

JOSÉ MARTÍ PÉREZ UNIVERSITY

PEDAGOGICAL SCIENCES FACULTY

FOREIGN LANGUAGE DEPARTMENT

MAJOR PAPER



ENVIRONMENTAL EDUCATION IN JUNIOR HIGH SCHOOL

Author: Jorge Luis Hernández Cardoso

SANCTI SPÍRITUS

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2016-2017**

DEDICATION

To the Revolution, for giving me the opportunity to enter university studies

GRATEFULNESS

To my family, for their demonstrated patience,
constant encouragement and complicity
in the realization of this dream.

To the cadres, officials and guides
in the town of La Sierpe for their
cooperation.

To my colleagues at Nestor Leonelo Carbonell
Junior High School, especially English
teachers for the generosity of their help
and for their constant concern

To all those who agreed to use part of their
valuable time to offer me their criteria as
specialists or to endorse the results of
this work.

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SUMMARY

The Cuban Revolution from its earliest moments has paid careful attention to raising the cultural level of its population, many actions have been taken in this direction, Commander in Chief Fidel Castro Ruz, has always been linked to intellectual development, following the special period in which the economic, political and social situation became more acute, he said that the war that was being waged in the field of ideas, I think The Battle of Ideas, and especially one of its programs, was precisely related to the Formation and development of the teacher as socializing agent and spokesman of the politics of the socialist state.

The present work includes one of the edges of the professional content of the teacher and guide of pioneers, in developing environmental education from the pioneer action, always with a marked interdisciplinary approach, where all curricular subjects are effective in Junior High School.

In the plan of activities of the pioneers are carried out varied activities, motivating and interesting for the teaching, extroverts and out-of-school activities to develop in an integrated way, patriotism and environmental education. The Pioneer Explorers Movement is chosen, given the possibilities it offers to carry out patriotic and cultural activities in the natural environment. The proposed activities aim to strengthen patriotism, develop environmental education and at the same time raise the cultural level by carrying out joint actions that promote a pleasant and pleasant stay, in order to develop a healthy, cultured and useful recreation, capable of raising the level of explorer's life ensures the execution of life in the campaign, survival and prepares them for life in a general sense, as part of the formation of the new generations that guarantee the historical continuity of the Revolution.

INTRODUCTION

Humanity must work steadily to solve different problems of a global nature and objectively their solutions depend on the existence of the human race. Problems related to the protection of the environment are great of concern in the world due to their increasing existence.

The feeling of taking care of the environment is proper to man, but better results can be obtained when the solutions are planned and develop with educator's guidance, families and all society

The protection of the environment has become a priority, in order to guarantee the economic, social and, above all, the health and survival of the human species throughout the planet.

During the course of the 1960s, environmental concerns began to reveal themselves more intensely, and the development of a growing sensitivity by all sectors of society began, in the face of environmental degradation, but the first initiatives to solve this situation do not arise in the context of the school, but in other social spheres, being collected and disseminated mainly in international organizations attached to the United Nations.

Organizations like the International Fund for Food (FAO), the United Nation Educational, Scientific and Cultural Organization of the United Nations Environment Program (UNESCO) and the World Health Organization (WHO) which in whole the program called "Man and Biosphere" was approved and implemented in order to provide basic knowledge for the rational use and conservation of resources in the biosphere since the year 1971.

Cuba is not excluded from environmental problems. Proof of this it is expressed in the program of the Communist Party of Cuba, democratically approved at the Third Congress in 1986 and recently ratified at the Seventh Congress in May 2016, to analyze the economic and social guidelines relating to environmental issues.

In order to contribute to sustainable development and the improvement of the quality of life, it is necessary to change the way of thinking and acting, as well as to develop responsible environmental behavior.

The behavior that each person acquires requires and demands a participatory citizen, who expresses his/her views, his criteria, his/her positions contributing knowledge in the solution of each problem.

Since the 1990s, the Ministry of Science, Technology and the Environment (CITMA) has worked to achieve this approach and clarifies concepts in order to achieve responsible behavior through different environmental education actions based on the National Strategy for Environmental Education and the implementation of these strategies in the different sectors of the country.

This strategy is a priority of the Ministry of Education's policy, materialized in educational practice, by incorporating environmental education as part of the educational and research work, from the school and to the community, using the class as an essential way of the process of Teaching learning and other extracurricular and extracurricular spaces.

Cuba pays great attention to the development of environmental education through educational centers and is confirmed in Article 27 of the Constitution of the Republic that states: "The State protects the environment and natural resources of the country."

In order to achieve sustainable development, the main environmental problems that affect the country, the provinces and the municipalities are identified, but their solution must be a coherent, integrative, systemic approach, and not as the simple sum of isolated actions, since everything has its concatenation on the main component of the environment that are human beings.

Although environmental policy has been drawn up, many difficulties remain, including:

- Poor knowledge related to environmental issues at international, national and local levels.
- Insufficient mastery of the environmental education work guiding documents.
- The desired effectiveness in the integration of all the actions carried out in the school in a coherent way in the work with environmental education has not yet been achieved.

These situations motivated the formulation of the **scientific problem**: "How to develop environmental education in the Pioneers from Junior High School?"

As a **study object** was determined: The environmental education of the pioneers and as a **field of action**: the development of educational actions to strengthen education in the ninth grade pioneers.

The objective was to employ educational actions to develop environmental education in the ninth grade pioneers, where the knowledge and skills of the English language, environmental education and pioneering work are integrated.

To conduct the investigative process the **scientific questions and tasks** were determined:

Questions:

1. Which are the theoretical, methodological ground works that sustain the environmental education in Junior High School?
2. Which is the current state of the environmental education in ninth graders students from Nestor Leonelo Carbonell Junior High School?
3. What educational actions to develop environmental education in ninth graders students from Nestor Leonelo Carbonell Junior High School?
4. How effective the applications of educational actions to develop the environmental education in the ninth graders from Nestor Leonelo Carbonell Junior High School, in the municipality of La Sierpe are?

Tasks:

1. Determination of the theoretical, methodological ground works that sustain the environmental education in Junior High School
2. Determination of the current state of the environmental education in ninth graders students from Nestor Leonelo Carbonell Junior High School.
3. Determination of educational actions aimed at developing environmental education in ninth graders students from Nestor Leonelo Carbonell Junior High School

4. Validation of educational actions aimed at developing the environmental education in the ninth grader students from Nestor Leonelo Carbonell Junior High School, in the municipality of La Sierpe.

In the course of the investigative process, methods and techniques were used to support the problem, to collect information, process it and reach conclusions. Among them are:

Methods of theoretical level:

Historical-logical: for the study of the educational process in its environmental connotation, its historical evolution, concepts, nexus and logic followed in research.

Analytical-synthetic: to process information, determine characteristics, results, search for relationships between components and draw partial and final conclusions, in addition to establishing the internal links, logical order and main characteristics of the environmental education process through a special social organization. (JMPO) integrated in this thematic axis the different subjects of the school curriculum.

Inductive-deductive: to make generalizations regarding theoretical positions, reach new conclusions about the object of research and the formulation of educational actions.

Methods of the empirical level:

Survey: used to collect information related to the theme of environmental education, with which it was possible to determine the main deficiencies of the ninth grade pioneers.

Interview: it was used to specify essential aspects of the educational practice of the Pioneer Movement and to determine the preferences of the pioneers, in order to elaborate the main actions to be carried out in the theme of environmental education.

Observation: it is carried out systematically to evaluate how environmental education manifests itself in the pioneering activities that materialize in the basic secondary school.

Methods of the statistical-mathematical level: used for the processing of the results of the diagnosis and the pedagogical pre-experiment.

Percentage calculation to analyze and compare numerical results, as well as **descriptive statistics** to evaluate the results obtained in the investigative process.

The practical contribution and novelty of this work resides in the proposal of

educational actions to be carried out with the pioneers of the basic secondary to strengthen environmental education integrating the knowledge and skills of the English language subject and the pioneering work through a **multidisciplinary process**.

DEVELOPMENT

Environmental education. Its evolution and development

One of the most important responsibilities of education systems in the world is preparing schoolchildren - citizen citizens - for the changes that will lead to a better world in the future. In this regard, at the United Nations Conference on the Human Environment held in Stockholm in 1972, he said:

"It is recommended that the Secretary-General, United Nations agencies, particularly the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the other international institutions concerned, should, after consultation and mutual agreement, The necessary measures to establish an international educational program for interdisciplinary, school and non-formal education on the environment which covers all levels of education and which is aimed at all ... in order to develop knowledge and create simple actions to enable them , In measures, of its possibilities to manage and protect its environment. " (UNESCO-UNEP, 1994, p, 13)

A significant event is the International Colloquium on Environmental Education in Belgrade in 1975, where a declaration of principles for the development of environmental education, known as the Charter of Belgrade: A global framework for environmental education is drawn up. There is great unanimity in the experts on the subject of considering it as one of the most complete. It states: "The goal of environmental education is to develop a world population that is sensitive and concerned about the environment and its problems, endowed with knowledge, techniques, attitudes, motivations and committed to work individually and collectively in favor of Solution of current problems and the prevention of new ones ". (UNESCO-UNEP, 1994, p, 19)

In October 1977, in collaboration with the United Nations Environment Program (UNEP), the United Nations Educational, Scientific and Cultural Organization (UNESCO) convened the First Intergovernmental Conference on Environmental Education Which took place in Tbilisi (Georgia, USSR). It is considered to be the most significant event in the history of environmental education, since it established the nature, objectives and pedagogical principles, as well as the strategies that should guide the development of such education at the international level. At the Tbilisi Conference, it is suggested that...

