



## ORIGINAL

**Environmental Education: an efficient process for the formation of conservational attitudes in elementary school students.**

MSc. Yusdell Iván Rodríguez León, Prof. Auxiliar. [[yrodriguezleon@udg.co.cu](mailto:yrodriguezleon@udg.co.cu)]   
*Universidad de Granma. Bayamo, Cuba.*

MSc. Eduardo Escalona Pardo, Asistente. [[epardo@udg.co.cu](mailto:epardo@udg.co.cu)]   
*Universidad de Granma. Bayamo, Cuba.*

Lic. Dannys Agustín Cabrera Cañadilla, Asistente. [[dcabrerac@udg.co.cu](mailto:dcabrerac@udg.co.cu)]   
*Universidad de Granma. Bayamo, Cuba.*

**Abstract**

This article is the result of a thesis to solve, from the research process, the problems related to the development of environmental education in primary education, since an adequate methodological work that contributes to the development of environmental attitudes has not been achieved yet. A study of the main references that support the theoretical framework of this research is made, the trends of the development of environmental education in Cuba are declared, as well as the diagnosis of its current situation from the teaching learning process in this level of education. As a result, it contributes to the solution of this problem through the contribution of theories that enrich the methodological preparation of teachers. The article aims at declaring the references of the environmental education process in primary education, which constitutes an important theoretical and practical reference for the formation of environmental attitudes in the teaching learning process of subjects such as the World We Live in, Natural Sciences, Geography and the development of extra class activities to promote the work with environmental education.

**Keywords:** environmental education; theoretical references; environment; attitudes.

**Recibido:** 14/04/2020 | **Aceptado:** 27/09/2020

**La educación ambiental: un proceso eficiente para la formación de actitudes ambientales en los alumnos de la enseñanza primaria.****Resumen**

El presente artículo es resultado de una tesis de grado para solucionar, desde la investigación, la problemática relacionada con el desarrollo de la educación ambiental en la enseñanza primaria, pues todavía no se logra un adecuado trabajo metodológico que contribuya al desarrollo de actitudes ambientales. Se realiza un estudio de los principales referentes que

sustentan el marco teórico de esta investigación, se declaran las tendencias del desarrollo de la educación ambiental en Cuba, así como el diagnóstico de su situación actual desde el proceso de enseñanza aprendizaje. Como resultado se contribuye a la solución de esta problemática mediante el aporte de teorías que enriquecen la preparación metodológica de los docentes. El artículo tiene como objetivo declarar los referentes del proceso de educación ambiental en la enseñanza primaria, los cuales constituyen un referente teórico y práctico importante para la formación de actitudes ambientales en la enseñanza aprendizaje de asignaturas como el Mundo en que Vivimos, Ciencias Naturales, Geografía y desarrollo de actividades extra clases para fomentar el trabajo con la educación ambiental.

**Palabras claves:** educación ambiental; referentes teóricos; medio ambiente; actitudes.

### **Introduction**

Primary education includes ways of feeling, thinking and acting, which correspond to the system of values and ideals of the Cuban Revolution. That is, the patriotic-military, internationalist, civic, labor, vocational and economic formation, as well as the environmental and energy-saving. Hence, environmental training at this level is considered a dimension of the integral formation of personality.

Environmental education is a process that began for several years in countries of the United Kingdom and France, characterized by a conservationist approach in relation to the environment and its problems and by the emergence of the first attempts to achieve social well-being and raise the living standards of the population.

In 1959, in Cuba, due to the scarce industrial development, the inattention of the environment and the critical social situation with high levels of poverty, unemployment, low levels of health and illiteracy, a positive attitude was formed towards the development of environmental education that favors the implementation of actions aimed at the protection, improvement and conservation of natural resources. It is still not possible to speak of the establishment of environmental education in teaching, but actions with that purpose are beginning to be organized.

With the improvement of school curricula, a work begins with the environmental education process in the school through educational, extracurricular and extra class activities and there are multiple efforts to improve it, but through the implementation of different research scientific methods, insufficiencies were detected, that still exist today, to favor the adequate development of this process, among which the lack of a literature with a specifically environmental profile with an interdisciplinary character stands out, the methodological guidelines to develop this work

through classes are limited and although the environmental educational aspect is considered in the general objectives for each grade, its conception shows a conservationist and reduced understanding of the natural aspects of the environment. Therefore, this article declares the fundamental references that constitute the conceptual theoretical framework of the research aimed at the development of an adequate work with the process of environmental education in primary education.

