting all aspects of the human personality.

Through school training, students rise from the empirical vision of the world to one rationally organized by science. Actively and consciously acquired quality knowledge goes from independent knowledge to knowledge systems, which then make the leap of transformation into conviction (scientific, moral, aesthetic).

Man acts as he thinks and as he understands things. The scientific conception determines the scientific attitude on all levels (moral, intellectual, aesthetic, etc.). Laying the foundations of the scientific conception of the world must start from the youngest age. In the first years of life, the child accumulates a heterogeneous baggage of empirical knowledge about the surrounding nature. The experience of limited knowledge of the first years of life generates in the minds of the little ones, animism, naive finalism, with which the organized process of school instruction has to fight later. The school must capitalize on the baggage of knowledge about nature acquired by children during the previous development periods and build a system of the knowledge process.

In the primary cycle classes (III-IV), knowledge about nature is taught following two main directions: to form adequate representations, notions and knowledge whose volume should evolve both linearly and concentrically based on the systematic development of observation

- Bison (*Bison humanus*)

Animals protected by law :

- Hucho hucho
- Tortoise (*Testudo graua iberica*)
- Black goat (*Capra ibex*)
- Grouse (female) (*Tetrargo urogallus*)
- Wood grouse (*Lyrurus tetrrix*)
- Lynx (*Lynx lynx*)
- Bustard (*Otis tarda*)
- White pelican (*Pelecanus onocrotalus*)
- Bearded eagle (*Gypaetus barbatus*)
- Mountain eagle (*Aquila chrysaetos*)

Plants in nature do not live in isolation, but make up pastures, hayfields, forests. As a result, the protection of nature must fall on such associations, considered special corners of nature, for the scientific interest they present.

Such vegetation areas protected by law are natural reserves which can be: national parks, natural parks, scientific reserves.

The first and largest reservation was created as early as 1938 and is the Retezatul-National Park. Natural reserves were also created in Făgăraș, Ceahlău, Cheile Bicazului and the Danube Delta, along some rivers, their number rising to 395 with a total area of over 222545 hectares. The Danube Delta, the kingdom of birds and reeds, is unique in the world.

Other important nature reserves:

- The Padiș-Cetățile ponorului Complex (in the Apuseni Mountains)
- Bâlea Lake area

children, and the problem, although it is not new, is becoming more and more acute, becoming an object of study in some classes, or an objective in some disciplines such as science, chemistry, biology, geography.

In order to know how this system works, of which we are also a part, it is essential that man be educated in the spirit of respect for the environment, so that he becomes aware of the fact that he is not the master of nature, but its part. In this context, educating the masses, especially the young generation, in order to acquire a unitary ecological concept, has become more and more necessary today, when there is an increased influence of man on nature, when technology is developing rapidly, when there is talk of mechanization agriculture, the use of pesticides, the development of tourism.

Ecological education implies not only the formation of a correct behavior towards the environment, but also the active and thoughtful involvement in the process of adopting environmental decisions.

If we ask ourselves what chance environmental education has in a world dominated by material interests and what effects it would have, we must not be left with optimism, to be convinced that, starting from the youngest age, ecological education has great chances.

The little ones must understand that on Earth there is interdependence between the human population and the countless species of plants and animals, between society and the biological cycles of nature. Then let's make them aware of the necessity of the conquests of science and technology that must not become enemies of nature, but in accordance with it, in order to preserve the Earth's resources; the judicious exploitation of the forests, the riches of the soil and the subsoil, in order to preserve the natural beauty of the mountains, the cleanliness of the waters, the air, so necessary for plants, animals and implicitly for man. Environmental education aims to train and cultivate the abilities to solve problems triggered with the application of industrial and post-industrial technologies on a social scale, which have recorded numerous negative effects on the level of nature and human existence. It studies the influence of human activities on the environment. In this context, he studies living things, including humans, in the natural and artificial environment and contributes to the understanding of the circuit of energy and matter.

them in modern ecological behavior. This is especially done in science lessons, aimed at facilitating the understanding of plant and animal organisms, the essential processes of life maintenance, the indissoluble links between plants - animals - environment, those of geography, but also, occasionally, in civic education lessons, Romanian language, musical education, plastic education, history.

The introduction of an optional discipline, under the generic name, Nature, my friend, is a particularly effective way for this purpose. This optional is, in my opinion, a generous option with multiple instructive and educational values. I applied it to the 3rd and 4th grades "Nature - my friend" gives the opportunity to enter the sphere of natural sciences, geography and history, civic education, as well as the formation of practical skills

The proposed framework objectives aim at:

1. Developing the spirit of investigation and scientific research of the students in the reconsideration, recognition and evaluation of ecosystems;
2. Knowing the causal relationships between different processes in nature and life on earth;
3. Formation of criteria for assessing the biological, economic and aesthetic values of places;
4. Formation of skills to protect, preserve and develop the environment.