"The environment was conceived as a whole, which included both the natural aspects and those that were the result of human action, environmental education was posed with an interdisciplinary approach, problem-oriented and open to the local reality , And should be integrated into all levels of school and out-of-school, general and specialized in the educational process and enable pupils to learn to organize their own learning experiences and give them the opportunity to make decisions and accept their consequences, using a variety of educational activities and a broad Variety of methods to communicate and acquire knowledge about the environment ". (UNESCO-UNEP, 1994, p, 13)

Among the basic objectives of environmental education that were adopted in this event are:

1. Awareness: To help individuals and social groups to become aware of and become aware of the global environment and its problems.
2. Knowledge: To help individuals and social groups to understand the global environment, its problems, the presence of man in the environment, responsibility and the critical role that affect him.
3. Attitude: To help individuals and social groups to acquire social values, to be interested in the environment, to have a strong motivation to want to participate in the protection of the environment and to improve it.
4. Skills: To help individuals and social groups acquire the skills needed to solve environmental problems.
5. Assessment capacity: To help individuals and social groups to evaluate environmental education measures and programs according to ecological, political, economic, social, aesthetic and educational factors.
6. Participation: To help individuals and social groups to develop their sense of responsibility to ensure measures to solve environmental problems.

During the 1970s and 1980s it became increasingly clear that natural resources were being squandered in the name of (development). At the end of 1983, an independent commission was set up to examine these problems. The report was presented to the General Assembly of the United Nations in the autumn of 1987. It describes two futures: one, in which the human species continues to deplete Earth's natural capital. In the other, governments adopt the concept of sustainable development and organize new, more equitable structures, which begin to close the chasm that separates rich countries from the poor. This abyss, as far as energy and resources are concerned, is the main environmental problem on the planet; Is also its main development problem.

In August 1987, the International Congress of Moscow was held. The most significant outcome of the congress was the presentation of the elements for an International Strategy for Action in Environmental Education and Training for the 1990s. "World Decade for Environmental Education"

The next significant international event was the Earth Summit, held in June 1992 in Rio de Janeiro, the United Nations Conference on Environment and Development. The results of the Summit include global conventions on biodiversity and climate, an Earth Constitution of basic principles, and a program of action, called Agenda 21, to put these principles into practice. Agenda 21 in its chapter 36: Promoting education, training and awareness-raising on education points out: "Education is of crucial importance in promoting sustainable development and building people's capacity to address issues Environmental and development issues. While basic education serves as a foundation for education in the field of environment and development, education must be incorporated as a fundamental part of learning. In order to be effective, education in the field of environment and development must deal with the physical / biological dynamics and the socio-economic environment and human development (which could include spiritual development), integrate into all subjects and use academic and non-academic methods and effective means of communication. " (UNESCO-UNEP, 1994, p, 87)

From this crucial moment for environmental education, we continue to insist on the fulfillment of Agenda 21 and stressing the importance of the educational part in this process of transformation, such as the Summits on Environment and Development held in 1997 In New York and Johannesburg in 2002. The analysis shows that environmental education must, above all, try to raise awareness and the sense of responsibility of the citizens with respect to the environment and its problematic and for this all people must own Knowledge, attitudes, motivations, commitments and tools needed to work individually and collectively in order to solve current problems and prevent new ones from arising.

The genesis of environmental education was set in the 1970s, which emerged as a worldwide concern for the destabilization of natural systems, forcing the international community to approach the need for changes in science, including, the science of education, in order to give answers to the new and growing problems facing humanity. In the search for change that the social sciences present today, environmental education maintains an epistemological duality, manifested in two trends: the modern positivism, deterministic and behaviorist of Deep Ecology, and the emerging paradigmatic reconstructive paradigm of post-Modernity called Humanistic Environmentalism, where sustainable development marks the direction of the new way of relating man, production and environment.

Finally, the environmental education of the decade of 2010 is based on the interdisciplinary and transdisciplinary within the systemic approach, in the search for an economic, ideological and epistemological emancipation of the old neoliberal and positivist capitalist structures that have depredated the environment for more than Two hundred years putting in a thin cord the health of the planet and the own survival of the humanity.

Environmental Education in Cuba

In 1997, the National Environmental Strategy was approved, which is the guiding document of the Cuban environmental policy, where the five main environmental problems were identified.

- Soil degradation.
- Pollution of inland and marine waters.
- Deforestation.
- Loss of biodiversity.
- Deterioration of environmental conditions in human settlements.

Several factors led to a necessary process of adaptation of the National Environmental Strategy of 1997, responding to the current requirements of national and international environmental policy.

It has been taken into account for the determination of the main environmental problems of the country, those of greater impact and that take place in the national territory, taking into account, among other factors:

- Affection of large or significant areas of the national territory.
- Impact produced in densely populated areas.
- Alterations to the health and quality of life of the population.
- Effect of global changes, in particular climate change.
- Economic consequences.
- Effect on ecosystems and biological resources.

The main environmental problems identified in the National Environmental Education Strategy have a complex and dynamic interrelation with natural resources and their link with economic and social development; therefore, their ordering does not imply any hierarchy.

The main environmental problems identified in the National Environmental Education Strategy (2015-2020) are:

1. Soil degradation.
2. Implications for forest cover.
3. Pollution.
 - Liquid waste.
 - Solid waste.
 - Emissions to the atmosphere and sonic pollution.
 - Hazardous chemicals and wastes.
4. Loss of biological diversity.
5. Lack of and difficulties with availability and quality of water.
6. Impact of climate change.

Given these problems, the Cuban State has always been concerned with protecting the environment. In the article: Environmental education in the Cuban context of Martha G Roque (1997, p, 44) arises: ... "In the beginning of the Revolution, environmental education was framed, in the non-formal and as an inherent element Socio-economic development project, environmental education was present in different ways in the social work of the country through the popular participation of political and mass organizations, other non-governmental organizations, becoming with part of the time National traditions".

Historically in the area of the block, in the different communities have carried out tasks aimed at improving the quality of life, such as:

- Health prevention tasks, such as vaccination campaigns, blood donations, control and attention to risk groups, among others.
- Participation in work related to cleaning, beautification and general sanitation.
- Those related to saving water, electricity, fuel and other resources in general.
- Recovery of waste materials of all kinds, with the aim of refusing or recovering it for further processing. (Recycling)
- Participation in reforestation, care and maintenance of urban green areas.
- Those linked to the attention of the socio-cultural problems of the population in general and in particular the neediest social groups.

On the other hand, scientific and recreational institutions, such as museums, aquariums, zoos, botanical gardens, exhibit a long experience in the development of educational programs aimed at the general public, involving citizens of all ages,

related to knowledge and protection of certain elements of the environment (fauna, flora, cultural heritage).

The interest in the protection of the environment by the Party and the State is expressed in the Program of the Communist Party of Cuba, approved by the Third Congress in 1986, p. 12 "An increasing role in the protection of the people's health is struggling to preserve the environment and natural resources from pollution. To this end, the necessary regulations are established to achieve this objective and to adopt the provisions that ensure its strict compliance, as well as to increase the educational work aimed at the active participation of the masses in their care and protection.

In this sense the Revolution has given a set of solid steps from the organizational and legislative points of view, which have demonstrated the will of the Cuban State for the protection of the environment and the promotion of environmental education. Reliable examples are:

- Granting of constitutional status to the environment, since it was explicitly included in the Constitution of the Republic of Cuba in 1976, Article 27. Modification of the same in 1992, to strengthen the idea of integrating the environment with sustainable economic and social development, which states: "The State protects the environment and natural resources of the country. It recognizes its close links with sustainable economic and social development to make human life more rational and to ensure the survival, well-being and security of present and future generations. It is up to the competent bodies to apply this policy. It is the duty of citizens to contribute to the protection of water, the atmosphere, and the conservation of soil, flora, fauna and all the rich potential of nature. "(Constitution of the Republic, 2015)
- Creation of the National Commission for the Protection of the Environment and Conservation of Natural Resources, 1976.
- Promulgation of Law 33 of January 10, 1981 "On Protection of the Environment and Rational Use of Resources, which states in article 14:" ... that within the National Education System must include the teaching of fundamental issues On the protection of the environment and natural resources ... "(Núñez Jiménez, 1982, p, 203)
- Approval of the National Environment and Development Program, Cuban adaptation of Agenda 21, 1993.
- Creation of the Ministry of Science, Technology and Environment, 1994.
- Law 81: Environment. 1997
- 2007 - 2010, National Environmental Strategy. (ENEA).

From this analysis it can be affirmed that the protection of the environment in Cuba and its projection towards a sustainable economic and social development, becomes reality to the extent that it consolidates more the socialist character of the revolutionary process and has as center of attention to its main member: the man.

