

**Project:**  
**Leave your Environmentalist Spirit Online for the Black Sea Basin**  
**“SpiritBSBonline”**

**Proiectul:**  
**Lasă-ți spiritul de ecologist în online pentru Bazinul Marii Negre**  
**“Spirit BSB online”**

**Output : T2.2 Develop of “New Environmentalist Education Model”**

**Output : T2.2 Dezvoltarea „Noului model de Educație de Mediu”**

**PROJECT PARTNERS**



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**JOINT OPERATIONAL PROGRAMME BLACK SEA BASIN 2014-2020**  
**PROGRAMUL OPERAȚIONAL COMUN „BAZINUL MĂRII NEGRE” 2014 - 2020**

Leave your Environmentalist Spirit Online for the Black Sea Basin- Spirit BSB  
online

Lasă-ți spiritul de ecologist în online pentru Bazinul Marii Negre - Spirit BSB  
online

**Project: Joint Operational Programme Black Sea Basin 2014-2020**  
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## European Union Definition

The European Union is a unique economic and political partnership between 27 European countries. In 1957, the signature of the Treaties of Rome marked the will of the six founding countries to create a common economic space. Since then, first the Community and then the European Union has continued to enlarge and welcome new countries as members. The Union has developed into a huge single market with the euro as its common currency. What began as a purely economic union has evolved into an organisation spanning all areas, from development aid to environmental policy. Thanks to the abolition of border controls between EU countries, it is now possible for people to travel freely within most of the EU. It has also become much easier to live and work in another EU country. The five main institutions of the European Union are the European Parliament, the Council of Ministers, the European Commission, the Court of Justice and the Court of Auditors. The European Union is a major player in international cooperation and development aid. It is also the world's largest humanitarian aid donor. The primary aim of the EU's own development policy, agreed in November 2000, is the eradication of poverty.

## Definiția Uniunii Europene

Uniunea Europeană este un parteneriat economic și politic unic între 27 de țări europene. În 1957, semnarea Tratatelor de la Roma a marcat voința celor șase țări fondatoare de a crea un spațiu economic comun. De atunci, mai întâi Comunitatea și apoi Uniunea Europeană au continuat să se extindă și să primească noi țări ca membri. Uniunea s-a dezvoltat într-o imensă piață unică, cu moneda euro comună. Ceea ce a început ca o uniune pur economică a evoluat într-o organizație care acoperă toate domeniile, de la ajutorul pentru dezvoltare la politica de mediu. Datorită abolirii controalelor la frontieră între țările UE, acum este posibil ca oamenii să călătorească liber în cea mai mare parte a UE. De asemenea, a devenit mult mai ușor să trăiești și să lucrezi într-o altă țară a UE. Cele cinci instituții principale ale Uniunii Europene sunt Parlamentul European, Consiliul de Miniștri, Comisia Europeană, Curtea de Justiție și Curtea de Conturi. Uniunea Europeană este un actor major în cooperarea internațională și în ajutorul pentru dezvoltare. Este, de asemenea, cel mai mare donator de ajutor umanitar din lume. Scopul principal al politicii de dezvoltare a UE, convenit în noiembrie 2000, este eradicarea sărăciei.

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## Output : T2.2 Develop of “New Environmentalist Education Model”

### Motto:

" Ecology is the science of the struggle for existence"(Greg Cooper)

" In nature is the secret of ecological conservation of the world"(Henry David Thoreau)

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## Introduction

The present paper aims to propose a profile of the young ecologist for the development of an ecological educational model. Ecology - as a science - has developed a lot in the last quarter of a century, it is beginning to interest more and more layers of readers in the field of natural sciences and social sciences. The major problems facing humanity today, regarding food, human population growth, pollution, energy crisis, ecosystem productivity, environmental protection and planning, the creation of ecological systems on spacecraft, are only some of the contemporary concerns that ecology must He said his word. The education of the masses, especially of the young generation in order to acquire a unitary ecological conception has become more and more necessary nowadays due to the increasing human influence on nature, through the dizzying development of technology, mechanization of agriculture, pesticide use, tourism development. It is also noted that the terms ecological education and environmental education are considered synonymous, although there are defining elements between them.

Ecological education is a crucial element when we talk about sustainable development and it must interact with other fields (geography, chemistry, art, literature and others). Society and the school have the task to show that indifference, lack of care for nature are intolerable reminiscences, and the concern not to bring any harm to nature, not to spoil their beauty, should characterize the young man and man. civilized today, that is, the young ecologist.