### **Population and sample**

For the application of empirical methods during the investigative process, a theoretical study was carried out for which a population of 59 teachers, three head of cycles, two school sub principal teachers, three school principals and 165 sixth grade students from the primary schools “José Maceo Grajales”, “Luís Ángel Rodríguez Muñoz” and “Pedro Sotto Alba” was determined. The sample was chosen randomly and was made up of 81 students, which represents 49% of the population.

A study started from the analytical-synthetic method to characterize the process of environmental education in primary education. The resources of the bibliographic review, the content analysis, as well as the survey and the interview were used to scientifically corroborate the problem addressed and the assumption of different theories to form the theoretical framework of the research and declare the shortcomings based on carrying out a theoretical and practical contribution.

### **Analysis of the results**

The development of society has raised the need to undertake educational projects for the formation of individuals with a collective thought, promoters of technical scientific progress aimed at human development, from the understanding that the problem of man's relationship with nature, of which emerges the environmental, appears in the history of humanity as the problem of the relationship between human society and the surrounding natural environment, as something social and as a natural or biological historical demand. This confirms the existence of a fundamental dependence between nature, material culture and the total development of individuals.

In this article the authors considers the environmental, as the category expressed in the result of the concrete forms of society-nature relationship historically given in correspondence with the level of development of the practical social activity that directs it. That is, the environmental as everything that surrounds us or that which surrounds man, understood in the essentiality of the material world and in the different relationships deriving from it, but not only to the degree of its

identification as matter, but as a category, as an abstraction that manages to have multiple concrete expressions in reality. It is a much broader concept than environment. Miranda, Vera, C. (1997). From this point of view, the understanding of the environment as a complex and dynamic system of ecological, socioeconomic and cultural interrelations is assumed, which evolves through the historical process of society, encompasses nature, society, historical cultural heritage, created by humanity, humanity itself and as an element of great importance social relations and culture.

Colom, A. and Sureda, J. (1989) refer that Environmental Education becomes the only critical Pedagogy of this time, since it considers man as a means to achieve his true purpose: the conservation of nature, of the living beings threatened and the environment in general and it has not evolved yet to constitute an independent science. So, when speaking of Environmental Pedagogy, reference is made to the categories of Pedagogy as science, in an environmental direction.

Other definitions refer to environmental education as an educational, permanent or pedagogical process, teaching value judgments, an instrument to promote awareness, educational action, a result of reorientation and interrelation of educational disciplines and experiences. In general, the tendency is to consider it as a way to influence the behavior of the individual in relation to the environment, but without linking it to development and without directing them to sustainable development, which has been consistent with the historical moment in which they have been declared.

In the context of contemporary pedagogy, environmental education is considered as part of comprehensive training, as a component of it (Cardona J. A. 1995), together with scientific, intellectual, patriotic, moral, aesthetic, polytechnic and labor, or influencing from each component; that is, it is considered a dimension of the integral formation of individuals.

Torres Consuegra, E. and Valdés Valdés, O. (1996) suggest that it is necessary to incorporate the environmental dimension into all the activities of the educational teaching learning process and to achieve the connection and extension to families and communities. It means that in the student context, environmental education requires the cognitive process of all subjects in general, everything instructive, incorporating the ethical, the aesthetic, transcending the limits of the school to the community.

The analysis of these criteria allows to understand environmental education as a dimension of the educational process in general, with a formative and integrative nature, which must provide individuals with a set of habits, skills, values and attitudes based on knowledge, to achieve that

this manifests it in an adequate behavior towards the environment and its problems, as a reflection of an environmental training; which is understood as a realization or result of the environmental educational process.

This integrative treatment implies considering the interdisciplinary character of environmental education not only as an epistemological criterion, an instrumental and operational system, but also a way of being, a philosophy of work, a way of thinking and proceeding to face the knowledge of reality and solve any of the problems that this raises. Fiallo Rodríguez, J. (1999).