In order to promote and stimulate the environmental education of society for sustainability, in the process of implementing the ENEA will take into account guidelines, understood as conceptual elements that should characterize educational processes on the basis that environmental education constitutes an

instrument of environmental policy and management, and therefore must contribute to sustainable development. Consistent with the above, the following guidelines are proposed:

- **Sustainable Development:** The term sustainable development incorporates the necessary harmonious relationship between society, nature and economy as a process of creation of material and spiritual conditions that promote the quality of life of society, with a character of equity and social justice in a sustained way and based on a harmonious relationship between the natural and social processes, aiming at both present and future generations.
- **Interdisciplinary:** Interdisciplinary refers to how to develop a joint knowledge or set of knowledge and disciplines. It establishes a form of applied knowledge that occur at the intersection of knowledge and the transfer of concepts from one field to another, starting from the presupposition that study across these borders is a source of great progress in knowledge. The interdisciplinary in Environmental Education brings to the integral culture and the formation of a general conception of the Environment, when developing a humanistic, environmentalist, and scientific thought, allows to adapt to the changes of contexts and to address problems of environmental interest from the perspective of Various disciplines and makes it possible to assume critical and responsible attitudes towards social and environmental policies.
- **Ecosystem approach:** The ecosystem approach is based on the application of appropriate scientific methodologies, focusing on the levels of biological organization, which comprise the essential structure, processes, functions and interactions between organisms and their environment.
- **Participatory character:** Participation is the passage of people to a role of subjects and not mere objects of external practice, which determines their active participation in the conception and conduction of processes, based on collective experiences and solidarity that feed these practices and directly influence decision making. In Environmental Education, participation means the creation or adoption of new methodologies, styles and techniques aimed at taking into account the criteria, interests and knowledge of all those involved.
- **Formation of values:** The formation of values is a complex social process in which various factors (Eg. family, school, institutions, organizations) intervene and are aimed at the transmission and assimilation of social values, as an expression of Progressive trends that guide the performance of individuals.
- **Gender perspective:** The National Environmental Education Strategy should be oriented towards the promotion of a sustainable human environmental culture that recognizes in its actions the socio-natural diversity, which contextualizes the values and the traditions for a change of attitudes and ways of living.

- **Local development:** Local development promotes sustainable development from the perspective of the community, regardless of the geographic space in question, the neighborhood, the village, the popular council or the municipality and that has a meaning for the group that He inhabits them, full of senses because through him past generations that were leaving their traces, the fruits of their work, but also the effects of their action of transformation of nature.

Environmental Education in Sancti Spiritus

Sancti Spíritus emerges as a province in the political-administrative division of 1976 has eight municipalities that cover a territorial extension of 6 731.9 km², reason why it occupies the seventh place of the country. Located in the central region, it is bordered on the north by the Atlantic, in the south by the Caribbean, in the east by Ciego de Ávila and in the west by Cienfuegos and Villa Clara.

Its territory constitutes one of the sectors of Cuba where the anthropic modification of the natural environment began early, under a land use pattern that privileged economic efficiency at the expense of ecology. It is in the revolutionary stage where the planning of socio-economic activities ensures a natural use of natural resources. This policy is currently part of the Sustainable Development Concept. (Dominguez, 2003)

Main environmental problems of the province:

- Degradation of soils (erosion, poor drainage, salinity, acidity, compaction, among others): it affects large areas of the agricultural area of the province, the main base of economic activity.
- Deterioration of sanitation and environmental conditions in human settlements: affects the quality of life of the population and settlements; also affects fishing, tourism and agriculture, among other sectors, and the quality of life in general.
- Pollution of terrestrial and marine waters.
- Low forest cover: affects soils, watersheds and the quality of mountainous, coastal and other fragile ecosystems.
- Loss of biological diversity: it implies impacts on the country's natural resources, both biotic and abiotic, and the quality of life of future generations.

Climate: Predominate warm humid tropical climate, with maritime influence and semi-continently traits.

Rainfall is temporarily distributed over two periods. The rainy season from May to October averaged 1,180-1,200 mm, representing 84%, and the rainy season, with 210-230 mm, representing 16% of the annual total. The wettest month is June, with 250 - 260 mm and the least rainy, December, with 15 - 25 mm. The spatial distribution is uneven, as rains increase from the coast to the interior and with a tendency from east to west. In the mountains of Guamuaya the maximum values are recorded and the minimum ones are located in the southern coastal strip.

The average annual temperature of the province ranges between 24.0 and 26.0 ° C. The maximum values are recorded in the southern area of the territory, ranging

between 30.5 and 31.0 ° C. Minima are located in mountainous areas, ranging between 21.5 and 22.5 ° C. The warmest month is August, with values between 31.0 to 33.0 ° C and the coldest month is January, with 21.0 to 23.5 ° C.

The average annual relative humidity ranges between 80 and 82%. The maxima correspond to the mountain, oscillating between 80 and 90% throughout the year and the minimum values of humidity correspond to the southern portion, with values between 76 and 80%. The wettest months are September and October, with 86 and 85% respectively. The least humid month is April, with 75%.

The prevailing wind direction is East Northeast (ENE). The northern part of the province has the highest values, with speeds of 9.0 and 10.0 km / h, while in the center of the territory the wind weakens to blow at a speed of 5.0 and 6.0 km / h. In the southern portion is 6.0 and 7.0 km / h, that is, the highest values occur in the areas near the coasts. The months with the highest wind speed are March and April, with records of 11.0 and 12.0 km / h on the north coast, and 7.0 and 9.0 km / h in the rest of the territory.

From the meteorological point of view, the province is commonly affected by dangerous meteorological phenomena, including locally intense rains, severe local storms and tropical cyclones; No doubt, the latter are the most important because of the enormous impact they have on human lives and the economy.

Atmosphere: Given the low level of industrial development in the province, few sources of pollutants of fixed atmospheric origin are identified; nevertheless, seven main sources are inventoried as main ones:

1. Sergio Soto Refinery
2. Asphalt plant of MICONS of Sancti Spíritus
3. Siguaney Cement Factory
4. Nieves Morejón Quarry
5. Cement Asbestos Factory
6. Uruguay Sugar Company
7. Melanio Hernández Sugar Company

The neediness of monitoring stations has prevented the knowledge of air quality behavior, even though this has been one of the environmental problems identified by the population. This perception is mostly associated with car transport emissions in human settlements and noise emissions in different night and work centers.

Water resources: The province Sancti Spíritus has a total water potential of 2860.4 million m³ of fresh water (surface and underground). Due to its complex geomorphological characteristics, it presents special conditions in terms of its surface water potential, represented by 2541.5 million m³, constituting one of the richest reserves in the country. In spite of this, it is affected due to the prevailing drought caused by the effects of climate change, for this reason it is necessary to

promote environmental education to make an efficient and rational use of the precious liquid for life.

Superficial watershed of provincial interest and several of the rivers:

1. Zaza, Hacha, Caonao, Taguasco, Calabaza Rivers. River watershed of the river Tuinucú, Yayabo and Cayajaná
2. Agabama River watershed of the. Rivers: Agabama, Guaracabulla, Crab, Velázquez, Caracusey, Sipiabo and Ay.
3. River watershed of the. Rivers: North of Jatibonico and La Sierra
4. South of Jatibonico watershed. Rivers: South of Jatibonico, Surrapandilla, Guanabo, Manacas and La Salida.

Soil Resource: The great diversity of lithology and relief, under conditions of insularity, make Sancti Spíritus recognize most of the types of soils distinguished in Cuba, which has been recognized by soil scientists, bio geographers, botanists and other researchers. These soils represent the main resource that we must handle and conserve in the province, due to its natural and anthropic degradation.

Types of soils present in the province Sancti Spiritus for agricultural use:

- Ferralitics
- Dark and light brown
- Yellows
- Alluvial
- Whites

Soil conservation and improvement:

From 2003 and significantly in 2006, with an investment in the management and conservation of soils in the province, there is a very favorable trend in the application of temporary and permanent measures, with positive impacts in the area affected by the decline Fertility, as a consequence of the significant annual increase in soil area on which organic matter is applied.

In general, there is a positive rate of increase in the area of soils benefiting from the completion of more than 75% of the conservation and improvement measures required for its recovery, which is explained by the rigorous monitoring of the actions of a period to another, in the areas of greatest interest

Temporary measures:

- Sowing in contours.
- Sow prospect in maximum slope.
- Minimal machining.
- Cover
- Water field independence.
- Short cuts.

Permanent measures:

- Planting of live barriers.
- Construction of dead barriers.
- Construction of terraces with plows.
- Individual terraces.
- Living coverage.
- Hydro-regulatory forest belt.
- Filling of gullies.
- Forest cover.
- Construction of gates.

The territory has a considerable mineral reserve, represented by 40 mineral deposits that are classified as non-metallic.

The main minerals or raw materials are related to:

- Limestone for cement and lime.
- Clay.
- Silica sand.
- Aggregates for construction.
- Red ceramics.
- Construction sand.
- Ornamental rock.
- Feldspar.
- Mineral water.
- Quartz.
- Graphite.

Forest Resources: Of the geographical area of the province Sancti Spíritus (6731.9 km²), the current forest area represents 13.88%. According to the analysis of the forest dynamics, as for Cuba, in Sancti Spíritus the process of deforestation was stopped, so all reforestation work is carried out, aimed at reducing deforested areas.

