

Actividades para la educación ambiental comunitaria desde la extensión universitaria

Activities for communal environmental education from university cultural life

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Resumen: El presente trabajo tiene como objetivo proponer actividades para la educación ambiental comunitaria desde la extensión universitaria en la carrera Biología-Geografía de la Universidad de Guantánamo. Se abordan los principales referentes teóricos de la educación ambiental comunitaria y de la extensión universitaria. Se aplicaron métodos y técnicas de investigación que permitieron constatar la existencia de insuficiencias en el proceso de extensión universitaria. Con la puesta en práctica de la propuesta se mejora el comportamiento personal y profesional de los estudiantes, así como la situación ambiental de la comunidad.

Palabras clave: Educación ambiental; Extensión universitaria; Comunidad; Biología; Geografía

Abstract: The paper aims to propose activities for community environmental education from the university cultural activities in the Biology-Geography major of the University of Guantánamo. It addresses the main theoretical references of community environmental education and the university students' cultural life. Research methods and techniques were used to verify the existence of insufficiencies in the university cultural life process. With the implementation of the proposal the major improves the personal and professional behavior of students, as well as the environmental situation of the community.

Keywords: Environmental education; University cultural and recreational department; Community; Biology; Geography

Introduction

The aggravation of the problems affecting economy, politics and society have an accelerating effect on the planet, exhausting the energy and material reserves that have been the sustenance of life in it. We live in a complex world that is going through an environmental crisis that worries humanity.

In Cuba there is a well-defined environmental policy that is revealed in its Constitution, in the guidelines of the VI Congress of the Communist Party of Cuba, Law 81 of the Environment, the ordering and completion of environmental legislation, institutional strengthening for systematic attention and rational use of the environment in the communities, inclusion of the environmental theme in the Cultural Programs for Education, scientific and technical research and improvement of environmental management and policy instruments and education; which demonstrates the concern and occupation of the government and the state for the development of environmental education consistent with the economic and social progress of the country.

Of special importance is the community environmental education in the initial training of teachers that influences their civic and professional performance. From systematizing and consolidating coordination relationships for the execution of projects and programs in universities, especially those related to the development of community environmental education and to the solution of local environmental problems. In this sense, the cultural activity has not always been understood in its real dimension, it acquires a significant position within the vision of the prospective University of the twenty-first century, going beyond the traditional concept to become a means that deepens the university-society link, however, there are still few studies that address the use of the educational potential offered by university cultural life to intervene in the development of community environmental education with a transformative purpose in the educational spaces located in the communities.

The university cultural life has conditions to create a network of multipliers in the transformation of the community, where interests are expressed, participation and search for solution using their own efforts, promoting change in communities with environmental problems.

From this perspective it is necessary to systematize the activities of university cultural life and the theoretical references that support it to contribute to the development of community environmental education and the involvement of students, once graduates, in the transformation of the community in which they intervene.

As a result of the research project the following shortcomings were determined: theoretical and methodological lack of teachers for the development of community environmental education from university cultural life, which affects the way students act; limited use of environmental knowledge, as well as the experience and culture of the community.

The purpose of this paper is hence to propose activities for community environmental education from the university cultural life in the Biology-Geography major of the University of Guantánamo.

Development

The current Cuban university has the social mission of preserving, developing and promoting culture as an intrinsic necessity of society through the integration of its substantive processes related to training, research and university cultural life.

The university cultural life is an integrating and energizing element to disseminate the university cultural issues to the whole society through community projects using the promotion as essential method. Numerous authors have addressed the process of university cultural life, enriching the theoretical references. Among them we can mention Piñón and Añorga (1995), González (1996), Díaz (1997, 1998),

García (1998), Del Huerto (2001), Fernández and Larrea (2002), García (2006), Rodríguez , Medina (2012), Fernández (2012).

González (1996) conceptualizes the university cultural life as:

System of interaction between the university and society, through activity and communication, which is carried out inside and outside the higher education center with the purpose of promoting culture in the university and extra-university community to contribute to its cultural development (p. 66).