Environmental education is done starting from the first years of life, in the family, then kindergarten and then school. Knowing the measures to protect the planet is a duty of honor of all citizens. Environmental protection thus becomes one of the most important concerns of contemporary society and requires actions to prevent environmental damage, ecological reconstruction actions and depollution actions.

Education should promote scientific research, environmental education. Within the didactic activities to practice the ecological excursions, the group hikes, the expeditions in nature, which will know how to offer unsuspected educational and instructive valences that are well capitalized.

Ecology is the discipline that gradually must acquire a deep practical-applicative character in Romanian schools. The development of activities in nature encourages students to follow aspects related to animal behavior. The activities in nature are based on analysis,

synthesis, discussions on the positive and negative aspects of human intervention in nature, noticing the relationships between biotic and abiotic factors. The student should grow, necessarily in a natural environment, with an ecosystem as complex as possible, combining the world of plants with the morphology of the relief, with the hydrological and zoological elements. The student must be allowed and even motivated to come into contact with all these elements. Under these conditions, he will certainly acquire a greater emotional sensitivity and compassion for all the elements around him, a more active intuition. The child must be left free to act. It will be ensured only that its manifestations do not infringe on the meaning of values: either it is negative activities towards certain beings, or the manifestation of certain destructive tendencies towards objects or non-observance of the rules established during the various outdoor activities. This period of childhood is essential in shaping an appropriate behavior towards order, respect for values and principles and especially towards the moral conduct of the future ecologist.

In the Romanian literature there are too few works that fully cover the field of knowledge of environmental protection by students. Most are part of the category of curricular auxiliaries and address only a few content elements and do not ensure the theoretical substantiation of the applications proposed to be made with students in class.

In the Romanian literature there are too few works that fully cover the field of knowledge of environmental protection by students. Most are part of the category of curricular auxiliaries and address only a few content elements and do not ensure the theoretical substantiation of the applications proposed to be made with students in class. It is also noted that the terms ecological education and environmental education are considered synonymous, although there are defining elements between them.

In order to support the teachers of the Romanian pre-university education, this paper presents clarifications regarding the components of the environment, the aims and objectives of environmental education, the formation of the attitude towards the environment and last but not least the formation of the profile of the young Romanian ecologist.

It is certainly difficult for teachers in Romanian schools to achieve environmental education in the presence of too few models, in a system that insufficiently promotes environmental values, with few resources and teaching materials, but their dedication and professionalism can it generates the power to break on this path of life towards a sustainable development in a knowledge-based society.

## Chapter1. Defining the concepts - model, ecology, environment

The scientific advances in the 21st century, the problem of the functioning of the human-nature ensemble, have stimulated the development of some environmental sciences, in some European and American schools, which determined the clarification of the notions under discussion - model, ecology, environment.

Due to the need for an integrated approach to the contents, science completes the analytical information but does not clarify the issue of the set of elements subject to discussion.

We often hear the line "it's a model for me" or "it's a role model" and we automatically compare the model in mind with the person who is talking or being talked about. There is a type of identification with the specific model of childhood or adolescence. At this age we want to show that our proposed model in mind and make a copy-paste of what he does, to have if not exactly his life at least a life similar to his.

In adulthood, however, there is an evolution of the way of reporting to models, thus identifying:

- copy-paste type, the adult consciously or unconsciously prolonging the identification of the child and adolescent
- the administrative-contemplative type, the respective adult making the model a simple object of admiration ,, it is a model, I would like to do it too, yes.... ”; the respective adult is caught in the traps of helplessness, there is at its level a rupture between the values he believes in and the values found in his actions
- admiring-compassionate type ,, the model goes through dramatic moments ”
- the type of value / attitudes that I include in my daily actions- the respective adult is not looking for concrete details that he could copy but values and attitudes that are found in his models "How would my model proceed?"

**The model** according to DEX is a theoretical or material system with the help of which the properties and transformations of another more complex system can be studied indirectly, with which the first system presents an analogy. In other words, something that can serve as a guide for reproductions.

We should abandon the division between "field ecologists" and "modelers", and we point out that modeling and empirical research are two powerful and often complementary

approaches in the 21st century environmentalists' toolbox, to be carried out singly or in combination, depending on the task at hand. Empirical research is an epistemologically priority over modeling; however, in order to realize their full potential and for modelers to do so wisely, empirical research is of fundamental importance. Combining both methodological approaches or forming "super connections" with colleagues, using different methods of creative exploitation we can identify methodological possibilities resulting from increased computing power. To improve the competence of the group we need literacy to model students among ecology. However, improved training in modeling must not reduce environmental education based on field principles and methods. As these skills are formed, the foundation for building and applying models in ecology is strengthening.