The Reforestation System in the 2015 campaign was characterized by:

- Adequate production of postures in forest nurseries.
- Plantation of the planned hectares, insisting on the honey plants.
- The reconstruction of forests is 100% complete, as well as silvicultural treatments.
- Plantation maintenance was completed as planned.
- Compliance with the forest fire program.
- Managed by natural regeneration in the province, 203.0 hectares.
- Restoration of failures was achieved at the province level, by 115%.
- In the hydro-regulatory strips, of a 177.4-hectare plan, 245.0 (138%) were executed.
- Forests of interest to the defense, with a 425.0-hectare plan, were made 440.1 for 104% compliance. All the municipalities and entities involved meet.

Forest fires: In a general sense in the province the fires have been diminished and generally those that are caused are by negligence of the man. In this regard, the municipalities of:

- Trinidad, with 8 fires and 76.5 affected.
- Development, with 2 fires and 29 affected.
- Cabaiguán, with 3 fires and 29 affected.
- Sancti Spíritus, with 2 fires and 5.3 affected.

Resources Flora and Fauna: During the last 10 years, in studies and research, relevant results have been obtained that deal with many aspects of the scientific knowledge of the biological diversity of the territory. Among the most significant results are the floristic and faunal inventories of many of the approved or proposed protected areas and most of the natural localities in the province, particularly in the areas of Topes de Collantes and Banao Heights, Southern zone, which are the points with the highest records of species richness in the province.

The most discussed topics are inventories or lists of species and ecological investigations in general sense, with emphasis on the recognition and monitoring of species facing threats of extinction. Several investigations have been taking place for some time and now continue to provide data on the fauna diversity of the province and its ecology, such as the monitoring of birds and mammals in areas of the Caguanes National Park, work on birds that nest in Arboreal cavities in several important localities such as Banao, Palmar de Romero in La Sierpe and others, as well as studies on the avifauna associated with live fences in the province.

Renewable energy:

Photovoltaic Solar Energy: The province of Sancti Spíritus, as in all of the country, has implemented several installations with solar panels, mainly for electricity supply to rural schools, thus ensuring the program for the implementation of video and television as teaching aids, as well as access to Computers in primary education.

Thermal solar energy: There are several ways of using this possibility based on solar energy, but the best known is the heating of water in tourist facilities, within which it can be noted, for example, that the tourist village Los Laureles, in its new investments at the beginning of 2000, he set up water heating systems for his rooms.

Wind power: Sancti Spíritus has limited wind energy potential, its greatest possible potential is concentrated in the Meneses area, in the municipality of Yaguajay, and this and other areas are still being studied to define the real potentials of the territory. On the other hand, in the sancti spiritus agriculture has been used traditionally the wind mills for the pumping of the water, existing several of these equipments currently functioning.

Hydraulic energy: Hydraulic power is widely used in the province, especially in mini and micro hydro. At present, for example, a micro hydropower works at the

Lebrije dam in Jatibonico, which ensures the electricity supply to several rural houses near the curtain of the dam. For the generation of electricity, the water flow to the irrigated areas of the agricultural areas is used. Similarly, a Small Hydroelectric Power Plant (PCHE) was built in the Zaza dam curtain, with a power above 2 MW. (Provide services to the population of the municipality of La Sierpe). On the other hand, in several regions of the province the hydraulic rams are used in the pumping of water to solve supplies of this liquid to the agricultural and livestock productions.

Biomass: In the case of biomass, its use is more widespread in the province, since it has been a traditional source for cooking in homes and institutions, although the methods of using biomass have not always been as efficient as needed, Requiring more biomass for low efficiency of the systems. In this area, in the territory has worked for several years in the design and implementation of efficient kitchens, some of which have been set up in schools and other workers' dining rooms.

Landscape: As part of the development of Landscape Science in the country, a group of researchers led by Alfredo Dominguez Gonzalez, they have been running for more than 20 years, field studies of the landscapes of the province of Espiritu, (both those landscapes that are found in natural conditions, such as semi-natural and cultural or built).

The Science of Landscape can contribute to the incorporation of sustainability into the development process, since it deals with one of the crucial problems of sustainable development theory and practice: the study of the constitution and structure of the biophysical system, which is the Material support of the development process and, at the same time, the bearer of sustainability inherent in natural systems. But in addition, it can explain how it originates and why natural capital deteriorates (Dominguez, 2003).

Protected areas: The proposed Protected Areas System for Sancti Spíritus has 15 areas (Caguanes National Park, Banao Alturas Ecological Reserve, Managed Forest Reserves: Lomas de Fomento, Lebrije and Arenas Silica de Casilda, Natural Elements: Ovens Lime, Lomas de Tasajeras and La Chucha, Wildlife Refuges: Tunas Zaza and Palmar de Romero; Protected Natural Landscape Topes de Collantes and Protected Areas of Managed Resources:

Biosphere Reserve: Buena Vista and Jobo Rosado. Of the total areas, 3 are of national significance, being the most representative within the system and therefore possess the most complete and best preserved ecosystems, as well as the highest natural values of the province, the rest (12), are of local significance. This system covers approximately 24% of the provincial territory in all its variants and categories (including the areas of the province within the Special Regions and Sustainable Development Guamuhaya, Bamburanao and the Savanna-Camagüey Archipelago).

Contaminant Sources: The main sources of contamination of surface waters are: domestic sewage, industrial wastewater and agricultural activities.

Among the main causes of the origin of water pollution in the province of Sancti Spiritus are identified:

- Poor state of sewerage networks and their partial or non-existent nature in most cases.
- Insufficient residual treatment coverage.
- Deficit of maintenance and attention to the operation of existing treatment systems.
- Technological obsolescence and low technological discipline.
- Insufficient use of cleaner production practices and economic use of waste.
- Insufficient execution of programs for monitoring and characterization of residuals.

Environmental Education in the Pioneer Movement

The Pioneer Explorers Movement (PEM) has structured its own system of preparation for guides and instructors, which is developed by levels or seminars. The elementary level, is directed to the guides that begin in the activity; Prepares them to develop the first encounters with the explorers. Its fundamental content is concretized in the activities to be carried out, especially those that relate to the knowledge of the natural world, its care and protection.

The techniques of exploration and camping are applied, linking in content of the actions to be carried out with the different subjects, so it can be affirmed that the PEM is the natural laboratory where it's put into practice the contents of each subject studied in the process of Teaching-learning, including the English language.

Pioneer preparation in the groups is one of the basic aspects of the organization, but it is not yet given by the managers and the guides, the true importance that this has, despite the fact that the Organization of Pioneers José Martí has Well structured, the preparation system, which part as it was expressed previously of the preparation of the guides, that is developed with a month of anticipation so that they have the possibility to investigate, to search, to verify, to collect and to investigate what they need and Consider necessary to acquire the basic and necessary self-preparation, which allows them to successfully face the practical implementation of different educational actions

The Pioneer preparation process is included in the basic high school curriculum, so it occupies a teaching shift within the school schedule, is developed once a week and by agreement between the National Presidency of the OPJM and MINED has been established That in the first and third weeks of each month general topics related to the operation of the Organization, which are visualized by means of Television, are addressed in the Pioneer Magazine; In the second week because of the importance it has to deal with the main aspects of the Pioneer Explorers Movement, including within them the requirements to be fulfilled in categorization and specialization and finally in the fourth week the Pioneer Assembly and the emulation. In this respect the pioneering assembly is first developed at the collective level and then at the level of detachment.

All of the above is combined with extracurricular activities during the weekends and weeks of teaching recess, as well as excursions, walks, camping and camping.

In order for the pioneer guide to plan, organize, execute and evaluate pioneer activities, it is necessary to master the main theoretical foundations of the Pioneer Explorers Movement. (JMPO, 2008 compendium 1)

The Explorers Pioneers Movement is a specialized movement of the OPJM, which satisfies the exploration and camping needs of the pioneers. It has its antecedents from the creation of the Boy Scouts at the beginning of century XX (1907), by Robert Baden Powell, high English officer. This organization developed rapidly and spread to other countries, with the support of the government and bourgeois institutions, which found in it a very adequate way to guarantee the maintenance of their political and philosophical positions in the new generations.

In Cuba, the Boy Scouts, were formed in 1914, as part of the world movement that strengthened and strengthened them. It had a powerful support from its beginnings on the part of the government and all the bourgeois institutions due to the American influence that prevailed the time.

It is necessary to recognize, however, that they trained their members in camping, exploration, developed in them the love of nature and the ability to adapt to difficult conditions of life, very positive elements of this organization, whose validity is fully maintained in our current pioneering movement, although of course with different objectives and framed in a diametrically opposed philosophical position.

On April 4th, 1961 with Revolution Triumph, the Union of Rebel Pioneers was created, reason why the Boy Scouts, with its facilities and its staff are integrated to the new organization for children.

On July 19, 1981, Children's Day is celebrated in Santo Domingo, Sierra Maestra, Granma, where Fidel Castro inaugurated the Explorer Pioneers Center "Ramón Paz Borroto". On that occasion he said that one of the first sports that he practiced was exploration, stating: "... one of the things I liked best was exploration, and it was almost impossible for him to see a hill and not to be tempted to Climb it, and not only feel the temptation, but I did not decide to climb the ridge, cross rivers, climb mountains, get in touch with nature." (Castro Ruz, 1981, p, 59)

The Commander-in-Chief attached great importance to the Pioneer Explorers Movement, noting that he carried out activities that enabled them to develop knowledge and skills that prepared them to develop life in the field, he said: "(...) I have no doubt That a childhood that is educated and educated as these pioneer explorers are being educated will be future vanguards, they will be communist futures and we could think more: they will be vanguards between vanguards and communists among communists! "(Castro Ruz, 43).