In order to facilitate the communication of the complex message of the optional subject, one can start from the study of some literary texts adapted to the level of understanding of first grade students.

The presentation of riddles, legends, fairy tales can be combined with short scientific, religious and folklore texts. Starting with the 2nd grade, students will be even more involved in their own training, by initiating research and practical actions guided by the teaching staff. The scientific value of knowledge is gradually taking the priority place previously given to literary texts.

The didactic strategy applied is algorithmic, combined with creative and conversational - heuristic. The methodology used includes observation, demonstration, experiment, problematization, exercise.

Observation activities, case studies, experimentation and research will be followed by practical activities relating to the natural environment, through applications such as arts, skills,

Along with the conservation of fields, hills, mountains, waters and their vegetation, special attention will have to be paid to the conservation of pastures, hayfields that produce organic matter necessary for animal feed. In the process of economic development and the exploitation of natural resources, people must accept the undeniable truth that the resources and capacities of ecosystems are limited and in danger of being destroyed, with serious consequences for the future of mankind.

3.2. DIRECTIONS OF INSTRUCTIONAL AND EDUCATIONAL ACTIVITIES IN THE DEVELOPMENT OF INTEREST FOR NATURE PROTECTION

It is necessary to know some of the fundamental concerns that appear and emerge from the content of school programs and textbooks regarding the directions of instructional-educational activities in educating the interest in protecting nature.

1. Students' knowledge of the permanent changes undergone by our planet, an integral part of the universe, fundamental laws that govern the spatial balance.
2. The appearance of life on earth and its evolution as qualitative leaps determined by quantitative accumulations.
3. The appearance of man, as a result of the leaps made on the scale of life; man as an integral part of nature.
4. Knowledge of natural laws, the factors that generate natural balance, biocenoses, ecosystems.
5. Changes in the structure of ecosystems through the permanent modification of the human-nature relationship, the reciprocal action of nature on man and man on nature.
6. Knowing the causes that contribute to the modification of nature.
7. Civilization and its repercussions on nature.
8. The importance of the environment for life and the need to fight for its protection.
9. Measures that must be taken to eliminate causes that endanger life.
10. The problem of the environment as a vital problem of the population of the entire globe, the need for worldwide cooperation in order to ensure a joint activity plan of concrete

adjacent park or the rows of flowers in front of the school, the trampled grass, discarded household waste.

Based on what was observed, discussions will be held with the students asking them to express their opinion, how they would behave on these occasions.

Other activities can be organized: walks, shorter trips to explore a green area, in a park or a forest near the town, discussions will be organized regarding the positive and negative aspects of the respective area, aspects related to the care of public property. The organization of a hike in a recreation area of the locality will be followed by discussions about what they saw here, the duties of each person for the care of the recreation area. Like hiking, walks followed by discussions contribute a lot to the development of an active attitude towards everything that surrounds us, they help to develop the aesthetic feeling, to notice the disturbing factors of the harmonies in nature.

In the small classes (III-IV), in addition to the lessons included in the program held in the hours provided for this subject, the knowledge of Science (one hour per week), many more activities can be organized to contribute to the development of active attitudes towards nature and protection the environment.

Lasting convictions regarding the need to protect the environment are formed only when starting from concrete examples, positive or negative, taken from the students' local horizon. The practical applications with this theme need to be worked on differently, depending on the locality where the school is located.

In the following I will list some of the practical activities that can be organized, through which students are formalized and which contribute to the development of an active attitude towards nature:

- students' knowledge of the different plants and animals that grow in the area where the school is located and in other areas;
- students' knowledge of rare plants and animals and those protected at local and national level;
- knowing the situation of different wild animals in the area where they live, the disappearance of birds, day and night predators, the number of rare wild mammals;

In order to obtain good results, certain conditions must be met:

- the goal will be clearly specified;
- the observation criteria will be established;
- a logical sequence of observation stages will be established , based on an action

plan;

- establishing the materials that will be used for making the observation; - using some didactic procedures that mobilize thinking

(analysis, comparison, analogy, synthesis);

- the preparation of sheets on which the work tasks will be entered and on which the obtained results will be recorded;

-the forms of student activity will be established (frontal, group or individual).

The teacher establishes the purpose of this activity, which in this case consists in the observation by the students of the component parts of some plants in the garden, in order to know its general composition, as well as the place where it lives and the maintenance work.

