

UNIVERSITY OF PEDAGOGICAL SCIENCES

“Captain Silverio Blanco Nunez”

“Sancti- Spiritus”

***Major Paper in option to the
Bachelors Degree in Foreign
Language Education.***

**Title: Interdisciplinary Activities aimed at developing
environmental education through the English Language Lessons.**

AUTHOR: Dainier Duardo Machado.

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AUTHOR: Dainier Duardo Machado.

TUTOR: Lic Aramís Rodríguez Gonzáles.

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Thought

“Tomorrow, it will be too late to do what we should do since a long time ago”.

Fidel Castro.

Discourse pronounced in R o de Janeiro in the conference of the United Nations about the environment and development. (June 12, 1992, page 1)

Dedication

- ❖ To those persons who have always supported me during this research with the goal of being a good teacher in the future.
- ❖ To my mother, grandma and my sister that were always supporting me during this investigation.
- ❖ Especially to my wife, for her comprehension and her endless love.

Acknowledgements

- To the Revolution, for giving me this opportunity.
- To all those people whom believe that a better world is possible.
- To the students who made possible the development of this work.
- To my tutor for being always present and dedicating me all his effort and comprehension.
- To all my friends in general.

Abstract

The present research is entitled: Interdisciplinary activities aimed at developing environmental education through the English Language Lessons., it has as objective to propose activities for developing an environmental education through the English lessons. Different methods and techniques were used like: the survey, the interview, the observation and the documentary analysis. To process the data the author uses the percentage calculus. This work brought as main results the lack of knowledge the students had regarding the flora and the fauna in general way, so, the same happened with the taking care of the environment that exists in the environmental education, some difficulties from the theoretical point of view in the English lessons.

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Introduction

Nature is in constant evolution due to the dynamic process unchained by phenomena like: floodings, fires, hurricanes, volcano eruptions or climatic accidents that provoke the disappearing or transformation of landscapes, species and ecosystems. All of this brings as consequence the destruction of the ozone layer, the acid rains, the global warming of the planet, and the loss of cultivable lands caused by deforestation, water pollution, decreasing of the biodiversity, which expose the mankind to danger; the present situation shown by the world, and specially, Latin America, makes emphasis on the necessity of elevating the environmental culture in the new generation, it is unquestionable that this responsibility, basically, falls upon the school together with the family and the different community factors, and also prepare persons for the future.

At international level, Zaror, C (1991) referred to the environmental control to preserve the natural environment and reaching a sustainable social-economic development and Foster, S (1992) proposed actions for the protection of the subterranean waters. In Cuba, different authors of major papers and articles, as Valdes, O (1996) who elaborated a methodological pamphlet to develop a correct environmental education in children and the commander Castro, F (1998) reflected about the protectionist alternatives in favor of the improvement and preservation of the environment in different events. Penton, F (2010) studies the environmental education in junior high school in a territorial project carried out in the University of Pedagogical Sciences.

In Cuba, the use of new technologies as a support to education has gone through in a dizzy way from the utopia to palpable reality. To review its excellent use and didactic utility, the role of the professor and the students, improve the pedagogical and didactic realities in the teaching learning process, as a more necessary result, among others. In this context the environmental education constitutes an important role for a person and the community in general, to be conscious about the problems that affect the possible survival of the species, environmental problems or how to solve them and prevent them, what implies the necessarily changing; each action aims at the effects of the individual and collective activity be modified,

headed in just one direction, the sustainability of the Cuban educative system, as main part of the social system should answer to the challenge of forming an integral man, capable of communicating correctly with the environment, guarantying a sustainable social and economical development.

In today's Cuban school the environmental conscience on the students should be developed, although this objective has been treated, the results are not the desired ones, specially, by means of the use of technologies in the teaching learning process, that is the case of the English subject, due this the following

Scientific problem is determined:

How to contribute to develop the environmental education through the English lessons in junior high school?

As **objective** of this research the author plans:

To propose activities to develop the environmental education through the English lessons. In this investigation constituted a fundamental guide the following

scientific questions:

- 1- Which are the theoretical and methodological precepts that support the environmental education in Secondary School Education?
- 2- What is the present status of ninth grader students from, "Mártires de la Familia Romero" Secondary School regarding the environmental education?
- 3- What school activities should be applied to reinforce the environmental education on ninth grader students?
- 4- What results would be obtained with the application of school activities to strengthen environmental education in ninth graders from "Mártires de la Familia Romero" Secondary School?

Scientific Tasks:

- 1-Determination of the theoretical and methodological precepts of the English teaching process with emphasis on the environmental education.
- 2-Diagnosis of the needs and potentialities related to the development of the environmental education on the students.
- 3- Elaboration of the proposal of activities to develop the environmental education.
- 4- Application of the proposal to develop the environmental education.