From the first moments the pioneers executed different activities in direct contact with the nature that allowed them to know the flora, the fauna and the environment, while at the same time they strengthened the patriotic formation to deepen in the history of the locality. They made explorations, excursions and camping to unknown places of historical and cultural interest where they showed their abilities to survive in natural conditions, setting up the rustic camp and making their own food.

Nowadays the pioneer explorers have a great strength, there is no activity that is carried out that does not have to do with them, directly or indirectly, they have reached a great mass in their incorporation, but still much to do by the elevation of

The quality of the activities, mainly with those that have to do directly with the execution of the life in campaign and the survival.

From the seventh to the ninth grades the deepening stage in the Pioneer Explorers Movement is developed, more complex activities are carried out and more contact with nature is organized in troops, which coincide with the structure of the detachment and in turn are subdivided into Patrols. The pioneers of this level strive to reach the categories and specialties, which develop fundamentally in camping and camping giving them strength to the execution of pioneering workshops and vocational training. All this makes it possible for the pioneers of this level to achieve in their preparation, the condition for "Camilo and Che's path" as a superior way to carry out life in the countryside and survival in difficult environmental conditions. Guidance to guide, advise, guide and evaluate the activities to be carried out by the pioneers must have reached the highest level of preparation.

The pioneers must practice different modalities that link them directly to the natural environment and that have to manifest their environmental education as stated in their Law "Love nature, the socialist homeland and prepare for life in the countryside,"

Among these modalities are:

- Cabuery. (Knots and moorings) Use of rustic ropes
- Tracks and signals. (Natural and artificial)
- Explorer skill. (Collect the camp in exceptional situations.)
- First aid. (Bandages and transfer stretchers)
- Archery and rustic arrows.
- Guidance on the ground by natural and artificial means.
- Observation and description of nature.
- Rustic kitchen. (Traditional dish, wild and rustic)
- Sketches.
- Burn from the rope.
- Varieties.
- Rustic constructions. Assembly of the physical-recreational camp

In addition to the modalities other complementary activities are worked out, among these are:

• Explorer Day: Is carried out once a month, on that day the pioneers come dressed as explorer and the activities that are carried out must be in correspondence with the categorization and specialization pioneer. This activity flows as a common day for the educational-educational process, except that the activities to be carried out must contain the contents of the Pioneer Explorers Movement.

• Defense Day: they are carried out in six occasions, two national days that coincide with the Sundays of the defense and four at territorial level, which are made in correspondence with the needs of each locality.

• Meteor: is an exercise undertaken by the pioneers as a way of preparing for the cyclonic season, various activities of Civil Defense are practiced, according to the indications that are received in each school year by the General Staff. These

activities include working with first aid and how to deal with exceptional situations caused by natural phenomena. It is vital to learn how to make the beach hut.

- Pioneer bastion: it is carried out in greeting to the operation Tribute, which surrenders to the martyrs of the Homeland, takes place during two consecutive days in the month of December. Patriotic activities linked to the history of the locality must be carried out. On the first day, actions linked to the Civil Defense are carried out, while on the second day the activities of the Pioneer Explorers Movement are carried out.

- The explorer in the street is an activity where the explorers storm the squares, parks, streets and other public places and perform practical activities giving the population knowledge, skills and skills.

- From nature we play sports: they are sports activities, which are carried out with the resources that nature provides us, are carried out during field trips, camping and camping, among the main activities are: relay race with message, long jump without impulse, Race with natural obstacles, coconut, javelin, etc.

- Meetings with fighters and their families: they are patriotic activities that greatly help the formation of values, since the pioneers drink from the living sources of knowledge. They greatly favor the pioneering fantasy. Generally, these meetings take place during night time and around a campfire.

- Games and songs: ludic activities are of great interest to the pioneers, because it is better to learn by playing, fundamentally if you employ didactic games that pursue this purpose. The scenery to be used is rustic and made with elements of nature itself. (Rustic Television)

- Reforestation: massive planting of trees, care and cultural attention to plantations, as well as protection of the environment.

- Patrols in the forest: to construct water troughs and feeders for wild animals. As well as build trails to avoid forest fires.

- Rustic television: an activity that is carried out, to develop healthy recreation of the pioneers, during their stay in camping, camping or competition, the pioneers themselves are the actors, the television is a rustic construction that is made with natural resources.

- Campfire: one of the activities that is most developed in the Movement of Exploring Pioneers, the best known is the conical bonfire, although there are other possibilities for its realization.

- The competences: they are very attractive activities, they are developed from the base to the nation, the most important, is the one that is carried out at the grassroots level, since it offers the possibility to participate to all the members of the troop and of this To achieve mass participation.

The modalities and the complementary activities allow developing the process of categorization and specialization within the Movement of Exploring Pioneers. The categories are obtained by degrees, while the specialties are acquired, in correspondence with the development achieved by the pioneer and materialize in the level from Junior High School.

The English language course in Junior High School

The subject of English as a widely spread international language in the National Education System responds to the political, economic, social and cultural importance of foreign languages in today's world, starting from the new context that has generated the increasing opening of Our country in the relations of cooperation and exchange with a large number of countries, in the political, scientific, technical, educational, cultural and sports fields among others. Context in which it plays an important role to guarantee Cuba's relations with these countries

All of this implies that the multilateral and harmonious formation of our students requires that they at least know a foreign language as a way to broaden their knowledge and assessments of the universal culture, which is taken into account as a subject in the curriculum of study. The General Polytechnic and Labor Education, this is aimed at the development of communicative cognitive competence; Concept that implies expression, interaction and negotiation of meanings and contributes to the scientific formation of the world in the students, taking as a starting point the language as a social phenomenon and the relation between thought-language and culture.

The teaching of the English language should not only contribute to functional linguistic efficiency, but also to the ability to construct and reconstruct new knowledge; Which means developing basic knowledge, habits and skills to communicate in the foreign language: to understand written oral information and to express yourself orally on topics of your school and social life, as well as to write simple and brief messages.

The program of the subject in the basic secondary is structured in two cycles, whose end coincides with the terminal grades of the average general school. In the first cycle we work in an integral and harmonious way in the development of the four basic skills, namely, listening comprehension, oral expression, reading comprehension and written expression, besides the procedures for understanding narratives, stories and simple written texts or oral presentations accompanied by visual or audiovisual images. Likewise, we work on the correspondence of sound spelling, the main rules of spelling and basic elements of word formation and begin to develop learning strategies that allow students to learn to learn, also facilitates knowledge of general elements of Cuban culture and universal, particularly of English-speaking peoples.

In the learning context the English curriculum has been designed to help reinforce the general secondary school curriculum and the training of revolutionary and responsible students in an active and cooperative environment where habits and skills are gradually formed through a process that include study and practice, but also creativity, problem solving.

In the specific case of the subject in the ninth grade, it should foster the development of communicative skills that allow students to understand oral and written information in English, express themselves orally on topics of their family, school and social life using the present basic structures, the past and the future in an integrated way.

The methodological treatment of content is done on the basis of the presentation of communicative functions in a communicative thematic-situational context that reflects the use of these functions, as well as the linguistic structures through which

they express themselves. The treatment of the subject takes into consideration the consideration of the mother tongue of the students as a basis for the presentation and systematization of the contents.

In this grade the subject has 120 hours / classes with a frequency of 3 hours / weekly classes distributed in 10 units:

Unit 1: Summer Vacations

Unit 2: Travel Time

Unit 3: The News

Unit 4: Hobbies

Unit 5: Review

Unit 6: Pastimes

Unit 7: Important Personalities

Unit 8: The Environment

Unit 9: A trip around the Country

Unit 10: All in All

The subject has the following objectives:

- Demonstrate their ideological political formation through responsible social behavior in the exchange with their classmates in activities carried out in classes and outside the school context where English is used.
- Assume a responsible attitude towards their learning.
- Demonstrate habits and skills of independent work and cooperation by performing different tasks and independent work projects where they use the language for authentic communicative purposes.
- Use skills developed in English to understand information related to the contents of other subjects and areas of the school curriculum and to express messages on these topics.
- Demonstrate understanding and identification with aspects related to Cuban and universal culture, particularly in the English-speaking countries that allow them to recognize and appreciate the communicative and cultural value of the foreign and mother tongue, showing an attitude of respect towards her speakers and their cultures.

The methodological conception of the subject takes into account the communicative approach integrating the basic principles of the conscious practical method for the systematization of contents that contributes to the development of communicative skills and the teaching of English through other contents to foster interdisciplinary. Therefore the most important thing in the study of English as a foreign language for the student is to use the same in diverse and varied communicative situations and also to use it to complement the learning of other areas and contents.

All of the above bases the proposal of our research in function of the integration of the contents of the curriculum of the subject and the environmental education through the extracurricular and extracurricular activities that are developed in the organization of pioneers José Martí.