Such an activity can be organized in the school garden, a nearby park or in the biology laboratory, at the living corner.

The teacher will establish ahead of time and communicate to the students the criteria based on which to make observations: the shape, the dimensions, the color of the component parts of the plants.

It will also establish and communicate the sequence in which these parts must be observed: the root, the stem, the leaf, the flower, the fruit, the seed.

It will also establish ahead of time the species of plants that will be observed (the species that are frequently found in that area).

A work sheet will be prepared in which the students record the results, the sheet containing the following headings:

- the name of the observed plant;
- its component parts;

The formation of notions is a complex and long-lasting process whose beginning is the perception, the direct observation of the studied objects and phenomena.

The close connection that exists between plants, animals and the changes that take place in nature will be highlighted, as well as the role that man has in the life of plants and animals.

CHAPTER 5

ConCluSIonS

The school and the educational activity of the masses in general can make a remarkable contribution to the awareness of the danger represented by the destruction of the ecological balance, as well as to the determination of a constructive attitude of all the inhabitants of the Earth, especially of the students towards the problems facing humanity. Recently, under the auspices of the UN and its specialized bodies, a number of actions aimed at protecting nature and the environment have been undertaken, with the particularly suggestive title "ONE EARTH".

Romania's initiatives in this regard are known and appreciated, our country being the host of international meetings and the initiator of consistent actions aimed at ensuring a balanced distribution and use of the planet's resources by all the nations of the world, general and total disarmament, the establishment of an ecological order and international politics. The accentuation of the process of degradation of the relations between man and the environment, whose consequences - some long-lasting - are unpredictable, calls for reflection and energetic measures on multiple levels - political, economic, scientific and cultural. It is known that in our country ecological education is an integral part of schoolchildren's education, constituting the subject of independent disciplines such as: ecology, natural sciences, geography, or of some activities organized by the school (excursions, visits, walks in nature, etc.) .

Through the united effort of educational factors, students must be helped to understand that there must be a harmonious correlation between economic development and technological civilization and the environment. Through the entire system of permanent education, we have the duty to draw children's attention to the causes of pollution, as well as to realistic solutions expected by our state, achieving, in a unitary and broad perspective, a pertinent and effective ecological education that will determine everyone a responsible attitude towards the future of man and the environment. Any damage to nature endangers the biological balance and implicitly

the future of man. That is precisely why the protection of the environment will have to be one of the basic human concerns in the coming decades. Today's man must be wise, nature in its entirety is a social asset, it is the source of the riches available to humanity.

Each generation has the moral duty to leave to future generations the riches and beauties of nature in better condition and in greater quantities than it received from the previous generation.

Activity project

Educational unit: Kindergarten

Educators:

Activity category: Knowledge of the environment

Method: Reading after pictures

Theme: "Let's protect nature"

Type of activity: Evaluation

Fundamental objective:

- Consolidation and systematization of knowledge regarding environmental protection norms;
- The formation of some premises of the scientific conception of the world and life;
- Developing the spirit of observation and logical thinking through the causal interpretation of some actions and phenomena;
- Enriching children's active vocabulary and activating known terms.

Operational objectives:

- to verbally express in sentences what was observed
- to synthesize the observed and generalize them
- to participate as speaker and listener in a given task
- to work individually on the sheets
- to discern right from wrong

Teaching strategies:

A. Methods and procedures: observation, conversation, explanation, problematization, generalization

Achieving performance	the picture formed on the magnetic board. - Where are the children? - How is everything around?	The children answer	Problem
Final evaluation	- Would you like to go on vacation in such a place? Why?	Several children recite the poem "Harnicie - vrednicie". The whole group performs the song "Little Environmentalists".	
Termination of activity	- The cards are presented. - Cut the bad deed! Appreciations are made and incentives are given.	Children work individually. The children come out in an orderly manner singing "Spring Has Come".	

DIDACTIC PROJECT

Class III

Subject: Sciences

Subject: "Natural vegetation and wild animals"

Type of lesson: mixed

Didactic methods and procedures: conversation, explanation, exercise, explanatory reading.

Educational resources: the physical map of Romania

The purpose of the lesson: acquiring knowledge about specific plants and animals
different forms of relief

Operational objectives:

At the end of the lesson, the student will be able to:

- to say who forms the natural vegetation;
- to list the plants that grow in meadows (cane, poplar, willow, wicker, poplar) and on the plain (the grasses).
- to know which animals live in the plains, in the waters of the rivers, in the forests
- to acquire the conventional signs for forests and pastures;
- to recall the learned conventional signs and to use them in administered geographic dictation