Independent Variable: The activities to develop the environmental education through the English lessons.

Dependent variable: Development of the environmental education.

Population: it is formed by the 39 students from group four. Ninth grade

This scientific presentation has been conceived, based on the precepts of the Marxist Leninist philosophy as epistemological theoretical foundation.

Besides, methods, from the following levels, have been used:

Scientific Methods

From the theoretical level:

- **Inductive-deductive:** It was used to get conception of the theoretical and methodological foundation that was used in the major paper.
- **Hypothetical-deductive:** It was used to determine the anticipation of the solution based on the main theoretical precepts of the environmental education promulgated by the Ministry of Education.

From the empirical level:

- Documentary analysis:** to know the requirements of the curriculum in the Junior High School.
- Observation:** to determine a first approximation to the problem, the deficiencies and potentialities of the students for the development of an environmental education.
- Interview:** to professors as unit of study to complement the information obtained by previous methods.

From the Statistical-Mathematical level:

Percentage calculus: used to know the degree of the indicators' evolution.

Scientific Novelty: It is given in the fact that teaching tasks demonstrate what to do and how to do it, to develop the environmental education on students from "Mártires de la Familia Romero" Junior High School.

Development

Theoretical considerations about the environmental education in the Junior High School.

The environmental education movement

It would be difficult to mark a date for the appearance of the so called Environmental Education movement, the first initiatives that can be related to an education to face the environmental problems, do not spout in the context of the school, if not in other social boundaries, like : Organization of United Nations to the Agriculture and the feeding FAO, World Organization to Health WHO, Organization to the education of Science and Culture of the United Nations UNESCO, the program Man and Biosphere, with the purpose of supplying the basic knowledge to the rational use and preservation of the biosphere recourses and the improvement of the global relation between man and the environment. On respect to this aspect, the Conference of the United Nations about Human Environment celebrated in Stocolm in 1972, among its recommendation number 96 which indicates "It is recommended that the general secretary, organism of the United Nations, particularly, the UNESCO and others international institutions interested to get a previous reference and common agreement into the necessary measures to establish an international educative program of interdisciplinary teaching in school and from them, the environment that involves all grades of teaching and that it be directed to everybody with the goal of developing the knowledge and to stir up simple actions that allow, in some possibilities, managing and protecting the environment.

A significant event is the International Colloquium of Environmental Education in Belgrado, 1975, where a declaration of principles to the development of the environmental education known with the name of Belgrade's Letter was written, global context to the environmental education in which there is a great inanity of the experts in the topic, it is considered as one of the most complete documents. In which the goal of the environmental education was exposed.

- Environment: System of abiotic, biotic and socioeconomic elements with what man interacts and adapts his life, transforms it and uses it to satisfy his necessities.(According to the law 81).
- Environmental Education: Is considered a continuous and permanent process, that constitutes a dimension of the integral education of all the citizens directed to the harmony of relations among men, between them and rest on society and nature, during the process of acquisition of knowledge, development of habits, skills, attitudes and formation of values, with the objective of participating in the reorientation of the cultural, social and economical process towards a sustainable development.

The Environmental Education has as objective: To make students understand the difficulties of the natural environment and the one created by man, resulting on the interaction of the biological, physical, social economical and cultural components that knowledge comprises, the values behaviors and practical skills to responsibly and efficiently participate in the prevention and solution of environment problems in favor of the quality of the natural environment. Nereida Nodarse Valdes (2004:194).

Progresses and tendencies of the environmental education at international scale.

Education has great relevance to promote the sustainable development and to increase the capacity of population to talk about environmental aspects and development. The basic education is used as foundation to education regarding the environment; the last one should be incorporated to learning as a fundamental part, with the purpose of being efficacious. At world scale, to materialize of practical form the goal of the environmental education, multiple efforts have been carried out, an example of that is ECO 92. Where they try to find ways of translating the good intentions in concrete measures, and governments specifically agreed to face the big environmental and development problems. The results of the Earth's Summit include global convention about biodiversity and climate.

The principal cause of almost all the environmental problems is due to the quick increasement of human population that nowadays reach 6.605 million (2007) of people in the entire world. Every day there are 250.000 births, what sums 90 millions in a year time. At this pace the global population will arrived to 10 000 millions in the year 2050. The basic needs of all these beings (feeding, dwelling, energy, clothes and goods consumption) plan a huge demand of natural recourses. If we do not make changes in the technology, the use of land and in birth control measures, this demand will increase hardly. The preassure of population augmenting on the environment, determined by its distribution and its local figure. The 90% of the present increasing takes place in the countries that are in a process of development, in which, for the year 2025, it will be concentrated the 84% of the world population. Kenya and Iraq, for examples, present a rhythm of growing of almost the 4% in the year, so they duplicate its population every 20 years. In some developed countries, like Japan and France, it would be necessary about 400 years to fold their populations.