On the other hand, Del Huerto (2001) ponders the university cultural life as:

Formative, integrative and systemic process, based on the cultural interaction of university activities in permanent two-way communication with society, including the university community, oriented to social transformation and responding to specific needs at a given moment; it has its own objectives and contents, and is carried out through different methods, but needs adequate means and resources, and of systematic planning and evaluation mechanisms for its improvement (p.9).

The National Cultural life Program approved in 2004, addresses the concept of university cultural life as "a process that aims to promote culture in the intra-university and extra-university community, to contribute to their cultural development" (Ministry of Higher Education, 2004, p.5).

Rodríguez (2009) states that the university cultural life is:

A process with a complex set of internal and external relations, which identify it as a substantive process for the professional's formation, but which differentiate it significantly from the others, especially by the special communication that develops in it, when proposing to promote culture in the interior and exterior of the campus of the university (p.18).

In the analysis to the definitions of university cultural life was determined the existence of characteristics, such as:

- Substantive process of the university.
- It allows the interaction between the university and society.
- It aims to promote culture.
- Means for activity and communication.
- Its purpose is to achieve cultural development.

These contributions enrich the theoretical conception of university cultural life by identifying it as a substantive process, which points to a greater integration of its contents, communication as a facilitator of

the continuous cultural flow between the University and society, besides its essential purpose is the promotion of the culture in its broadest sense. This is present in the current conception of the process, which in our consideration should be taken into account in the development the work for cultural life.

It emphasizes the promotion of culture in the definitions of university cultural life, however, this purpose is mostly associated with artistic, patriotic and literary culture, disregarding other important aspects of comprehensive general culture, specifically environmental culture, which has been poorly treated.

To achieve the environmental culture in the community it is necessary to develop community environmental education, this has been assumed over time with various meanings. Its interpretation is related to natural spaces and the transmission of values through a set of knowledge and techniques, inspired by perception studies. Its objective is to stimulate a change of attitudes and behaviors in favor of the environment.

For Martínez (2004) community environmental education is "an educational process aimed at forming environmental attitudes and values in teachers, students and community population, carried out through formal and non-formal channels, with a systemic and integral character among the didactic, attitudinal and environmental aspects" (p.14). It is conceived as an educational process aided by didactic tools with the purpose of forming attitudes and environmental values: This process can be developed by educational institutions.

Relaño (2010) defines community environmental education as a "systematic process from the school for the improvement and transformation of the community, considering its socio-cultural characteristic and directed towards local sustainable development" (p.38). It emphasizes the improvement and transformation of the community, where the principles of sustainable development, led by the school are assumed.

In the analysis to the definitions of community environmental education was determined the existence of different elements such as:

- Strategy based on the principles of environmental education.
- Methodological axis to reach the objectives and goals of sustainable development.
- Improve the quality of life of the population.
- Relations with nature and society.
- The environmental protection.
- Methodological approach.

- Training creative thinking in educators and communities.
- Form environmental attitudes and values.
- Improvement and transformation of the community.
- Educational process.

Since there is no coincidence of the elements mentioned above in the definitions of community environmental education analyzed, we want to consider the essential features raised by Relaño (2010), in addition to these, cultural life is taken into account as other element to be considered in the university-society relationship for the development of community environmental education from university cultural life. These are the following:

- Environmental: related to the knowledge of the environment and its components, as well as legal provisions aimed at care and protection.
- Educational: related to the educational work and educational methods for the educational process in which the university and the community intervene.
- Cultural life: related to the promotion of environmental culture in the educational spaces of the university, community and family.
- The community: related to socio-cultural characteristics and mode of action in the prevention, mitigation or elimination of environmental problems of the community.

In this sense, these essential features and the definition of university cultural life are taken into account in order to define the category of community environmental education from university cultural life. We conceive it as a process directed to the cognitive, procedural and attitudinal development of the students for the environmental transformation of the intra and extra-university community seizing the opportunities provided by educational spaces.