The practical motivation for making models an increasingly integral part of our methodological toolbox is that modeling is particularly well suited for addressing emerging new objectives and challenges in ecosystem ecology. Ecosystems research is rapidly increasing in complexity. One example is the growing realization that solely focusing on ecosystem processes might not suffice to understand the earth system, and that the influence of and interactions with humans require increasing consideration (Liu and others 2007). In other words: The advent of the Anthropocene (Steffen and others 2007) calls for a revision of our system boundaries when we study ecosystems and their functioning. Yet, a broadening of system boundaries necessarily increases complexity. Models can help us to cope with such increasing levels of complexity, in at least two ways: First, they allow us to consistently and quantitatively study the effect of complex interactions within a system. Keeping track of dynamic feedbacks and interactions is a main strength of models, and harnessing this strength can lead to important and sometimes unexpected discoveries of ecosystem dynamics (see for example, Yue and others 2016). Second, modeling can help us to identify which variables and interactions within a complex system are driving particular patterns of interest. A model is by definition a simplification of reality, and a lot can be learned about a system through the process of deliberate simplification that is at the core of model development. If, for instance, a complex ecological pattern is reproduced by a model consisting of only a small set of carefully selected variables and interactions, we might be one step closer to identifying key drivers of the observed pattern (for example, Wootton 2001).

Vice versa, if we are not able to explain the observed system dynamics with a model that contains all the currently available process knowledge, modeling can aptly point to where our current limits in systems understanding lie, and what further research might be needed to advance the field. In this sense, even wrong models can be informative for pushing the frontier of ecosystem research. .( Rupert Seidl, 2017)

**Ecology** deals with living structures and has as its object of study the ecosystem. This branch of ecological sciences deals with the problems of the surrounding world, of nature, which is partially destroyed by irrational anthropogenic activities, of degradation of biological conditions. Ecology, as a science, has developed a lot in the last quarter of a century interest in ever-widening layers of readers in the field of natural sciences and sciences social. The major problems facing humanity today, regarding food, human population growth, pollution, energy crisis, ecosystem productivity, environmental protection and planning, creation of ecological systems on spacecraft, it is only part of the contemporary concerns that ecology must address

the word. As a complex science of synthesis, ecology emerged and developed from interference with other biological and “non-biological” sciences, physics, chemistry, mathematics, cybernetics, urban planning, meteorology, sociology)

The term ecology (Greek oikos = house, household, place of residence and logos = science, speech), created by E. Haeckel (1866) defines the science of the conditions of the struggle for existence ”, especially the relations of the animals with the environment, following also the behavior of them.

Contemporary ecology studies the structure and functionality of ecosystems. Human civilization plays a very important role in the evolution of ecosystems on our planet, unfortunately, man does not seem to be aware of the immense role he has. From the simple hunter-gatherer, in the course of his evolution, man has come to himself considers itself the master of the resources of the planet that it wastes without taking into account its own interest of the human race. We are at the beginning of a century that will have to bring about essential changes to this attitudes, otherwise the very existence of the human race will be called into question. To know how this system works, of which we are part it is essential that man be educated in the spirit of respect for all that surrounds him, for let him become aware that he is not the master of nature, but part of it.

The notion of **environment** has been known since the medieval period in the sense of closed space (fr.environment, engl.environment). In German terminology, the term landscape referred to a medium-sized territory that represented the living environment of a human community and included natural elements and man-made elements.

The environment sums up all the natural and anthropic elements that interact and generate the current state at the planetary level. It consists of 2 types of components: abiotic components and biotic components. The abiotic components include the earth's crust, relief elements, atmospheric elements and hydrographic elements. These provided the conditions for the appearance and evolution of man on Earth. Biotic components include elements specific to the plant and animal kingdom.

1. The primary (abiotic) components bear this name due to the genetic primordiality. The abiotic components are visible in the Earth's geospheres - lithosphere, atmosphere, hydrosphere.

The earth's crust is the result of the interaction between internal and external factors. At the level of the earth's crust there are petrographic resources and water resources that are used by man during it. We are referring here to the civilization of stone, bronze, iron.