The industrialized countries, with a higher level of life, are responsible for the major part the atmosphere's contamination, the winter resort effect, the fishing running out and the deforestation. However, these countries can reduce the environmental risk when using the new technologies as antipollution appliance, in chimneys, system of the auto regulation of emission, and facilities for the treatment of the residual waters. Although the countries in via of development consume less resource by a person, the high density of population produces a big running out of the ground, the forest and the aquatic resources. The new not contaminating Technologies are economically inaccessible for those countries. Due to this, urge actions to preserve a more inhabitable world, under sustainable and economic principles.

The first initiative to solve this situation do not appear in the school context, but in other social boundaries, being collected and diffused above all international organism related, directly, to the United Nation. Among these organization are: The Organization in charge of the agriculture and feeding (FAO), World Health Organization (WHO), The Culture, Science, and Education Organization for the

United Nation UNESCO), which together, approved and put into practice the program with an instructive character had the propose of supplying knowledge of Natural and Social Science necessities for the rational use and the conservation of natural resources present in the biosphere.

It is necessary an immediate action plan joined to the continuous effort what will count with an educative plan to obtain a good result in a long term. In fact, one of the most important responsibilities of the educative system is to prepare the future students for the citizen changes that will take place in a better world, in a near future. Respect this recommendation # 96, conference of the United Nations about Human Environmental, celebrated in Stockholm in 1972, indicates:

“It is recommended that the General Secretary, the organism of the United Nations, particularly the UNESCO and the other international institution interest take previous consultation and of common agreement, the necessary measures to establish an international educative program of interdisciplinary teaching in the school and out of it, regarding the environment, that covers all the grades of teaching and directed to everybody [...]with the goal of developing the knowledge and to motivate simple actions that permit them[...] to administrate and to protect the environment”.

On October, 1977 the UNESCO, in collaboration with the PNUMA, convoked the first Intergovernmental Conference of Environmental education that took place in Tbilisi (Georgia). It is considered the most significant event in the history of the Environmental Education, because in it the objectives and the pedagogical principles were established, so the strategies that should guide the development of such education at international scale.

In the Tbilisi Conference ,”The environment is conceived as, included the natural aspects and the ones resulted by the human action; the Environmental Education was planed with an interdisciplinary focusing, assigned to the solution of problems and opened to the local reality remaining integrated in all the educative process and making the students to learn how to organize their own experiences of learning and give them the opportunity of deciding and accepting its consequences, using

different educative activities, a wide variety of methods to communicate and acquire knowledge about the environment.”

During the decades of 1970 and 1980 it was cleared that the natural resources were squandered on behalf of development. There were unforeseen changes in the atmosphere, grounds, waters, plants and animal, and in the relations among all of them. At the ending of 1983, the general secretary of the United Nations asked the First Ministry of Norway, Gro Harlem Brundtland, to create an independent commission to examine these problems that suggest mechanism for the increasing population of the planet to face the necessities.

On August, 1987 it was celebrated the International Congress in Moscow, in which one agreement was to declare the decade of the nineties as “World Decade for the Environmental Education”. The works were organized, in relation to decisive elements of the Environmental Education; it insists on the need of an Environmental Education, that we should make emphasis on a sustainable development. The most significant of the results, in the congress, was the statement of the elements for an International Strategy of Action regarding education and environmental formations for the 1990 decade.

The areas in which the work was projected are:

- Reorientation of education towards the sustainable development.
- Increasing of the people’s conscience. Foment of the capacitation.

The Environmental education in the Cuban Educative context:

In the beginnings of the Triumph of the Revolution, the environmental education was treated not formal way and as inherent element of the socioeconomic development project, the environmental education refers to different ways of the social task of the country through the popular participation, political and mass organizations, becoming with the course of time in part of the national traditions. At the end of the decade of 70s is celebrated the first national seminar of environmental education, in which one of the recommendations directed to school was to continue introducing the environmental dimension in each subject of the curricula in junior high school. From this period of time the ministry of education

has achieved to introduce elements that are related to the environment in curriculums in different levels of education.

The different levels and types of education should be represented in the permanent commission to the environmental education workers. The lesson should be the principal element to introduce the environmental dimension, taking into account the system of knowledge's, so the potential that can give to develop the activities out of the school. Participation in labours related to cleaning, embellishment and sanitation in general. The ones related with the saving of water, electricity, fuels and recourses.