The environmental educational process is oriented not only to the understanding and correct interpretation of environmental issues, but also to the need of students to develop values consistent with such approaches. From this criterion, environmental education is conceived as a cross-curricular study in primary school. However, the consideration of the evaluative sphere in educational practice is insufficient. This limitation is recognized when considering an error the belief that including students in planting trees, hygiene or energy saving campaigns, collecting raw materials, campsites, camping, among others, can produce the expected educational effects by themselves.

The environment outside of human thought, outside of human values is not educational, but when man learns to value it, becomes a powerful means of education; if environmental education does not assume it, it will never be able to account for its object of study, which constitutes the most complex when understanding the biotic, the abiotic, the axiological and the behavior. Torres Consuegra, E. (2001)

The environmental educational process must contribute to the construction of a hierarchical set of values, an aspect that is not yet satisfied in the development of environmental education in primary schools. In this regard, García Martínez, A. (1996) argues that environmental education is perceived from the axiological vantage point as an educational strategy to solve the big problem that we have in our hands: our persistent bad education about everything that concerns the environment in which we live and from which we live. The axiological offer represents the guiding basis of this strategy.

Miranda, Vera, C. (1997) refers that from the axiological point of view it is understood that as a result of the nature-society relationship and the relationships between men and society, historically conforms a system of values of a spiritual order that finally has the functionality of regulating these relationships between humans and with nature and claims that the theoretical thinking that today tries to respond to environmental problems should be directed towards this.

Hence, transversality is not seen only as transversal themes or prioritized content, currently defended by some authors (Gómez Granell, J. (1996); Fiallo Rodríguez, J. (1999); Santos Abreu, I. (2017), but also as a globalizing, integrating, totalizing, holistic way of assimilation of the content system; Brito Sierra, Y. (2005); Romero Pacheco, E. (2006). This implies a global resizing of learning from reality that students live, a learning focused on the necessary synthesis and harmony between learning to learn and learning to live.

It must be considered that the primary school student is in the stage of changes and transformations towards adolescence, which is perhaps the stage of more abrupt changes in the formation of the human being's personality, the social environment demands greater responsibilities in general and in particular each student's family. The teaching activity becomes more complex as the teaching and educational subjects and activities diversify, they are required to conduct themselves adequately in all spaces, however, sometimes, the socializing demands of the family and the community environment are not consistent with the demands of the students.

In this sense, it must be taken into account that the environmental educational process as a dimension of the educational teaching process in primary school must start from an integrative teaching problem, which takes advantage of the potentialities of the subjects, the environmental problems of the territorial context and the particular characteristics of students through diagnosis.

This is related to the community approach that bases environmental education and which is based on the school-community relationship. From this approach, the social function of the school is considered in the preparation of the student to adjust to community life and at the same time enhance in him capacities to transform it, hence it is assumed as a fundamental context of the environmental educational process. Torres Consuegra, E. and Valdés Valdés, O. (1996)

This position is assumed by the authors of this article, who conceive schools in their socio-community role as public places where students learn knowledge and develop skills necessary to live in an authentic and democratic community. A school oriented to the formation of citizens has to shed light on social reality: see and feel what happens beyond its walls, reflect on the conflicts and contradictions of society, reveal what happens on the other side.

The historical cultural approach of Vigotsky, L. V. (1987), is the essential foundation of pedagogical practice in Cuba and an unavoidable reference point for the Project of Transformations in Primary education; from this perspective it is assumed the conception of the

developer-teaching learning process that arises must characterize this education and which approaches are reliable with the aspects that must be considered in the development of environmental education as a formative and integrative process and dimension of the teaching learning process.

From this perspective, environmental education as a dimension of the educational teaching process, is conceived as the process of appropriation of the social historical experience of humanity that is expressed in the teaching content, in an environmental direction in which the student participates actively and consciously, with the teacher's direction, by appropriating knowledge, skills, as well as procedures to act, in interaction and communication with others. This favors the formation of values, feelings and standards of conduct consistent with the need to care for and protect the environment and help their family members to face climate change (Life Task) and them at the same time to the community in general.