2. The secondary (biotic) components include elements specific to vegetation, fauna and soil.

The biotic component can be classified according to the way it obtains its food as follows: producers, consumers and decomposers. Within the biosphere there is a hierarchy: the planetary ecosystem, the biome, the biotope.

The components of the environment combine in different forms. Being a determining factor that generates living environments, they differ and have specific features. Thus are distinguished: physical environment (cosmic radiation, solar radiation, gravitational pull), climate (types of climates on Earth), soil environment (soil), hydrological environment (surface and groundwater), biocenotic environment (living organisms), biochemical environment (metabolic products eliminated by the body and influencing other organisms)

Being considered a geosystem, within the environment there are a number of relationships between its elements: action, reaction, coercion, interaction and correlation. Action involves carrying out an activity, reaction is a response to an action, coercion is an action done together with someone, interaction is a reciprocal action between elements, the correlation is a relationship between 2 or more elements.

In the contemporary period, the interest for the natural and socio-economic conditions necessary for human existence imposed the need for an integrated, systemic approach to the elements around us.

## Chapter 2. Environmental education

Nature with all its elements is the most important life lesson because it does not ask us for anything, instead it provides us with everything: air, water, food, shelter. That is why we have the duty to respect it, to protect it as a common good - the most precious, to offer to our descendants. But nature needs us to "heal" her wounds and to protect her.

Today, humanity is going through a period of extensive transformations. We are in the process of transformation and development at all levels: economic, social, political and cultural. The continuous degradation of the environment takes place before our eyes and is a major element of a crisis of civilization and is due to human intervention in nature. A thought becomes constant for any rational being living on this earth - training the young generation in support of nature protection, starting from childhood.

The educational process with all its components is among the main factors of education, which contributes to the thorough preparation for life, the formation of consciousness, ecological thinking and the creation and consolidation of attitudes, skills and habits of nature conservation.

### *2.1. The concept of environmental education*

Ecological education must take into account, with an even greater weight, the problem of ecosystem degradation (terrestrial, aquatic, continental, coastal and marine, coral reefs), which in practical ecology occupies a central place, because ecosystem degradation is equivalent to ruining the biosphere by mass extinction of living species.

In environmental education, it is important that every child avoids actions to destroy a component or assemblies of components in the environment. To take measures means to execute a series of works or to take an action in order to achieve a certain goal (DEX, 1998). There are several types of measures that can be taken:

- safety measures are special means of prevention, provided by criminal law and used against criminals who present danger
- prevention measures refer to precautionary (safety) measures that we use to prevent the occurrence of a phenomenon, a process, an action.

- control measures refer to the measures by which by making efforts and using appropriate procedures we make the named aspects disappear
- environmental protection measures include a set of technical-organizational, sanitary measures meant to prevent the destruction of the environment and to ensure its evolution in optimal conditions.

## *2.2.The aims and objectives of environmental education*

According to the provisions of the Tbilisi Conference, environmental education should pursue the following goals:

- awareness of environmental issues of economic, social, political, ecological
- acquiring knowledge, principles
- forming skills, attitudes, abilities, capacities, competencies and a system of values correlated with environmental issues
- foundation of new behaviors towards the environment

The purpose of environmental education is to help those who have learned environmental knowledge, to form skills, to become dedicated human beings who are willing to work individually or collectively in order to achieve or maintain a dynamic balance between quality. life and quality of the environment.

The goals of environmental education are the same all over the world: to maintain and improve the quality of the environment, to prevent environmental problems. One goal of environmental education is to help individuals think critically and creatively: weigh options, identify alternatives, communicate, ask relevant questions, analyze information, and make decisions.

Environmental education means informing and increasing knowledge about waste and other environmental problems, about the functioning of the earth, about monitoring environmental degradation and learning what is the role in creating and preventing environmental problems.

Environmental education increases awareness and understanding of personal values by discovering attitudes and understanding by helping individuals to evolve and clarify their feelings about nature and the environment and how to help identify and solve its problems. . Environmental education helps each person understand that people have different values, and conflicts between them had to be addressed in order to prevent and ultimately solve environmental problems.

The main objectives of environmental education are:

- knowledge the environment and understand the processes and phenomena as a major impact on the environment in order to intervene positively
- understanding the relationship between man and the environment, the interdependence between the quality of the environment and the quality of life
- identifying the qualities of the environment necessary for a healthy life
- forming the attitude of respect for the environment, a system of values and appropriate behaviors towards the environment
- development of ecological awareness, feelings of responsibility, solidarity between individuals for preserving and improving the environment
- developing the ability to make decisions, to identify and put into practice solutions for preventing and solving human problems with his living environment
- preparing the citizen to positively influence economic, political and social decisions regarding the environment
- involvement in environmental protection actions
- application of human rights principles in environmental protection actions.