Recuperation of any type of recycling materials with the objective of recycling or recuperate them for their procedure later. Participation in labours of forest repopulation, take care and maintenance of urban green areas. The ones banded in the attention to the sociocultural problems and the population in general, in particular to the more needed social groups.

In this aspect the revolution has been advanced with solid steps from the organizative and legislative point of view, what have showed the will of the Cuban State for the protection of the environment and the promotion of the environmental education. This reality is seen in successes that the different breaches reach, as: health education, science and technology among others, which during 40 years have devoted the work to satisfy the growing necessities of the population. The origin of this new attitude is found in the wide ecological crisis, in the social reverberation that it plans and the need of answering from several sectors, among them: education.

The environmental education implies the practice, decision, and the auto formulation of conducts code about the creation of a major interest by the environmental problems; this wariness has an important role in the social scientific development in the three last decades, to surpass the environmental problems. In the historical context that supports these efforts three decisive moments in work towards the searching of solution to the environmental problems are distinguished.

Due to the problems detected, The National Strategy of the Environmental Education designed these objectives:

1. Develop on children and young people conscience of the need of taking care and protecting the environment and be sensible with the ecological problems.
2. Contribute to the acquisition of knowledges and develop attitudes, skills, feelings, convictions and capacities that allow the formation of a personality who determines the causes and effects of the environmental problems and makes possible the participation in the improvement of the environment.
3. Create on the students a conscience about the economic, political and ecological interdependence of the contemporaneous world, with the goal of intensifying responsibility and solidarity.

The role of the school in this contribution is expressed through the purpose of integrating the environmental dimension in the educative system, guided to the acquisition of knowledge, the development of capacities and the formation of ethic values favorable to a social and a coherent professional behavior to reach a sustainable development.

Nowadays it is a challenge the attainment of the interdisciplinary relations at a level that is required by the systemic character of the environmental problematic regarding the development.

- The interdisciplinary relations is the highest level of them, the idea is to form a total system that has no limits among the subjects.

In the teaching learning process is necessary a formation on the students which help them to acquire an interdisciplinary way of acting and thinking based on the subjects they receive at school. All the students and particularly those we teach, need to be conscious about the world that surround us and the present circumstances in which the human being attempt against the survival, it is necessary that they enrich their knowledge about such important topic using the syllabus and giving them our help referent to the educative necessity in this case.

The teenagers think they are important and useful persons when they do some duties fulfill norms to live together in society and search about what they can do or not. This research has been done with few resources, used in the correct way, with equality and justice, and above all offering the same opportunities to the youth from our country.

It is our intention to reinforce care and protection of the environment making a good use of the English lessons' potentialities through the syllabus of the subject for ninth grade in which are designed and applied activities related to environmental themes that can be used as a teaching aid in order to involve the Environmental Education in the English lessons and that is propitiated by the syllabus.

The environmental education in the school in the new millennium is characterized by studies, researches and experiences which in the present stage are generalized and they have generated new strategies, methodologies, indications, resolutions and plans that conforms the legal of the environmental education in the Cuban educational politics.

Ministry of Education Program for Energy Saving. (EMESP).

It has as general objective; to contribute to the formation of a responsible civic conduct on present and future generations through the National Education System that based on the country's present energetic situation guarantees conscience about the need of using the electric energy, rationally, but also its saving and the contribution to environment protection, regarding the sustainable development.

Joined Resolution #. 1/2005. Program for the saving and rational use of water in the educational sector.

The situation of contingency that the country has due to the consequence of the drought's accumulative effects, that during some years affect the rains' regimen, the inadequate use of the sources to supply water and the no rational employ of this liquid, with the negative impact on the population quality of life , cause that the Cuban school assume the inescapable should of taking into account the measures to contribute to the people education , since early ages forming values and foment

a responsible citizen conduct with the saving and the rational employ of all the resources, among them, the water with an extraordinary importance.

Circular Letter # 11 / 03: Joined indications of MINED and the Cultural Society “José Martí” for the development and establishment of the Martianos Gardens in the educational sector.

These indications support the Project named “Creation and conservation of forests: an approach to José Martí and the nature's culture”, it has as base the thought of our national hero in defense of nature and his aesthetic precepts, and also, the help that in this branch the revolutionary government offers, referring to the noble effort for the protection of the environment in the battle against deforestation, process of environmental destruction that threat with the disappearing of forest species.

The materialization of the environmental education in the highest level of the educational policies is constituted by its rank of formative objective, becoming in a transversal axle that embraces all types of education.