A frontal group work with the student must be accompanied by an individual work. Each student is the bearer of the influences of their community and family environment, of psychological traits and characteristics that are in a period of change, of consolidation of self-esteem, self-awareness, self-image and they do not occur in the same way, nor at the same time in each.

Environmental education has established the system of principles approved in the Tbilisi Intergovernmental Conference. This principle system must converge with the principles for the direction of the pedagogical process according to Addine Fernández, F. (2002), based on the development of student's environmental training during the educational teaching process. However, when analyzed, it is interpreted that they are expressed as regulations to channel a certain action and do not become an instrument for the teacher.

Roque Molina, M. (2003) overcomes this limitation by formulating the system of principles, in this case aimed at the formation of the professional's environmental culture. When relating these principles with those established for the direction of the pedagogical process in primary education, it is revealed that there is a greater approach since they converge when referring both to the unity of the scientific and ideological character, the unity of the cognitive and the affective, to the collective and individual character and the relationship of the school with life, the social environment and work in the educational process; the first in an environmental direction and the second in a general way. So they are constant, regardless of not being designed for the same level of education. However, and independently of the fact that the principles formulated by Roque Molina, M. (2003) include the ethical, interdisciplinary, global and historical character of environmental problems, they still do not reveal the uniqueness of environmental education,

nor do they evidence the heuristic dynamics, problematizing and hermeneutic that connote this problematic.

This theoretical insufficiency also includes the methods of the environmental educational process. It must be considered that the method mediates the relationship between the object and the content. This, by specifying the dynamics of the relationships that the environmental educational process implies as a dimension of the educational teaching process and formative and integrative process, favors the content of different qualities, promotes understanding, critical-reflective assessment and construction as psychological processes, from which the learner must organize their resources and modify their mode of action accordingly with the need to care for and protect the environment.

*The environmental attitude as a reflection of student's environmental training.*

The environmental educational process must contribute to generating positive attitudes. In the analysis of attitudes, it generally refers to psychological processes that intervene in the development of human activity, but that are not visible, explicit, strong, but are mixed in such a way with the other processes that a careful analysis is necessary in order to extract, through the methods and procedures of scientific research, its fundamental characteristics.

From the analysis of different definitions of attitude, it is determined that the characteristics of these definitions are the disposition, predisposition, event or situation to act, the predisposition or determination to respond in a favorable or unfavorable way with respect to a given social object, the tendency to act before given social situations, favorable or unfavorable ways with respect to a given social object, the tendency or disposition to evaluate objects, actions, events or situations and the convictions, beliefs and behaviors about a certain matter, object or sector of reality or its environment.

From their considerations it is inferred that the attitude is the disposition or predisposition of the subject to act, respond and evaluate in a favorable or unfavorable way, with respect to the beliefs and behaviors acquired about a certain matter, event, object or sector of social reality and surrounding and that is a psychological trait that allows defining the relationships between the subject and the object, which cannot be measured directly, but is inferred from the behavior or verbal declarations of the subject.

Attitudes can be of two types: the Mentalist Attitude, which is the mental disposition that guides the action towards the object of the attitude and the Behavioral Attitude, which is a response to a specific object. Both differ in their mentalistic or behavioral conception, and also differ in the structural nature of attitudes, with two schools of thought in this regard.



The Single Component School maintains that an attitude is simply the tendency to evaluate an object in positive or negative terms. According to this school of thought, attitudes are evaluative, and refer to an object; that is, they consider attitudes as one-dimensional, because the structural conception of attitude is restricted to a single dimension: the evaluative.

The School of Multiple Components conceptualizes the structure of the attitude formed by three components. The cognitive component, consisting of the perceptions, criteria and information that one has towards an object. Objects that are not known or about which there is no information that cannot generate attitudes towards them.

The affective component, such as the feeling for or against a social object, is the most characteristic component of attitudes. The behavioral component, such as the tendency to react to objects in a certain way, is the active behavior of the attitude. If you have negative feelings towards a certain person or group, you tend to avoid them, and on the contrary, if you have positive feelings, the tendency will be to interact frequently with them.

Based on these ideas, it is understood that, although there is no unanimity regarding the relationship between attitude and behavior, attitudes can be considered as good predictors of an explicit behavior. There is a coherent relationship between attitude and behavior. The organized set of convictions or beliefs originate attitudes, which are accompanied by emotional elements that create positive or negative feelings oriented towards objects, situations or people.