Taking into account this conception a set of activities for the community environmental education was designed involving the university cultural work, with the purpose of improving the environmental situation of the university community.

Activity 1

Title: Do you know the community of San Justo?

Type of activity: excursion

Objective: to identify the main environmental problems affecting the San Justo community and the potentialities for the improvement of the quality of life of its residents.

Place: community of San Justo.

Responsible: Professor of Regional Geography

Participants: students of the course Biology – Geography

Methodological guidelines:

In order to carry out this activity, it is necessary to make a previous visit of familiarization to the community by the responsible teacher in order to determine the main environmental problems and difficulties that may hinder the activity.

In the preparation phase, it is necessary to clearly understand the activities with the group, to form work teams, and the delivery of an observation guide with the elements to take into account, based on the knowledge received in Physical Geography and Education. Each team will be assigned an itinerary.

In the execution stage, students will follow the recommended itinerary, and gather information by recording the data according to the instructions given and proposing possible ways of solving it. In the final stage and once the tour is concluded, the activity will focus on processing all information, draw conclusions, and evaluate the quality of the activity.

Activity 2

Title: risk map and resources of the community of San Justo.

Type of activity: practice.

Objective: to elaborate the map of environmental risk and resources of the community of San Justo with the students of the major Biology - Geography.

Location: Geography specialized classroom.

To be taught by: a local teacher.

Participants: Biology-Geography students.

Responsible: the teacher.

Method: independent work.

Means: map of the city of Guantánamo, if possible focused on the specific area of the community of San Justo, crayons, cardboard or paper.

Methodological guidelines:

To prepare the environmental risk map, and the natural and socio-cultural resources of the reference location, the students will make a preliminary study, to which the data collected in the excursion will be

added, with a theoretical study of the elements of knowledge required in diverse sources of information assigned by the teacher.

The work will be distributed in four teams of five members each, balanced according to the diagnosis, so that the tasks are distributed taking into account the diversity and the needs and potentialities of each of the students.

Students will work on the basis of general guidelines given in advance; it will enable them to put into practice the knowledge acquired and creativity.

The final result should be to hand out a map that reflects the natural and socio-cultural resources and environmental risks in the community of San Justo, and in oral way, they must argue in each case the causes of risks and proposals of measures to minimize them.

Individual assessment will be quantitative in accordance with students' performance, and collectively, emphasizing such aspects as cooperation and the equitable division of tasks.

Activity # 3

Title: community analysis and reflection workshop.

Type of activity: workshop

Objective: to train students and community members on the basic elements of the environment, this will favor perception and decision-making related to environmental problems of the community.
To be taught by: Professor of Environmental Education.

Participants: Biology-Geography students.

Responsible: principal teacher of the year.

Methodological guidelines:

The topics will be addressed to the socio-cultural reality of the community. Social behavior, environmental hygiene, including: natural and urban ecosystem; environmental education and social development; changes and behaviors of lifestyles; water pollution, its consequences for health and the treatment of solid and liquid wastes; sanitation and environmental hygiene; green areas design and maintenance; social pollution, its consequences.

It is also recommended to strengthen the work with values such as responsibility, industriousness and solidarity, collectivism, humanism, among others to confront environmental education in the community. To carry out these workshops, prior coordination with community organizations and their leaders it is necessary to involve, motivate, and make them participate in their environmental reality.

The effectiveness of the task will be conditioned by the level of motivation propitiated for the community to participate in the debate, in an environment of mutual respect, exposing their ideas, needs and interests to change their environment and provide possible ways of solving the problems presented.

Activity # 4

Title: talk about environmental education with the children of the community.

Type of activity: educational talk.

Objective: to talk with the children of the community about the basic elements of the environment.

Responsible: principal teacher of the year

Methodological guidelines:

The theme to be developed must be related to the environmental problems of the community. The activity will have a playful approach taking into account the specificities of working with children. Through role play, children will reflect about their perception of community problems and how they would like adults to behave and act regarding it.