The Secondary School Pattern has the following precision:

General Formative Objective.

-To demonstrate a correct attitude towards the environment, expressed on the way of acting, respect to the protection and saving of resources, mainly the energetic ones, and the taking care of the social property.

- To carry out, studies of familiarization about the environment, the biodiversity that surrounds us, the energetic resources, etc, participating in the actions for their conservation and the taking care of the social property, through the contents that subjects bring, the duties of the OPJM, the PAEME, clubs formed according to students interests etc.

So', it is obvious that, the main goal of the scholastic environmental education is; giving the students the knowledges about the environment and development, but at the same time to create a new way of acting that is in accordance with the environment.

Then, we need to educate in an environmental culture to form:

- Students with knowledge about the environmental problematic which is considered a risk for the human being and they should carry out some environmental practices to give solution to that problem.
- Students with an environmental ethic, who be conscious and able to criticize the bad behaviors, they should observe and understand, demand their environmental rights, prepare for their own environmental responsibilities.
- Students with capacity to participate in the environmental management guided towards the realization of an inhabitable environment.

PRESENTATION OF THE PROPOSAL OF ACTIVITY TO DEVELOP THE ENVIRONMENTAL EDUCATION ON NINTH GRADERS.

Valuation of the indicators´ initial status.

In a general way the students have scarce knowledge about the environmental culture. On respect to the total of students, 22 are in the first level for a 55% (low), 8 for a 20% in level two (middle) and only 9 for a 22% (High) can reach the third level. The indicators behave as follows:

- 1-Only ten students take care of the forest.
- 2-Seven students preserve the species in extinction.
- 3- Five students save water and electricity.
- 4- Nine students keep the cleaning and hygiene of classrooms and other areas of the school.
- 5- Eight students assume a correct attitude in situations of inadequate conducts.

The previous information has a closed relation with the development of students´ skills.

Main causes of the detected problems:

The insufficient level of teachers´ preparation: In methodological meetings the teachers do not receive orientations and actions from the technical and directional organs. This causes that teachers do not pay attention to the necessary self-

preparation looking for alternatives that allow students to give solution to any thematic axes of the Major Program. In the interview to the teachers, that work with group 4. 2, they expressed that they know and apply some elements of the environment in their subjects, 4 said that they have treat this topic through different ceremonies, formative programs and extra school activities, 9 have talked with the students about the topic but not with the required time and knowledge.

The technological resources are not used with frequency

In the school, there is the possibility of getting information from video cassettes, software and video lessons, and only the Biology and Geography teachers treat the content related to environmental problems, The others expressed that their subjects are complex to fulfill this activity.

The school does not make a good use of the bibliographical material: The school library possesses specialized materials about the environmental culture, and everybody can consult magazines, newspapers, the ENCARTA Encyclopedia and teachers do not assign students independent activities related to the environment .

Poor creativity to develop the “School for Fathers”: The environmental education is rarely treated in those meetings and in the case of being treated it is done superficially.

Extra school activities are not planned and programmed in the methodological system: The fulfillment of these extra school activities for each stage of the course allows to develop skills about the environmental education in which the fundamental educative agents of the centre should be inserted.

Lack of students’ protagonism: It is given because of the weak educative work in the formation of the students’ individual responsibilities at the moment of fulfilling important tasks with formative emphasis.

Few organizing styles, at the moment of developing the school and extra school activities, to apply systems of communication and spaces, without the use of participative techniques, which will motivate the interests on the students.

The educative labor of some teachers and other persons do not constitute patterns of acting, because it does not generate real influences neither transmit positive values, mainly related to the taking care and respect towards the environment.

Methodological- Theoretical Bases.

Based on the obtained results some actions with an interdisciplinary focusing directed to the environmental education on the students from the junior high school have been elaborated. These actions are designed in ten sessions of work divided in four hours. It is proposed to develop an activity each month, due to the complex character of them and the time devoted to reflection, debate and taking of decisions. In the elaboration of the actions the interdisciplinary relations with the Natural Sciences area and the school-family- community were taken into account.

This provides a conscience regarding the harm to the environment that personal and collective actions cause. The actions should be transformed in an individual and collective commitment to the solution of the environmental problems, creating attitudes that favor the participation in the environmental management of the community and the family.

The conception of the proposal, allows characterizing it as flexible, systemic, interdisciplinary and educative, because it contributes to the acquisition of environmental knowledge related to community problems, and also the conscience in respect to the environmental problematic. It permits, to establish interdisciplinary relations among the subjects that belong to the same department, taking as reference the educative potentialities of the knowledges' system that each one offers during the whole course.