The first things that the individual acquires are the beliefs or convictions they have, accompanied by emotional and affective elements. In this way, when a set of convictions is formed accompanied by a cognitive load, they cause the appearance of attitudes, which always refer to values or are the reflection of these, which occupy the highest and most abstract place in the cognitive structure of the subject.

Values are lasting convictions, occupying an important place in the personality and cognitive structure of people (hierarchy of values). This scale or hierarchy of values guides, controls and directs people's beliefs and attitudes. If this is taken into account in the conception of a process of formation of environmental attitudes, it is guaranteed to achieve a correspondence between student's thinking and acting.

Hence the need to replace the traditional model of environmental teaching with a more cognitive, participatory and evaluative reasoning, with a predominance of an education for moral autonomy, logical reasoning and the development of analytical skills, on the basis of reality. This means leading the formation of attitudes to the prevention and solution of environmental problems for a better quality of life of the population, through the formation of a cultured,

supportive, tolerant citizen, lover of peace and concerned about the environment, with an ethical sense.

For the evaluation of environmental education, three cognitive levels of integration defined by the training of pedagogical personnel are considered, and they value the knowledge acquired about the environment, skills and attitudes. The following indicators reflect the manifestations of environmental attitudes (sensitivity, recognition, respect, valuations, responsibility, and critical attitude); however, although they contribute to assessing the behavior and values of each student regarding the environment, they do not help to understand how to form and evaluate them.

*Historical trends in the development of environmental education and the formation of the environmental attitude in primary education in Cuba.*

To determine the trends of environmental education in Cuba and specifically in primary education, an analysis is carried out that allows the characteristics to be grouped into four stages, which differ from the pedagogical novelty at the different moments of educational improvement after the revolutionary triumph in 1959 and that significantly affect the introduction and development of environmental education in the student context. The indicators for the historical characterization of each stage were:

- Repercussion in Cuba of the development of environmental education in the international arena.
- Conditions that favor the introduction and development of environmental education in the Cuban student context.
- Characteristics of the implementation of environmental education in primary education.

*First stage from 1959 to 1975:* The triumph of the Revolution, starting in January 1959, marks the beginning of this stage. In it, the first evocative actions of the environmental educational concept in the student field are given and countries such as the United Kingdom, the Nordic Countries and France in the United Nations Organization for Education, Science and Culture are pioneers of this movement. In this initial moment, environmental education is characterized by a conservationist approach in relation to the environment and its problems and by the emergence of the first movements that advocate for human social welfare to achieve certain objectives that contribute to raising the levels of life of the population.

It is also characterized by the creation of important organizations that help to institutionalize it internationally, such as: the Man and the Biosphere Program (MAB), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Program for the

Environment (UNEP), the International Program for Environmental Education (PIEA), the International Union for Conservation of Nature (IUCN), the United Nations Conference on Environment and Development (UNCED), the Organization of the United Nations for Food and Agriculture (FAO), the World Health Organization (WHO), among others.

Cuba, in 1959, inherited a deformed economic structure, with little industrial development and a negatively impacted environment, at this time there is a critical social situation with high levels of poverty, unemployment, low levels of health and illiteracy, which causes from an economic, educational, social and environmental point of view, that the country also faces a deep crisis. However, there is a positive impact on the international development of environmental education, given the existence of a political determination that favors profound transformations, which lead to positive changes in the living conditions of the population, through actions aimed at protecting, improvement and conservation of natural resources.

Although it is not possible to speak at this stage of the establishment of environmental education in primary education, the conditions that favor a movement in this direction are given. The schools are linked to the conservation and protection actions that are developed by the revolutionary transformation process and in some way this participation contributed to take off and advance in the process of raising awareness of the environmental problem.

*Second stage from 1975 to 1990:* In the improvement of the school curricula, the debate of important ideas regarding the curricular conception of environmental and integrative education of the environment prevails for the study of its problems, and the definitions of the concepts sustainable development and eco-development are introduced. This analysis is taken up in Cuba in the development of national seminars, workshops, conferences and meetings. These events contribute important elements to the work of environmental education in schools as one of the responses to the approach of an international need, which also constitutes a national reality.