The individual evaluation will be quantitative according to the performance of the participants, and collectively, emphasizing the value of the ideas contributed.

Activity # 5

Title: sanitation campaign.

Type of activity: Interventional practice.

Objective: to carry out a sanitation campaign with the participation of community members and Biology-Geography students.

Place: community of San Justo.

Participants: Biology-Geography and community students.

Responsible: principal teacher of the year.

Methodological guidelines:

To carry out this activity, a coordination visit with the community leaders is necessary to select the day and time, and ensure the greatest number of community members' participation. To start the activity the teacher should create a favorable climate for cooperation and teamwork, in addition, students must make a brief speech where they state their purpose, guide the tasks to be undertaken and the importance they

have for the sanitation of the community. These are aimed at improving the habitat, urban education, neighborhood identity and integrate local actors.

The evaluation will be done by the participants when assessing the favorable effect that their actions contributed to the environment in which they acted. The Positive, Negative and Interesting survey technique (PNI in Spanish) will be used.

Conclusions

The activities developed and their implementation contribute to the solution of the declared scientific problem, which allow the design of a curricular strategy of environmental education to be strengthened; as well it will provide students with the possibility of linking the environmental knowledge received with practice, and acquire an environmental awareness in order to face and to solve the environmental problems that are manifested in the community outside and inside the university.

Bibliographic References

- Arias, H. (1995). *La comunidad y su estudio*. La Habana: Pueblo y Educación.
- Del Huerto, M. (2001). *Un reto a la gestión cultural de las universidades del siglo XXI*. España: Trabel.
- Fernández, I. M. (2012). *La formación ambiental del estudiante de la carrera de Psicología desde el proceso de extensión universitaria* (Tesis en opción al grado científico de Doctor en Ciencias Pedagógicas). Santiago de Cuba: Universidad de Ciencias Pedagógicas “ Frank País García”.
- García, J. (1998). La educación ambiental y el desarrollo sostenible. En: *Cuba Verde. En busca de un modelo para la sustentabilidad en el siglo XXI*. La Habana: José Martí.
- González, G. R. (1996). *Modelo de extensión universitaria para la Educación Superior Cubana*. (Tesis de Doctorado). Instituto Superior de Cultura Física "Manuel Fajardo", La Habana.
- González, M. (2002). *Modelo de gestión de extensión universitaria para la Universidad de Pinar del Río* (Tesis de Doctorado). Universidad de Ciencias Pedagógicas “ Frank País García”, Santiago de Cuba.
- Martínez, C. M. (2004). *La educación ambiental comunitaria para el desarrollo del trabajo comunitario en las instituciones educativas* (Tesis de Doctorado). ISP "José de la luz y Caballero", Holguín, Cuba.
- Mc. Pherson, M. (2004). *La Educación Ambiental en la formación de docentes*. La Habana: Pueblo y Educación.

- Medina, E. del C. (2011). *Modelo pedagógico de formación del protagonismo del futuro profesional desde la extensión universitaria, en el contexto de la universalización* (Tesis de Doctorado) “ Frank País García”, Santiago de Cuba.
- Ministerio de Educación Superior. (2004). *Programa Nacional de Extensión Universitaria*. (CD- ROM). La Habana.
- Relaño, L. (2008). *Estrategia pedagógica de Educación Ambiental Comunitaria*. Simposio Internacional de Educación Ambiental escolar auspiciado por GEA-ISPEJV.
- Relaño, L. (2010). *Estrategia pedagógica de educación ambiental comunitaria* (Tesis de Doctorado). Universidad de Ciencias Pedagógicas “Enrique José Varona”, La Habana.
- Rodríguez. (2009). *Modelo pedagógico para la formación de la competencia comunicativa de los futuros licenciados en educación, desde la extensión universitaria* . (Tesis de Doctorado). ISP "Frank País García", Santiago de Cuba.
- Valdés, O. (1996). *La educación ambiental en el proceso docente educativo en las montañas de Cuba* (Tesis de Doctorado). Instituto Central de Ciencias Pedagógicas, La Habana.