Many children and their families may be directly or indirectly responsible for the environmental issues that students investigate. For example, in big cities, many of the children's parents work in companies that pollute the air and water. Near forests, it is possible that some of the children and their families or relatives play a role in the problem of poaching or excessive cutting of trees.

Environmental education cultivates a certain system of values. As children mature, the value system they promote influences the opinions and decisions they make about all aspects of their lives, including environmental issues.

There is also a close link between values, attitudes, beliefs and the development of an environmental ethic. When students take part in a community project, they help themselves and others at the same time. They assert their own values and see that their actions have an impact on the community they come from.

### *2.3. Levels of environmental education*

According to the Tbilisi Declaration, it should reach the following levels:

- aware awareness, respectively the development of sensitivity to the environment and its problems: it helps students to have an understanding and sensitivity to the whole environment and its problems, develops the ability to understand and distinguish stimuli, to process, refine and expand these perceptions
- knowledge of a structured set of information about the environment as a system, about its functionality and people's interaction with the living environment, helps students to understand the functioning of the environment and how they appear and how environmental problems can be solved
- the attitude towards the environment, as a set of values and feelings, the care for the environment ensures the motivation and the desire to participate in the actions of maintaining the quality of the environment
- abilities, capacities and skills formed for investigating environmental phenomena and processes
- participation in concrete actions, framework for experimenting with the acquired knowledge and skills. Carrying out projects involves the development of multiple skills such as communication, teamwork, management of situations. Students thus have the power to act, the certainty that their work matters.

Strengthening skills and building a system of environmental values should be correlated with changes in behavior as part of the culture of the environment. In the formation of a correct behavior towards the environment, 4 levels can be identified:

- the formation of ecological concepts includes the general presentation of the concepts about environment and ecology. Some teachers add to this level the general concept of politics, economics, psychology and social sciences
- conceptual awareness refers to understanding how individual and collective behavior towards the environment influences the relationship between quality of life and quality of the environment or how human behavior can practically solve environmental problems
- investigation and evaluation aims at developing knowledge and skills for identifying and solving environmental problems
- the formation of ecological skills aims at developing the abilities and skills necessary to achieve positive actions in remedying environmental problems.

## 2.4. Principles of environmental education

The principles that guide the behavioral changes of the young ecologist are:

- considering the environment as a complex consisting of natural and anthropogenic environment
- realization of environmental education as a continuous process carried out throughout life
- integrated, interdisciplinary, transdisciplinary and multidisciplinary approach to ecological contents
- examining major environmental issues from a local, regional and national point of view
- focusing on current or potential situations but also taking into account historical perspectives
- promoting values and local, national and international cooperation for the prevention and solution of environmental problems
- explicit consideration of environmental aspects included in the development and economic growth plan
- providing the possibilities for students to have a defined role in planning their own learning experiences and providing opportunities for decision making and accepting their consequences
- making connections between knowledge, problem-solving skills and clarifying the values of each age group, but with an emphasis on raising students' awareness at increasingly younger ages, for the environmental problems of the community they belong to
- discovering the real causes of environmental problems
- highlighting the complexity of environmental problems that require the development of critical thinking and operational problem solving skills

Environmental education contributes to the formation of mentalities and to their modeling according to matrices that promote the values of society and the importance of environmental protection. Man learns faster from his own mistakes than from those of others, but when it comes to remedying, to bear the consequences of the mistakes of others, things are reversed. The sanitation actions organized with the students instill in them a feeling of non-acceptance towards those who caused the jealousy they gather and implicitly a non-acceptance of the attitude they had towards the environment. This skill and attitude remains imprinted on the students and it is possible to translate it into a current behavior.

Environmental education is a process that takes place throughout human existence and is generated and supported by the values of society. To educate means to make children acquire through experience a system of values that will enable them to integrate intelligently and morally in a world that is constantly changing.

Environmental education includes the human component in exploring and solving environmental problems. Education is based on knowledge of ecological and socio-economic systems. Knowledge is the basis for the analysis of environmental problems, for resolving conflicts and preventing the emergence of new dysfunctions. The solutions include historical, political, economic, cultural circumstances.