The National Seminar on Environmental Education, held in Havana in 1979, which is organized and developed by the Central Institute of Pedagogical Sciences, with the assistance of UNESCO, constitutes the starting point for environmental education work. In this, it is specified that the school is the basic institution to treat environmental education through the class and the interdisciplinary approach is emphasized by carrying out extracurricular and extra class activities with a theoretical-practical and investigative nature, on the environment and natural resources.

In addition, environmental education in this education is characterized by a development in the manner of tasks and objectives to be fulfilled, in which enthusiasm and motivation prevails,

without using educational research with its wide possibilities. But there is limited progress in the interdisciplinary conception of environmental education that progresses gradually and its introduction in primary school is produced mainly with a curricular conception. This constitutes one of the first responses of Cuba, from the pedagogical context, to the need that arises in the international debate during this stage on the environmental problem.

*Third stage from 1990 to 2000:* Cuba receives its impact on economic and social development, which is logically reflected in education and its quality levels. In this stage, the strategic approach to the treatment of environmental problems on the basis of sustainable development begins to manifest itself from the establishment of the International Strategy for Environmental Education, since the International Congress of Moscow, in 1987.

There is a refinement of the training process that implies the conception of environmental education as part of integral education and a component of the educational process, by introducing cross-curricular studies, which among others include environmental education, to enhance this process, which constitutes an essential element, as well as its inter and multidisciplinary conception and not as a subject. In primary education, the new conception of the structure by subjects tends to reinforce the treatment of environmental issues, from the methodological work of the subjects and the degree that favors, among other relationships, the unity of the cognitive and the affective.

*Fourth stage from 2000 to the present:* The determination of the Objectives and General Training Contents of primary education, as a result of the development of the transformations in this level, marks the beginning of this stage, in which the efforts to promote the integrality of the process are manifested environmental education and interdisciplinary and multidisciplinary implementation, by projecting towards a more comprehensive work in the treatment of environmental issues in the educational teaching learning process with a marked formative approach.

In the General Training Objectives of this education, the environmental aspect is considered, although its proclamation does not reflect the complex nature of the environment, nor the link between the educational process and development. In them, the student is not interpreted in the center of the actions, in an interrelation with the environment, but in a relationship only of knowing and not of acting, even when acting is mentioned. Thus, environmental education in primary school shows an ascending development in the instrumental, the external of the educational process, which is not yet expressed internally, which is nothing more than the result.

In general, this periodization allows determining the development trends of environmental education. They are:

- The transition of environmental education from a naturalistic conception, through a conservationist conception, to moving towards a conception based on development and sustainability.
- The interdisciplinary nature of environmental education is systematized when the vision of the process in the natural aspects of the environment is broadened.
- Environmental education is basically manifested in the cognitive, until reaching an affective treatment, when the training approach is achieved.
- Environmental education is not focused directly and particularly at the formation of environmental attitudes as a concrete result of educational influence in this direction.

*Diagnosis of the current state of environmental education from the teaching learning process in Primary School.*

The study of the main insufficiencies in the development of environmental education from the teaching learning process in primary school are fully identified with the results of the diagnosis carried out in the three schools declared as the population of this research.

In the first stage of the diagnosis, only the “José Maceo Grajales” and “Luís Ángel Rodríguez Muñoz” schools are included. From this diagnosis, insufficiencies are detected in the preparation of teachers and supervisors to systematize environmental education from the teaching learning process. In the same way, the interest and enthusiasm of the students for participating in activities related to the environment is confirmed.

In the second stage, the diagnosis is made at “Pedro Sotto Alba” Primary School. In this center, the purpose of the diagnosis is to reveal the level of preparation of teachers, expressed in their performance for the formation of environmental attitudes in students from the teaching learning process in different conditions at the first moment of this diagnosis. The indicators used for the analysis are the following:

- Design and development of environmental education activities in the school.
- Theoretical-methodological preparation of teachers to develop the work of environmental education from the educational teaching learning process.
- Contribution of the educational teaching learning process, which takes place in the classroom context, to the formation of environmental attitudes in the student.