The following action constitutes an important element to answer the scientific problem presented in this research: To define the interdisciplinary activities concept the author consulted different criteria. The author of this investigation agree with the one said by Viviana González Maura (1995:91) Activities: "Process in which transition happens among the poles fellow-object in function of the necessities of the first one (...) the activity necessarily exists through actions. "Jorge Fiallo (1996: 9). The interdisciplinarity: Essentially, consists on a collective work having presented the interaction of the scientific disciplines, of its guidelines concepts, of its methodology, of its procedures, of its data and of the organization in the teaching. After having analyzed these concepts the author arrived to the

following one: As the process in which happens transitions among the poles fellow-object that exist through actions, in those teaching – learning situations in a collective work, having present the interaction of the scientific disciplines, of its guidelines concept, its methodology, of its procedures, of its data and of the organization in the teaching.

Example of activity

School Activity # 2

Title: “Saving our blue planet.”

Objective: Sensitize the students with environmental problems that affect mankind.

Participants: Students and teachers.

Way of control: The teacher will evaluate the activity in all the moments mainly orally.

Time: 45 minutes.

Procedures:

1-The teacher writes on board the word **NATURE** and asks:

What does this term suggest you?

The students begin to express any idea, word or phrase that comes to mind, for example:

Green, birds, keep the forest, do not destroy the environment, and take care of water, planet, infertile lands, garbage everywhere, acid rain, toxic gases, and atmospheric contamination.

The teacher will ask the students the following questions.

2- How do you contribute to protect nature at school and in the community?

After valuing these aspects, in which the students should play an active role, the teacher will analyze the relation cause-effect of these problems and define the concept of Environmental Education with the students. It is important to precise that the environmental education is not the only cause of the environmental

destruction, other factors exist, such as: the extinction of species from the flora and fauna, the desertification, the indiscriminated cutting dawn of woods, the lands erosion, the drought, the level of salt in waters, and the alkalinity of lands, constitute damages that contribute to the destruction of the environment.

In the **conclusions** of the activity the teacher most clear that the principal cause of the environmental destruction is the human being and we should do something to avoid our actions.

Pedagogical Test.(annex-4)

A pedagogical test was applied to the students from the sample again, with the objective of proving the level of knowledge about the indicators that characterize a person who possesses a correct environmental education and his manifestations regarding the theme, this test permitted verifying that the level of knowledge about that type of education increased. When we ask them if the environmental education was important, the total of the students answered correctly, representing the 100%.

The results of the instruments after the activities' application proved the same, which permitted to determine that the difficulties regarding environmental education were eliminated on the students, was also achieved that, they took care and keep the classroom organized, show a correct attitude towards the taking care of all what surrounded them at school and the community, they participate in activities of knowledge related to the environment and the world impact.

CONCLUSIONS

The study of the pedagogical literature gave the author all the materials groundwork to the environmental education in the secondary school.

The diagnostic study revealed that it was necessary to know about the environmental education due to the following reasons:

- Mistreatment of the school environment.
- Creation of harmful agents.

The proposal of activities is directed to the junior high school students and is characterized for having a participative and integrated conception which motivates the school activity that has as a central core the student protagonism.

The application of the proposal of activities revealed an improvement in: the taking care of the flora, conservation of species in extinction, saving of water and electricity, keeping the cleaning and the hygiene of the environment that surrounded them and also the attitude assumed by the students in situations of incorrect behavior related to the topic.

RECOMMENDATIONS

The author recommends:

- Continue researching about the topic object of study with the purpose of keeping its force for post- graduated studies.
- Present the results of the research in scientific events.

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ANNEXES

ANNEX-1 Activities proposal.

Activity#1- Match the elements from column A with their corresponding in column B

Objective: The students should identify the relation among some elements related to the environment to understand the damage that human beings cause to it.

Participants: The students

Way of control: The teacher will control the activity checking the notebooks

Time: 45 minutes.

Match:

A	B
1- Water	tree
2- Air	fish
3- Industry	bird
4- Forest	man

a- Which one of the elements from column B causes more damages to the environment?

b- Why do we relate man with industry?

Activity#3 -Fill in the gaps

Objective: The students should identify some vocabulary words related to the environment to acquire conscience about taking care of nature.

Participants: The students

Way of control: The teacher will control the activity checking the notebooks

Time: 45 minutes.

a- Cuban people like to go to the ----- and the ----- in summer.

b- The students dislike throwing ----- in streets and rivers.

c- My mother loves having ----- at home.

d- My friends hate cutting ----- and hunting -----.

List: plants, beach, trees, garbage, birds, camping site.