Environmental education offers opportunities for the development of skills and abilities necessary to solve environmental problems. These skills refer to; communication, investigation, group and individual activities. Environmental education supports the development of intellectual activity (critical thinking, creative thinking, integrative thinking) in order to efficiently solve environmental problems and provides adequate context for the development of learning competence. Students thus understand the interrelationships between the elements of the natural environment and economic, social and political activities.

### **Chapter 3. Formation of attitudes towards the environment**

In the formation of a young ecologist involved in the actions around him, an important role is played by the formation of a correct attitude towards the problems of the surrounding environment. Attitudes or attitudinal knowledge are complex representations, dispositions or predispositions that allow a person to react in a specific way.

Attitudes are revealed and formed in the system of relationships of the individual: the manifested attitudes become relationships, and the internalized relationships private in time constitute attitudes. Definitive for attitudes is the continuous reference to values, the presence of an evaluation moment materialized in the selectivity of relationships, of the way of behavior. Attitudes are the result of the chain of representation of the lived state and of the associated emotions.

### 3.1. The concept of attitude

Attitudes acquired in the person's knowledge base influence his choices. Attitudes are primary orientations that constitute a selective reporting to an object and that determine a model of own behavior. Attitudes are characterized by the following attributes;

- high resistance to change (represents a latent disposition of the personality structure with a relatively stable character)
- generality, because it triggers various reactions that tend to spread in wider areas than the particular ones in which they were activated
- mobilizes social energy, externalizing the cultural model of personality
- assume the assumption of individual responsibility because their manifested expression is subject to social control
- own relief depending on their orientation towards the universal of meanings to which they refer
- contextuality, because it is structured in an integrative social, cultural and historical context

Collective attitudes play certain roles:

- mediating role, through the interpersonal relations of the members of a group and of their interrelations with the material and symbolic universal of the social institutions
- classifying role by defining the social status of the actors involved
- engishing role representing the major reasons for individual or collective action
- role of symbolic elaboration by building the meanings that people give to institutions

Because we are not born with a specific set of attitudes but only with some biological-genetic determinations, attitudes are learned during socialization as well as stereotypes. A Gavreliuc, (2006) presents 3 major sources of attitude formation: social learning, social comparison and genetic factors.

Social learning is the process by which along our ontogenetic path and during socialization we acquire new information, new selective orientations towards objects in reality and new behavioral models by relating to the other and to the world. The most well-known forms of social learning are: classical conditioning, subliminal conditioning, instrumental conditioning, attitudinal modeling by taking over the other's behavior.

Classical conditioning involves implicit learning through associations, being determined on the principle: when the stimulus regularly precedes another, the first stimulus becomes a signal for the appearance of the second. When the first stimulus

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manifests, the subjects learn to wait for the consecutive stimulus. Through a recurrent mechanism of this kind, the same type of reactions to the two stimuli is acquired, the reaction becoming manifest (Gavreliuc, 2006). It is noted that any initially neutral stimulus can acquire the ability to evoke specific effects and to provoke particular reactions by repeated association with another stimulus.

Subliminal conditioning occurs in situations where a person is frequently exposed to stimuli that manifest below the threshold of consciousness causing an attitudinal change.

The instrumental conditioning of (Gavreliuc, 2006) indicates the way in which the subject learns punctually from a good point of view and receives in return a symbolic reward by strengthening his correct answer. Reinforced behaviors tend to be repeated and discouraged ones are repressed. Instrumental conditioning is a learning with minimum cognitive costs and maximum capitalization of the consequences of a specific action, constituting a way of forming attitudes through a series of symbolic rewards: an approving smile, red dots, candies.

Attitudinal modeling by taking over the other's behavior - children receive recommendations from teachers such as cyvine to always be polite / unhealthy to smoke, but discover in the teacher an aggressive or smoking behavior, will be an attitude model and convergent behavior will not with what they say, with what they relate to

### *3.2. Formation of attitudes towards the environment*

Social comparison is based on the theory of Leon Festinger (1954) who argues that social attitudes are acquired through social learning and through a process of symbolic and semantic comparison that the subject performs with the other similar and significant, to determine whether perception and pre-presentation the reality realized by him is relevant and adequate. Because the contexts in reality are always changing, the cognitive schemas we have formed are not adequate, we need to immediately explain a situation according to the relevant information we have, the other becoming a rich and valid source of information in this endeavor. The attitude is formed on the basis of contextual information towards the other and not on the basis of an attitudinal pattern capitalized from the social memory. It is assumed that attitudes learned through social memory are all the more influential and profound.