- Cognitive, affective and behavioral development of the student in relation to the environmental aspect.

The analysis of the data obtained through the application of the research methods and techniques shows the following regularities.

- The environmental educational aspect is considered in the general objectives of each grade; however, its conception shows a conservationist and reduced understanding of the natural aspects of the environment, a situation that does not correspond to the current theoretical development in relation to environmental education.
- The methodological guidelines are insufficient to specify the integration of the contents related to the environment in order to develop an environmental educational work with a formative nature and they lack arguments because they do not explicitly declare their contribution to the formation of environmental attitudes.
- Knowledge of the conceptualization of environmental education and clarity of its conception as a cross-curricular study is evidenced, it is also signified as an important aspect in the primary formation of the student and the role of the school and the teacher is highlighted.
- There is awareness of the methodological guidelines and indications of the Ministry of Education that guides the development of environmental education, but it is pointed out that they are not totally explicit and therefore are not considered sufficiently guiding.
- Teachers tend to link the environmental aspect with the content of the class, however a naturalistic vision prevails in this regard and a correct representation of its complex and inclusive nature is not evidenced.

In a general sense, the diagnosis reveals insufficiencies in the direction of the environmental education process in primary school, which are essentially manifested in spontaneous and not very inclusive work, a consequence of insufficient methodological preparation of teachers in this regard. So that environmental education, at the present time, is not in correspondence with the demands and the effectiveness required by the comprehensive training process of the student based on environmental attitudes.

## **Conclusions**

1. Environmental education is an issue investigated by different authors and it is considered as an educational conception of a formative and integrative nature, which, although it has been enriched with the contribution of different theoretical approaches for its implementation in the pedagogical context, it does not provide a sufficient response to the needs of the student's comprehensive training process yet.

2. The development of environmental education in elementary school in Cuba has gone through four stages of development since 1959, significantly conditioned by the pedagogical novelty in educational improvement, in which the evolution towards a conception of sustainable development manifested as trends: the systematization of its interdisciplinary nature and the insufficient treatment of affective aspects.
3. There are insufficiencies for the direction of environmental education from the educational teaching learning process to promote the formation of environmental attitudes.

### **Bibliographic References**

- Addine, F., González, A. M. y Recarey, S. C. (2002). Principles for the direction of the pedagogical process. In G. G. Batista. *Compendium of Pedagogy*. Havana: People and Education.
- Brito Sierra Yamilé. (2005). Methodological proposal for the teaching, investigative and productive exploitation of the Basic-experimental Area in the Agricultural Polytechnical Institute in *Santiago de Cuba*. Thesis in option to the Degree of Doctor in Pedagogical Sciences. Higher Pedagogical Institute "Frank País García".
- Cardona, J. A. (1995). The evaluation of environmental education. Conference. IV National Seminar on Environmental Education of the Higher Pedagogical Institutes of Cuba, Villa Clara.
- Colom, A Sureda, J. (1989). *Environmental Pedagogy*. Ed. CEAC.
- Fiallo Rodríguez Jorge. (1999). *Studies about a model in the High School in Cuba*. Havana, ICCP.
- García Martínez, A. (1996). Axiological References of Environmental Education, in *Pedagogy*, University of Murcia.
- Gómez Granell, C. and others (1996). Permanent seminars in Environmental Education. (MOPT)
- Miranda Vera, C. E. (1997). *Philosophy and Environment: A theoretical approximation*. México.
- Romero Pacheco, E. V. and others (2006). Transversality in environmental education in *Education* N. 119 /September-December. Havana.
- Roque Molina, M. (2003). *Educative Strategy for the Environmental Education Formation in Cuban Professionals*. Thesis in Option to the degree of Doctor in Pedagogical Sciences. Higher Pedagogical Institute "Enrique José Varona". Havana.
- Abreu, I. (2017). Improvement of environmental education for sustainable development in the National Education System. Advances in the introduction of a scientific result. In: International Conference Center, Havana, Cuba.
- Torres Consuegra, E. and Valdés Valdés, O. (1996). "*How to achieve environmental education in your students*". Havana. People and Education.
- Vigotsky, S. L. (1987). *Language and Thought*. Havana: People and Education.