EXPLORATORY DIAGNOSIS

In order to develop the research process at Nestor Leonelo Carbonell Junior High School in the municipality of La Sierpe. It has a register of 225 students, 64 of them in grade 9, to whom a survey was applied (Annex 1) to determine the knowledge that the pioneers have regarding the subject of environmental education.

It was determined that 29.6% of the pioneers (19) mark the activities of the Explorers' Movement as those where the environment is spoken of, 21.8% (14 pioneers) refer to artistic activities, 50% (32) prefer the care of the animals in their homes, 45.3% (29) like to participate in life activities in the countryside and survival, related in order to excursions, visits to unknown places and camping, 40.6% (26) expresses that they systematically carry out sports and recreational activities.

An interview was applied (Annex 2) to determine the order of priority given to the main pioneering activities that are carried out and it was possible to determine that the most accepted are those that have to do with nature and recreation. Linked to the Pioneer Explorers Movement, among them:

- Participate in the camping.
- Visit unknown places.
- Make sports-recreational games.
- Excursions.
- To develop competences of the EPM, sports and cultural.
- Know the plants and animals.
- Planting plants.

This is one of the reasons why we have to work these activities to be able to influence educationally in environmental education taking into account their needs, gaps, tastes and preferences.

FOUNDATION OF THE PROPOSAL OF ACTIVITIES

This research has the particularity of developing educational actions for the development of the environmental education process from a special social organization (JMPO) in the Junior High School, with the specific direction towards exploration and camping, as context, where the rest are integrated of the subjects, guide by the pioneer activities.

In its conception, we took into account the studies carried out by some authors, such as:

Leontiev (1967) points out that action constitutes the process subordinated to a representation of the result to be achieved, that is, a consciously set goal or objective.

P.YA. Galperin (1977) studied action as a unit of analysis of the psyche and elaborated the theory of planned and staged formation of mental actions and concepts.

For Galperin (1977) the action has structural components as its object, its objective, its motive, its operations and its process, the subject that performs it and functional components such as orientation, execution and control.

All of the above is materialized in the proposal of educational actions carried out in the research, which materialize as part of the extracurricular activities of the

pioneer organization. According to Toledo Díaz (2012) Educational actions are components of activities to develop knowledge, skills and skills and in turn form appropriate ways of acting in the personality of the pioneer.

Its necessity is determined by the demands of building a system of activities those dynamise essential aspects of the environmental education process, which constitutes a challenge for the strengthening of this in the current Cuban school, as part of the transformations that are experienced in the Junior High School model.

An activity in the process of patriotic education through the Movement of Pioneer Explorers represent a particular and coherent set of Philosophical, Pedagogical, Psychological and Sociological groundwork called to explain, from the angle of Pedagogy, the object, process or phenomenon Educational in question, therefore has a pedagogical orientation, understood as the theoretical set of laws, principles, relationships, nexus and criteria from Pedagogical Science.

Philosophical foundation: the knowledge and application of the Marxist-Leninist philosophy and its postulates, talking about social consciousness and the ideological reflection of reality from the subject's activity, as well as the laws, principles and categories of the dialectic, which are manifested in the natural environment.

These philosophical aspects are the basis of the pedagogical conception of integration for the development of environmental education process from a special social organization, represent the core of the conceptual framework because it defines the concepts of maximum generality and synthesize what each of the different It is the case of the concepts: education, homeland, patriotism, protagonist, social conscience, etc.

Psychological foundation: the historical-cultural approach of Vygotsky and his followers, in particular, has been taken into account: learning, as an interactive process, as activity and communication, conceived as a social activity through which the student appropriates the historical-cultural experience and assimilates social models of activity and interaction, and also takes into account his conceptions of the Zone of Near Development (ZND).

Stimulating the group's ZND (Troop in the Pioneer Explorers Movement) leads to the establishment of common goals, exchanges of opinions, self-control actions, collective valuation and discussion with others, all of which promote the integral formation of the personality of the scholar in his\her status as pioneer explorer.

To work with potential means to create conditions that allow organizing the activity so that the pioneer operates, firstly, on an external plane, of communication, of relationship with others, in which the actions he performs allow him gradually to externalize them and then work on an independent plane of individual achievements, which shows that the pioneer has acquired the procedure previously.

Pedagogical foundation: it is given in the aspects related to the learning developer that is achieved when the school is placed in optimal conditions that promotes the leading role in the development of the activities, therefore presupposes the mastery by the scholar of historical-cultural knowledge,

environmental and of the subjects, as well as the skills that will enable him / her to develop the interaction with the nearest ecological environment (micro medium). The methodological conception of the proposal takes into account the communicative approach integrating the basic principles of the conscious practical method for the systematization of the contents that contribute to the development of communicative skills and the teaching of English through other contents to promote the interdisciplinary.

Sociological foundation: it recognizes the role of the school in the preparation for life, which allows the objective analysis of social processes, which place man at the center of social development and explain the role they play in transforming society to base on concrete historical and social conditions, with the aim of achieving the social project to which we aspire.

PROPOSAL OF ACTIVITIES

Activity 1:

Title: Excursion to the locality.

Objective: Identify the main environmental risks in the community and the neighborhood close to Nestor Leonelo Carbonell Junior High School to emphasize on the importance of keeping all the areas clean for the protection of the environment.

Description:

This activity is developed as a part of the project: Prepare and protect us.

Main educative actions to be taken into account are:

- The teacher of English should prepare all the necessary conditions to organize a tour to the community, explaining to the students what they will do, how they will do the different educative actions and the importance of doing and acting together to protect the environment for the progress of the community.

In the tour to the community the students have:

- To identify the main environmental risks and to take note about all possible environmental risks they see.
- To describe the place using some of the adjectives and communicative functions studied in the subject, expressing if they like or not the place.
- To complete some sentences in English using the information studied about environmental risks.
- To explain what a geographical evidence of the detected risk is
- To match the environmental risks with the corresponding images
- To practice the vocabulary related to the topic, through a guessing game in small groups.
- To draw the community risk map.

- To prepare a dialogue or a dramatization using the communicative functions studied about the describing places, expressing likes or dislikes (the art instructor and some other teachers are of great help)

Evaluation:

- To express their feelings about the protection of the environment in La Sierpe
- To say a word in English or in Spanish to express their feelings. How much they learned from others and how much they learned from the interaction with people from the community.
- To express what they learned from the place, and after drawing the environmental risk map.
- To express about the importance of learning every day about the place they live in.

Activity 2:

Title: The pioneer camping.

Objective: Identify different natural conditions to practice life in the field and survival without altering the natural environment for the progress of their future lives as citizens from La Sierpe community.

Description:

This activity can be developed at any time, but it is suggested to do it on October 19 in greetings to the anniversary of the birth of Paquito González Cueto. Pioneer martyr of the Organization:

The educative actions to be taken into account are:

- The teacher selects the place because of its physical-geographic, historical or cultural interest.
- The teacher makes a previous coordination visit to the chosen place where the main aspects to be developed are negotiated. (School-family-community)
- The teacher prepares the necessary conditions for camping, parents are first asked for permission and their co-operation is requested, and afterwards, assignments are given to the pioneers to ensure the basic conditions.
- The teacher asks students to bring a bilingual English-Spanish and Spanish-English dictionary.
- The camping is carried out following the elaborated action plan. This is where the actions to be carried out by the troop and the patrols are planned, that is, the knowledge and skills related to the modalities of the Pioneer Explorers Movement are developed.

Students have:

- To collect natural samples and materials to perform pictorial activities with elements of nature itself for an exhibition.
- To collect materials to make the rustic wardrobe.
- To collect firewood for the assembly of the bonfires (Annex 4).
- Describe the place using the adjectives studied in Unit 2 of the English program (Describing places).
- To use bilingual dictionary to look up the meaning of the words studied in the English subject to describe places

- To spell the words in English the teacher will say them (adjectives to describe places)
- To sing songs from children's and patriotic repertoire.
- To make dramatizations based on the importance of protecting the environment.
- To create stories using puppets about the protections of the environment for their future life
- Get acquainted about all necessary measures to put out the fire, to avoid possible forest fires, in compliance with the Environmental, Forestry and Heritage Law, regarding the protection and conservation of the natural and cultural environment.
- To walk to observe the camping areas and to highlight the results obtained individually and collectively through answering some questions dictated by the teacher.

Evaluation:

The teacher asks the students in small sentences to value the actions performed and express their conformities and nonconformities during the camping. And the description of the place (Likes and dislikes Unit 4 Hobbies and Unit 2)

Activity 3:

Title: Observation and description of nature.

Objective: To express orally about the importance of protecting flora and fauna for the sustainable development of La Sierpe community.

Description:

This activity is done as part of the teaching process itself as this theme is conceived as one of the units of the program of the subject. (The Environment) It is an activity that can be carried out in a planned and conscious way. So the students should understand the importance of doing the proposed educative actions

It is recommended to begin the activity asking the students to express orally about the main topic.

The teacher will explain to the students some of the elements of nature, since nature becomes a natural laboratory

Students have:

- To select an area or a location.
- To express orally in English about the weather conditions at the time of describing the place. The teacher will remember some of the phrases studied to talk about the weather
- to characterize the relief using some of the elements studied in Natural Sciences.