Genetic factors in attitude formation were minimized in the 1990s, but some studies have shown a correlation between genetic consistency and attitudinal similarity.

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In many situations we are faced with action dilemmas: to do what we should do according to our beliefs and values or to adapt to the contradictory context in such a way as to obtain the maximum of symbolic benefits. In life, it has been proven that we frequently act on animations from an instrumental perspective, often implicit in the world, so that not always what we feel we consider and say turns into convergent behavior. If we conventionally consider that opinion is the verbal expression of attitude, and behavior is the actual action then the essential hypothesis of the convergence between attitudes, opinions and behaviors (Gavreliuc, 2006).

We can thus note A- what people think and feel, O-what they say, C-what they do. Between these elements there is the utmost ratio  $A / O / C = 1$ . This ratio is not always close to unity, hence the hypothesis of the discrepancy stated by Richard LaPierre (1934). Studies show a big discrepancy between what people say and what they do.

A good example methodologically and epistemologically bases the idea of convergence between attitudes-A, opinions-O and compostament-C, is the opinion poll. It starts from the premises: what is measured at the level of opinion is very close to what happens at the level of explicit behaviors. The elements that determine the convergence-A (O) / C are the following:

- the motivational force of attitudes that generate a specific behavior according to the principle: A (O) is the cause C
- people's tendency to realize is a consonant between A (O) / C by which ae self-justifies A (O) to make it compatible with C's behavior reshapes A (O).

The moderating factors of the behavior through the attitude are:

- situational factors- social norms, implicit values. For example, if a person throws garbage on the street, the social norm of politeness and the implicit value of respecting the other person's opinion prevent us from intervening and making the necessary corrections.
- the composition of attitudes belongs to 3 important registers: the origin, intensity and accessibility of attitudes.

The originality of attitudes illustrates how attitudes acquired through direct experience are more strongly illustrated within us and influence behaviors more directly. For example, the attitude towards the environment is cultivated more convincingly and has a greater influence on the behavior if the student participates in actions to clean the environment or to plant trees.

The intensity of attitudes that is correlated with the stakes and the importance of the attitude. This is influenced by 3 factors: self-interest - refers to how the transfer of attitude in behavior leads to the achievement of the subject's goals, social identification -

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considers how the subject can strengthen through mobilization of an attitude attachment to important groups compared to his social identity, value relevance - is the degree to which the activation of an attitude reflects the dominant values of the person.

The accessibility of attitudes depends on the ease with which an attitude can be recalled and brought above the threshold of consciousness, a mechanism that is all the easier to activate as the situation that produced the initial attitude is restored.

The personality type of the subject models in a specific way the mechanism in which the attitude is activated. The degree of automation is the ability to change the behavior to adapt it to the situation and the ability to control the expressiveness of one's behavior to influence the impression on the other. Some subjects rely on their own interiority in making decisions in which attitudes are a guide in adopting a certain behavior regardless of the reactions it will produce, and others focus their attention outside, acting in such a way as to produce a certain impression on the other. controlling the echoes of their behavior. The low automation in the first subjects determines a great convergence, attitude-behavior, the person manifesting himself autonomously, and the high automation in the other subjects determines an inhibition of the attitude that does not always reflect in behavior only insofar as it brings symbolic benefits to the subject.

An operational presentation of attitudes should highlight:

-direction of the attitude, ie its orientation in the social field through which the targeted object can be located

-the composition of the aptitude, this being able to be unidimensional, that is to say it is manifested in relation to a single object or multidimensional, it is related to several objects

Attitude intensity that can be measured by specific scales.

Positive attitude determines an effect of fulfillment, self-confidence, satisfaction, well-being, is transmitted to others, attracts people, phases health, forming friendships, solving problems, forming a good self-image, based on good thoughts

Negative attitude causes an effect of sadness, self-doubt, dissatisfaction, malaise, depression, frustration, anger, rage, is transmitted to others, alienates people, disadvantages health, forming friendships, problem solving, forming a negative self-image , is based on bad thoughts.

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#### 4. The profile of the young Romanian ecologist

The relationship between environmental education and civic education refers to the conscious summing up by citizens of solutions to environmental problems in today's society regardless of their complexity. Through an adequate civic education regarding the environment, it is possible to: develop a positive civic behavior, diminish the negative individual or collective impact on the environment, identify and initiate measures meant to solve the environmental problems.