Activity#4-Saying true or false:

Objective: The students should recognize some statements to deep into the importance of the forest and air for living.

a- ----- Fishes die because of waters´ contamination.

b- ----- The forest is very dangerous for the human beings.

c- -----The cleaning of the cities contributes to the environment´ s protection.

a- Why is statement B false?

Activity#5 -Guess Where?

Objective: The students should identify the name of one of the most interesting and famous places in Cuba, in order to get to know how the government preserves it.

Participants: The students

Way of control: The teacher will control the activity checking the notebooks

Time: 45 minutes.

Procedures: The teacher says: Next vacation, I am going to visit a place in Pinar del Rio, it is beautiful, big, and green and there are many species from our flora and fauna. This is the unique place in Cuba where you can find small mountains named hillocks.

Activity #- 6

Title: "Meeting my town."

Objective: Valorate the main environmental problems that affect the place where the school is located.

Participants: Students, Teachers, some members of the CDR, parents and a specialist from CITMA.

Procedures:

This activity will be developed based on an ecological walk through different places of school. In this sense the teacher will start the activity discussing the concepts of Nature, Community, Society and Environmental Cleaning; it can be done by means of questions and problematic situations.

During the walk will be necessary to analyze the following contamination sources:

- The ones produced by solids, liquids coming from factories, and human activities.
- Residuos sólidos y líquidos provenientes de la crianza de cerdos.
- Emanaciones industriales en forma de humo o polvo, las cuales se lanzan diariamente a la atmósfera y contaminan el aire.

These are the main environmental problems that affect the community:

- a) The waters contamination.
- b) Lands erosions
- c) Air contamination.

.

In the conclusions of the activity the teacher most clear that the principal cause of the environmental destruction is the human being, and it should do something to avoid this actions.

Activity # 7

Title: "Building the forest"

Objective: To develop behaviours that favours the activity of the students and the necessity of being useful

Participants: : Students, professors, selected parents and members of the community.

Procedures:

The patternmaker will begin the activity by means of the reading of the following fragment: The trees moved away 180 000 millions of tons of dioxide of carbon from the air and 50% of a tree it is carbon Just an hectare of tropical forest absorbs 10 tons of dioxide of carbon in one year, during decades it has harboured and protected thousands of biological organisms. Is it worth or doesn't it to respect and to conserve the trees? Starting from this moment the debate of the previous position will settle down which should propitiate, starting from the points of views and approaches characteristic of the students, to solve the outlined query. Starting from this groupal exchange, where they should participate actively, the patternmaker of the activity will guide you to begin to plant a forest in the area that you are, which presents a damaged floor for the shortage of vegetation in the same one. When concluding the professor of Geography will orientate the following project work:

- Look for information about the main existent natural resources in the province. Investigate what environmental stocks are executed for its care and protection. Elaborate a report with the gathered information.

This report will be discussed in the group assisting to the information that gathered each team. The evaluation will depend on the depth of the approached content and the reflections

ANNEX- 2

Título: Entrevista grupal a estudiantes.

Objetivo: constatar el nivel de conocimiento que poseen acerca de la educación ambiental.

Para conocer el nivel de conocimiento que poseen acerca de la educación ambiental.

Conceptos relativos a la Educación ambientalista

1. Documentos ministeriales que rigen el trabajo metodológico con el medio ambiente.
2. Principales problemas que afectan el medio ambiente.
3. Argumentos, explicaciones y opiniones sobre problemáticas que afectan el medio ambiente.
4. Papel que juega cada uno, desde la función que realiza, en la aplicación del Programa Director de Promoción y Educación Ambiental.

ANNEX-3

Título: Entrevista individual a estudiantes.

Objetivo: constatar la explicación y aplicación de la educación ambiental.

Las preguntas giran alrededor de los aspectos que a continuación se plantean, según la función de cada uno:

- 1-Dominio que tienen de los conceptos relativos a la Educación Ambiental.
- 2-Solidez en los argumentos, explicaciones y opiniones que expresan cuando se analizan problemáticas de medio ambiente.
- 3-Participación en clases, así como en actividades extradocentes y extraescolares que contribuyen a la educación ambientalista.
- 4-Consulta de libros, manuales, folletos y plegables que tratan sobre medio ambiente.
5. Cumplimiento de las normas de limpieza e higiene en áreas colectivas
- 6- Responsabilidad individual y colectiva cuando realizan tareas investigativas en las bibliotecas (escolares, públicas y especializadas), así como en otras instituciones comunitarias que promueven una Educación Ambiental.
- 7-Disciplina durante las clases u otras actividades cuando se desarrollan temáticas vinculadas al medio ambiente y la conducta social en general.