Among them:

- Soil characteristics.
- Characteristics of hydrographic. (Water sources)
- Conditions of place to set up camp.
- Presence of animals
- Predominant vegetation.

- Floristic inventory.
 - Common name.
 - Root, stem, leaf, flowers and fruits.
 - Utility.
- To compare the types of plants in the floristic inventory made using the adjectives studied in class.
- To express their opinions about taking caring of the environment.
- To identify the different tree types.

Evaluation:

The teacher will give the students the English name of the tree types and students must classify into two groups which of them are more common and which are less common in their community.

Taking into account what was studied in unit 8 of the English program of ninth grade the teacher will ask them to evaluate their work. Using a scale from 1 to 5, where 5 is the highest number students are supposed to evaluate their work in the activity, how much they learned and how they felt during the activity.

Activity 4:

Title: My friend the forest.

Objective: To express orally about their feelings and motivations for the protection of wooded areas to reinforce on the necessity of having an environmental culture for the progress of the community

Description:

This activity can be done at any time, it is only intended to stimulate the pioneers in the conservation of the forests.

During the school year there are numerous environmental events, one of which is precisely June 21. Forest worker's day

It takes into account the Law "The pioneer explorer, loves nature, the Socialist Homeland and prepares for life in the campaign."

The teacher will let the students know some of historical facts among them: At different historical times Cubans have been forced to use nature as a natural refuge, the aborigines depended on it, the runaway slaves lived in natural conditions in the palenques, the mambis used the jungle like theater of operations, like the Rebellious Nowadays the FAR have their bases of operations in natural conditions. On the other hand, peasants constantly use forest resources for their main activities.

All this means that the pioneer explorer has within their actions, those that are aimed at promoting the environmental culture in the promotion and cultural attention of the forest plantations.

These actions include:

- To carry out patrols to the forests near the community to verify the health of the plants and to observe the care flora and fauna.
- To make runways or trails to avoid forest fires.
- To clean forests and water sources of solid waste and waste.

- To put feeding troughs and troughs for animals.
- To comply with safety regulations when performing fires and fugues in them to perform in the increase of species in the local Bosque Martiano.
 - To write the names of the trees in English
 - To write five sentences in English using the names of the trees,

Evaluation:
Students should describe the species in a comparative table. Taking into account the content studied in unit 1 of the ninth grade English program.

Activity 5.

Title: I plant for the future.

Objective: To express orally about the environmental improvement through the creation of nurseries for the benefit of La Sierpe community.

Description:

the teacher will select in the outer areas of the school an area with the conditions required for the creation of a nursery.

This activity can be done integrating the contents studied in the subjects of Natural Sciences and Labor Education, in addition to the educative actions that are developed as part of the system of activities of the Jose Marti Pioneer Movement. As a preliminary preparation some photos and video fragments can be shown to the pioneers, they are told to collect plastic or metal containers and in this way they all contribute to the recycling campaign, organic matter can be also managed through the CAI Rice South of the Jíbaro, by means of the urban agriculture or using the compost of the wastes that are being obtained in the own orchard school. Once the necessary media and materials are gathered, the following educative actions are carried out:

- To fill containers and planting the seeds.
- To carry out cultural care systematically until the plants are ready to be taken to the plantation sites.
- To create nurseries of forest, fruit, ornamental and medicinal plants.
 - To write down in English all the verbs, to use bilingual dictionary
 - To spell the words
 - To match to meaning of the word with the image or action
 - To express orally about likes or dislikes in protecting the environment after watching some fragments from the videos.

Evaluation:

The teacher will divide the group into four or five teams, and she or he will give them some disorganized questions. Students have to organize them to start evaluating the activity they did.

Examples of questions:

Do you like the activity?

How much do you after watching the photos and video fragments?

What do you need to take care of plants?

Activity 6:

Title: From my river to Two rivers.

Objective: To express orally about the importance of sanitation work in local water sources to preserve the environment.

Description:

This activity is linked to José Martí's life it is done to strengthen environmental education.

On January 28, the invitation to participate in Salute to the birth of Martí is launched and various environmental actions are systematically carried out, including on May 19 by the fall in combat of the national hero of Cuba.

During these can be developed varied educational actions between them

- Collection of debris and solid waste from the river banks of the locality.
- Cleaning of contaminated water sources
- Elimination of micro-landfills.
- Planting of trees in protective belts.

These educational actions strengthen environmental education and form values in the pioneers.

Evaluation:

The teacher guides a practical work as an independent study to check the development of basic oral expression skills, writing and the use of the language for authentic communicative purposes.

PRE PEDAGOGICAL EXPERIMENT

The proposed activities were experimentally applied to group 1 ninth grade Néstor Leonelo Carbonell Junior High School, from La Sierpe municipality, which was chosen as an intentional sample, because the author is located as a teacher in this grade. Its composition is of 32 pioneers, of which 20 are female and 12 are male. They are girls and boys with normal intelligence, who learn quickly and are very motivated to participate in pioneering activities, especially those that relate to the Pioneer Explorers Movement.

With the sample the different activities were developed at different times and during the teaching and outreach spaces, used by the Pioneer Organization to develop their training activities, with which a joint work was carried out between the teachers of the detachment, the guides and the instructors of Art, to develop integral activities and with interdisciplinary character.

With the objective of measuring the effectiveness of the same, a simple pre-experiment was designed that would gather the necessary but sufficient information and that would allow to evaluate the activity and be able to make the necessary corrections to reach the expected results.

It was determined as an independent variable the proposal of varied activities, as a dependent variable, the development of environmental education during the execution of the pioneering activities and as external variables were taken into account: the level of preparation of the participants, this is good since The professors of the department are Bachelors in Education and the author of the work, studied the Environmental Education subjects and during his pioneer life was an explorer, on the other hand the pioneers were very motivated and interested in

the pioneering and cultural activities, the scene was mounted with the Collaboration and cooperation of parents, neighbors and the community. The chosen timetable sometimes hit because the work plan shows unplanned activities that are priorities of the Ministry of Education and local government bodies.

The selected sample was systematically observed (Annex 6) during the execution of the activities taking into account the dimensions and indicators previously raised and the following results were obtained:

Initial stage: It was developed before beginning the experimentation stage, traditional activities of the Organization were observed, among them, hike to the surroundings from Junior High School, excursion to Rice-Growing CAI, base competition of the Movement of Exploring Pioneers.

Ideopolitical dimension:

The ideopolitical orientation was poor, only 6 pioneers (18.75%), explained the individual and collective objectives of the activities to be carried out, the activities were taxed and guided by the guide, no pioneer had a leading role in their organization (0%); 2 pioneers (6,25) facilitated the exchange between participants and established criticism and self-criticism. The assessment of the activity was very superficial.

Patriotic dimension:

4 pioneers (12.5%) expressed an orientation towards patriotic feelings, the activity was because it was in the plan of activities of the month but it was not explained why that day was chosen, to whom the activity was dedicated and what was being pursued With its execution. The work with the socio-cultural symbols of the locality was almost nil, 5 pioneers (15.62%) recognized the national symbols, and almost did not know how they could use the national symbols, the representatives of the country and the locality in their pioneering activities, the All of the pioneers participated in the activities in a reproductive way, they did not take into account the imagination and the creativity of the pioneering fantasy to project varied, motivating and interesting activities.

Environmental dimension:

3 pioneers (9.37%) knew how to set the place chosen to develop their activities using natural resources without affecting the environment, (100%) of the pioneers carried out the activity in natural conditions resorting to spontaneity, were not prepared Preconditions for motivating and integrating activities, with little exchange with the environment, and without achieving a social and patrimonial transformation.

Final Stage: It was developed during the experimentation stage, at the conclusion of the same it was possible to appreciate significant advances, fundamentally in the modes of action of the guides and the pioneers and the main transformations are explained next.

Ideopolitical dimension:

It was appreciated a strengthening of the ideopolitical orientation, the 30 pioneers (93.7%) adequately explained the objectives of the activity, making known the meaning of the same, who was addressed and why was chosen that day, were given To know essential aspects of the hero or the chosen ephemeris, the activities to be carried out were analyzed at the monthly pioneril meeting and the pioneers were given the opportunity to propose actions to be carried out according to their tastes, interests and needs. Level of motivation increased considerably, thus coordinated and creative activities were projected. 28 pioneers (87.5%) correctly identify and use national symbols and attributes in their activities; 31 pioneers (96.8%) adequately exchange the results of the activity in a critical and self-critical way.

Patriotic dimension:

The pioneers showed an active and conscious participation, developing the protagonism in the actions entrusted to them, 30 pioneers (93.7%) showed interest in the activities, knew and used properly the national symbols, attributes of the country and representatives of the locality . The (100%) of the pioneers wore distinctive scout uniforms and flags that identified the main local socio-cultural symbols. An active and transformative transformation was achieved, as 28 pioneers (87.5%) from the patriotic point of view were already deepening the life and work of national and local heroes. They expressed criteria that corroborated in knowledge that they had acquired during the execution of practical activities, while at the same time they developed knowledge and skills with artistic and cultural manifestations.

Environmental dimension:

During the execution of the proposed activities, 29 pioneers (90.6%) through collective and community action, sought the material resources for the proper setting of the proposed activities, in correspondence with the natural environment chosen, 30 pioneers (93.7 %) constantly and systematically exchanged with nature, developing a conscious attitude, through artistic activities, aimed at the protection of flora, fauna and the environment and achieved a profound change in the ways of social and patrimonial action.