Environmental education participates in building the general culture related to the environment. The development of a general culture among citizens regarding the environment is the main goal of ecological education. The peculiarity of this general culture regarding the environment should be defined in terms of observable behavior. People should be able to demonstrate, in an observable way, what they have learned, how they are oriented towards solving problems or how knowledge can be applied in practice.

Knowing the environment means acquiring a structured set of information about the environment as a system, about its components, about its functionality and

The field of environmental education must evolve in a constructive direction. An environmental education related to only one of the dimensions mentioned above would be incomplete and limiting, therefore all the dimensions presented above must be taken into account. Education is perceived as a tool in the service of long-term environmental conservation, being considered as a reservoir of resources to be exploited in the context of sustainable economic development.

It is essential that education in the spirit of respect for nature, the environment to start from kindergarten, when due to psycho-pedagogical particularities specific to preschool age it is possible to familiarize children with the impact of human activities on nature and they can be educated emotions, feelings and attitudes. positive about it.

Ecological education must encourage initiative, a spirit of responsibility and dedication to building a better future.

We believe that environmental issues are urgent and need to be addressed by the whole community, and education must be an integral part of the solution. Divergent views on the state of the environment, the consequences of its degradation and the role of education are good topics for discussion and debate. Of we also believe that environmental education should not impose on people a certain kind of think; Our hope is that it can help people learn how to think - including how to solve problems, make decisions, weigh options

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and align values with actions personal.

There are voices claiming that students everywhere - especially in urban areas - are losing touch with the natural world. In many places, outdoor experiences are not a common part of instruction; outdoor experiences are often reduced to a few outings in primary school instead of being used throughout the student's schooling period. Bringing students into the environment on a regular basis is an important part of a conscious environmental education program. Nothing can replace one's own experiences that help students understand own community, natural systems and environmental issues.

Using the environment as a classroom is also a way to bring students closer to nature to stimulate their creativity in written expression. It is recommended that science and mathematics teachers use the environment as a laboratory in which students conduct their investigations and experiments. It is also important to be sensitive to the realities of the environmental issues you are dealing with confronts the community. Many students and their families can be directly / indirectly responsible for the environmental issues that students are investigating.

One of the goals of environmental education programs is to help students develop ability to think - critically and creatively.

This is the reason why it is necessary to define an ecological educational model in our country and to implement activities in the field that capitalize on the knowledge, skills and attitudes specific to environmental education in the context of sustainable development.

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## Conclusions

The following conclusions can be drawn from this paper:

1. One of the purposes of achieving an ecological educational model is to help students **develop their ability to think** - both critically and creatively. A student who may one day be a member of the local council will be most effective if he or she is able to weigh options well, identify alternatives, communicate, ask the right questions, analyze suggestions from citizens, and take decisions.

2. Environmental education also cultivates a **system of values**. As children grow older, the value system they promote influences the choices and decisions they make about all aspects of their lives, including environmental issues. Values also bring consistency of a person's life, which helps him to realize a better concept about himself.

**There is a close link between values, beliefs, attitudes and the development of an environmental ethic.**

3. An environmental education program can do much to empower students to **improve the quality of their lives** and the lives of others. And this power can lead to amplification feelings of pride and self-respect. When students take part in a community project to help improve the quality of the environment or solve a community problem, they help themselves and others at the same time. They assert their own values and see that their actions matter.

4. A teacher involved in the life of the local community can **introduce the strategies of environmental education in teaching**. The quality of the environment is directly reflected in the lives of students and their families. Helping them to know their rights as citizens, empowering them to act and feel that they it matters, clarifying the links between individual or family health and the environment, showing the connection between personal income and the environment, and arousing their interest in the natural world, you can ignites a spark of personal property in environmental issues. And don't worry if you can't do it all - lighting a spark is a good start.

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## Bibliography

1. Ciolan Laura, 2002, Early education. The problem of the global and individual development of the small school, univ. Bucharest, DPPP
2. Dulama eliza, 2010, Knowledge and protection of the environment by children, ed. Cluj University Press, Cluj
3. Gavreliuc A, 2006, From interpersonal relations to social communication, Polirom Publishing House, Iasi
4. Saburo Okita, 1992, Facing the 21st century, Ed AGER the economist, Bucharest
5. Rupert Seidl, 2017, To Model or not to Model, That is no Longer the Question for Ecologists,
5. xxxDEX, 1996
6. xxx, 2008, Ecological education and environmental protection, student's notebook, BREVIS ed., Oradea
7. xxx, 1995, Ecology, citizen education

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