ANNEX-4

Título: Prueba pedagógica final

Nombre y apellidos: _____

Objetivo: medir el nivel conocimiento que poseen los adolescentes respecto al medio ambiente.

- 1 Defina el concepto de medio ambiente.
- 2 Mencione los componentes del medio ambiente.
- 3 Diga los principales problemas ambientales globales y locales.
- 4 ¿Cuáles son las causas que originan los problemas ambientales globales?
- 5 Mencione las medidas que se toman para proteger el medio ambiente.
- 6- Respetas los animales y las plantas que te rodean.
- 7- Te interesa conocer bibliografías relacionadas con el medio ambiente.
- 8- Aprecias las bellezas de la naturaleza circundante.
- 9- Asistes a las campañas de ahorros de recursos.
- 10- ¿Qué te motiva a participar en campañas de higienización?

ANNEX-5

Título: Encuesta.

Adolescentes: se solicita su cooperación consciente al responder las preguntas de esta encuesta, la cual está dirigida al conocimiento que usted posee sobre el medio ambiente. La misma no lleva su nombre. Gracias.

Objetivo: constatar los conocimientos ambientales que poseen los adolescentes.

1-Marca con una (X) lo que consideres que forma parte del concepto de medio ambiente.

La degradación de los suelos.

Todo lo que nos rodea.

Elementos bióticos y abióticos.

Elementos socioeconómicos con que interactúa el hombre.

2- Marca con una (X) los que consideres elementos que forman parte del medio ambiente:

hombre agua composición

plantas pájaro pólvora

aire clima sol

3-Marca con una (X) los que consideres problemas ambientales.

Agotamiento de la capa de ozono.

Pérdida de la diversidad biológica.

Degradación de los suelos.

Explotación de yacimientos de petróleo.

Crecimiento demográfico.

Uso de alimentos para producir combustibles.

4-Marca con una (X) las causas que den lugar al surgimiento de problemas ambientales en tu localidad.

Los incendios forestales.

Siembra de árboles en áreas deforestadas.

La caza indiscriminada de animales o la captura con fines ornamentales.

Siembra de cultivos en las zonas de pendiente.

La presencia de vertederos y micro vertederos próximos, o en corrientes superficiales de agua.

5. De las medidas que se presentan a continuación marca con una (X) las que consideres que estén dirigidas al cuidado y protección del medio ambiente:

Sembrar árboles maderables y frutales.

Suministrar abonos orgánicos a las plantas

Cazador pájaros para embellecer nuestros hogares

Botar al mar los desechos y residuos sólidos.

Colocar filtros en las chimeneas de las fábricas.

Hacer fogatas en cualquier lugar cuando hay acampada

ANNEX-6. Guía de observación científica.

Objetivo: Constatar el nivel de conocimientos que poseen los estudiantes sobre la educación ambiental.

Aspectos a observar:

- 1- Compromiso por adquirir una educación ambiental.
- 2- Interés por proteger y conservar el medio ambiente.
- 3- Disposición para proteger el medio ambiente.
- 4- Conocimiento de la situación medioambiental de la localidad.
- 5- Dominio de las medidas para proteger y conservar el medio ambiente.

Tabla 2. Resultados de la observación científica.

Población: 39 estudiantes del grupo 9no 4 "ESBU Mártires de la Familia Romero".

Escala Indicador	ALTO		Medio		Bajo	
	cantidad	%	cantidad	%	cantidad	%
Compromiso por adquirir una educación ambiental.	1	2,5	10	25,7	28	71,7
Interés por proteger y conservar el medio ambiente.	1	2,5	10	25,7	28	71,7
Disposición para proteger el medio ambiente.	1	2,5	0	0	38	97,4
Conocimiento de la situación medioambiental de la localidad.	2	5,1	0	0	37	94,8
Dominio de las medidas para proteger y conservar el medio ambiente.	2	5,1	0	0	37	94,8
Total	1	2,5	10	25,7	29	74,3

Résumé

La recherche présente est intitulée: Les activités interdisciplinaires ont visé à développer l'éducation de l'environnement à travers les Leçons de la Langue anglaises, il a comme objectif pour proposer des activités pour développer une éducation de l'environnement à travers les leçons anglaises. Les méthodes différentes et techniques ont été utilisées: l'étude, l'entrevue, l'observation et l'analyse documentaire. Traiter les données l'auteur utilise le calcul du pourcentage. Ce travail a apporté comme résultats du principal le manque de connaissance que les étudiants avaient concernant la flore et la faune dans chemin général, donc, le même s'est passé avec le pennant sont de l'environnement qui existe dans l'éducation de l'environnement, quelques difficultés du point de vue théorique dans les leçons anglaises.