It was possible to determine that 31 pioneers (96.87%) of the pioneers made exchanges with specialists in natural sciences, pioneer and art, although no expert criterion was used, it was determined through the exchanges that the proposed activities are novel, Motivating and interesting and that can be applied to the pioneering activities, that it can integrate different themes and gives the possibility to develop the interdisciplinary work from the pioneril, with a patriotic approach and that this work is of all the educators and not only Of the pioneer guide as some consider.

CONCLUSIONS

The bibliographic review made it possible to verify that there are several bases to support theoretically the theme related to the development of Environmental Education in Basic Secondary, all sources consulted clearly state what needs to be done, but they do not argue how to develop the actions to achieve it in professional pedagogical practice.

The exploratory diagnosis made it possible to gather information related to the main shortcomings of secondary school children to develop environmental education. On the other hand, it was possible to determine tastes and preferences for pioneering activities related to nature, recreation and art.

The proposal of activities is considered novel since it allows relating in the action pioneer linking the teaching activities, extra teaching and extracurricular with a marked interdisciplinary and patriotic approach.

The pre-experiment made it possible to corroborate in practice that the proposed activities achieved the expected results and can be applied during the system of activities developed by the José Martí Pioneer Organization.

RECOMMENDATIONS

The author of this Paper Work, after having applied the activities in the sample group, considers it opportune to analyze the possibility of extending this pedagogical experience to the rest grades from Nestor Leonelo Carbonell Junior High School, in the municipality of La Sierpe. In order to strengthen the environmental education in the pioneer activities with an integrative character

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ANNEX 1

SURVEY

Presentation:

Pioneer, an investigation is being carried out in relation to the pioneer activities and its connection with environmental education and its cooperation is needed for the development of the same, so thank you for your participation.

Questionnaire:

1. Mark the activities where it is linked to the environment.

----- Pioneer Explorers Movement.

----- Teaching subjects.

----- The nursery.

----- Cultural activities.

2. Select activities that address environmental issues.

----- Teaching subjects.

----- Political-ideological activities.

----- Artistic activities.

----- Community activities.

3. What environmental activities do you do in your home?

----- Domestic chores.

----- Agricultural work. Orchards, plots, organoponics.

----- The saving of energy carriers.

----- Caring for animals. (Pets).

4. What community activities do you participate in?

----- Camping. Campaign life and survival activities.

----- Patrols Click.

----- Collection of raw materials.

----- Attention to banners, busts and monuments.

----- Cleaning of green areas.

5. What activities do you prefer?

ANNEX 2 INTERVIEW

Presentation:

Pioneer, research is being carried out in relation to pioneering activities and its link with environmental education and you need to respond or be as sincere as possible, your participation is crucial to achieve satisfactory results, thank you for it.

NOTE: it is done in a group, in a pleasant conversation, favoring the active participation of the pioneers.

Aspects to consider:

1. Participation in the activities convened by the pioneer collective. (Pioneers and guides)
2. Organization of activities.
3. Places and means used for its execution.
4. Results obtained.
5. Order of preference of activities.

ANNEX 3

RISK MAP

MAP: Flat representation of a part of the terrestrial surface that, by its extension and due to the curvature of the terrestrial surface, requires making use of space systems of transformation proper to the cartography.

ELEMENTS INCLUDING A MAP:

- Orientation
- Content
- Symbology or legend
- Scale

RISK: The combination of the probability of an event occurring and its negative consequences and is determined by the threats, vulnerabilities and capabilities to decrease or prevent it.

SOME RISKS THAT CAN BE SIGNED ON THE MAP:

- Cyclones and Hurricanes.
- Earthquakes or earthquakes.
- Tornadoes.
- Accidents involving hazardous substances.
- Floods due to heavy rains.
- Slumping.
- Landslides.
- Fires and explosions.
- Air, sea and ground accidents.
- Industrial accidents.
- Oil spill.
- Contamination with toxic, chemical and radiological substances.
- Drought.
- Risks of accidents in schools and houses.
- Risk of dengue, leptospirosis, hepatitis, and other diseases that may occur and cause a disaster.
- Other risks that can be identified.

In essence they are schemes, representations, drawings, sketches and other ways to identify and locate the risks, without reaching the specialized map of geodesy, cartography.

They are a valuable educational tool through which risk management in schools and communities is undoubtedly contributed.



ANNEX 4

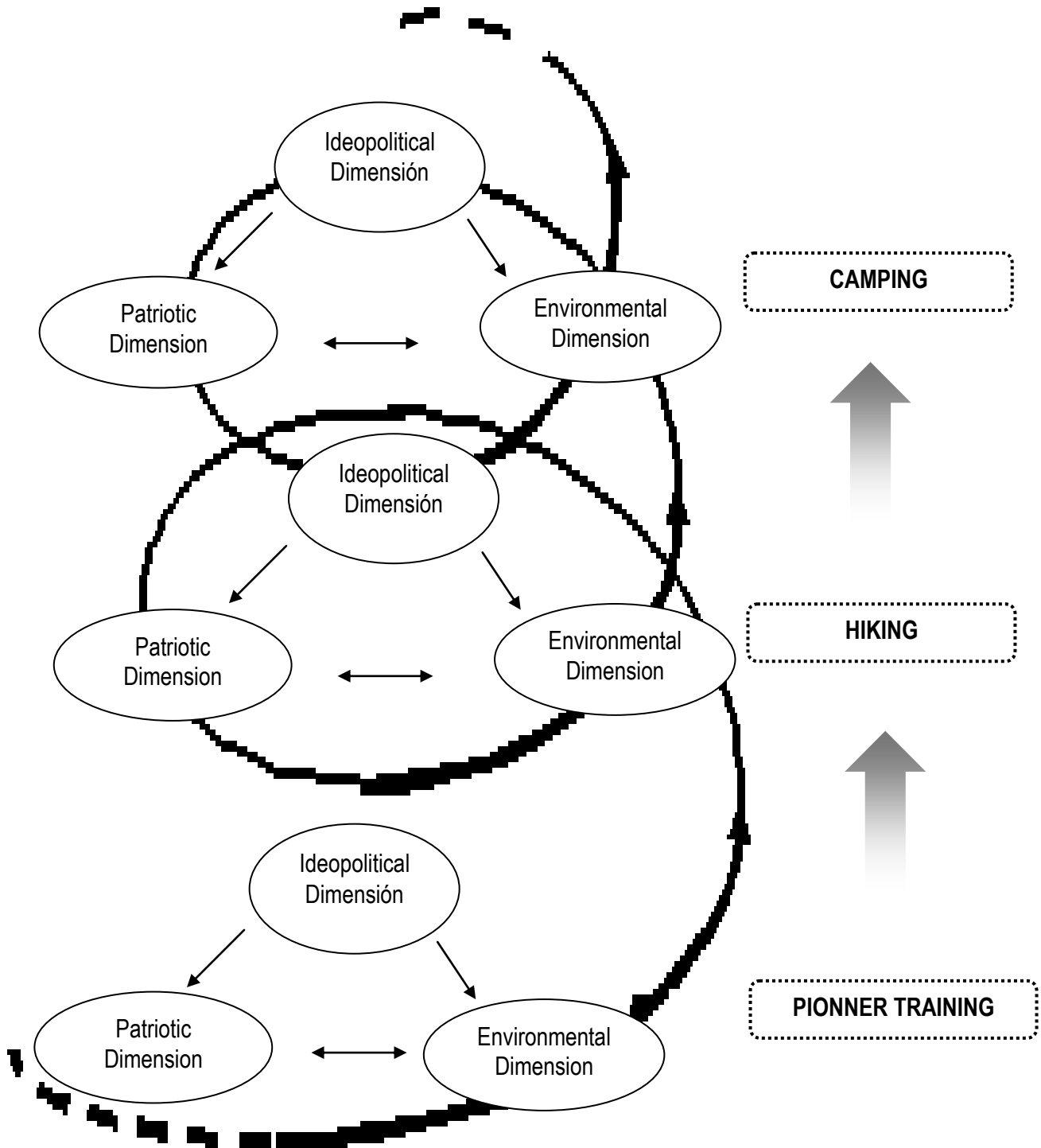
BONFIRE ASSEMBLY

There are different ways to mount the campfire, the most used in the camp, is the Conical or central, for being the best known and easy to make.



ANNEX 5

Scheme of the conception used to develop the pre-experiment



ANNEX 6

Observation Guide. Pioneer activities

Aspects to consider:

Ideopolitical dimension:

- The objective of the activity is oriented with an ideological approach
Specify what you want to achieve.
- Individual and collective goals are proposed.
- Dialogue with the pioneers is allowed, favoring criticism and self-criticism.

Patriotic dimension:

- Feelings, attitudes and values are highlighted.
- Native symbols and local and national socio-cultural attributes are worked.
- Active participation is planned for the pioneers.
- The transformation is achieved in the modes of action of the pioneers.

Environmental dimension:

- The objective of the activity guides the social protagonism from the environmental point of view.
- During the activity the exchange with the environment, natural, social and cultural.
- How historical, cultural and ecological aspects are addressed.
- What work is done in order to protect the historical and natural heritage.