

PERSPECTIVAS DE EDUCACIÓN AMBIENTAL EN LAS INSTITUCIONES DE EDUCACIÓN SUPERIOR

PROSPECTS FOR ENVIRONMENTAL EDUCATION IN INSTITUTIONS OF HIGHER EDUCATION

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RESUMEN

Cada vez más, varios sectores de la sociedad se preocupan por lograr un equilibrio en el ecosistema, incluyendo el área de la educación superior. En el presente estudio, se analizaron la parte teórica y las generalidades sobre la educación ambiental en la educación superior de México con el fin de coadyuvar en la concientización emergente. En este sentido, la educación ambiental debe de contribuir a la integración de la conciencia, conocimiento y actitud de la sociedad ante la problemática ambiental.

Palabras clave: educación ambiental, instituciones de educación superior, medio ambiente.

ABSTRACT

Increasingly, various sectors of the society cares for a balance in the ecosystem, including the area of higher education .. In the present study, the theoretical part is analyzed and an overview of environmental education in higher education Mexico in order to assist in the emerging awareness .. in this sense, environmental education should contribute to the integration of awareness, knowledge and attitude of society towards environmental issues.

Key Words: environmental education, institutions of higher education, environment

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Introduction

Currently, humanity is facing a serious problem that affects every living things on earth, namely, the environmental crisis, which covers not only issues of resource depletion, greenhouse effect, pollution and overall imbalance ecosystems but also economic inequality, poverty, wars, equity and social justice. To supplement this problem, the United Nations Conference on the Human Environment, held in Stockholm in 1972, defines the environment as the overall physical and biological system in which humans and other organisms live, constituting a complex whole , interacting with various components inside.

According to the United Nations Environment Programme, the environment consists of the biosphere, or the air, soil and water, biologically inhabited (UNEP, 2009). The environment is a fragile system and in-difference to nature has become so great that have deteriorated ecosystems. The National Association of Universities and Institutions of Higher Education (ANUIES) notes that the prevailing styles of development in the world in recent times consider the biosphere as an inert and economic interests subject to the object; that is, only as a resource and not as a complex set of interacting systems (ANUIES, 2009).

BEGINNINGS OF ENVIRONMENTAL EDUCATION IN MEXICO

During the Second Latin American Congress on Environmental Education, held in Guadalajara, Jalisco, from May 31 to June 5, 1997, Sanchez Leon and Robles (1997), referred to (Gonzalez, 1993), who noted that the discussion on education and environmental management in the field of higher education in Mexico began since the year 1985 with the installation of the Environmental Training Network in Queretaro, which proposed, among others, in order to "contribute to the formation and shaping technical cadres of researchers, teachers and decision makers, based on the potential of supply and demand in each region. " Subsequently, various forums and meetings in the National Autonomous University of Mexico were held at the Autonomous University of Queretaro and the University of Guadalajara, to discuss the training of professionals to this environmental problem. In the "Declaration of Chapala, 1990" to the Higher Education Institutions (HEI) that will implement comprehensive training processes in various areas of the cone-foundation for the "detection, prevention and

professional management of environmental problems" it was recommended . In September 2000, within the framework of the "Third National Meeting Extracurricular Institutions of Higher Education in Mexico Environmental programs," the Mexican Consortium of University Environmental Programmes for Sustainable Development (COMPLEXUS) was established. They attended several institutions of higher education, the Centre for Education and Training for Sustainable Development (CECADESU) of SEMARNAT and the National Association of Universities and Institutions of Higher Education (ANUIES). (COMPLEXUS, 2009).

THE ROLE OF INSTITUTIONS OF HIGHER EDUCATION IN PROMOTING ENVIRONMENTAL EDUCATION

Medina (2009), which essentially says the higher educational levels are attributed the responsibility to develop the capacities of individuals to contribute to improve the quality of life on the planet, because this has the potential to influence the formation of the individuals integrating the environmental dimension as a priority to guide their personal and professional performance in all its fields of development. Institutions of higher education can not, and should, remain outside the solution of environmental problems through its core functions of teaching, research and liaison. Through education it is to achieve a conceptual change in our relationship with nature. Palma (2006), highlights the National Education Plan 2001- 2006, which seeks to promote teacher reflection and dialogue on ethical issues and global and local environmental problems that diminish the quality of life of people and the planet. In this Plan it promotes a culture for the protection of the environment and sustainable development through the training of teachers and the promotion of social participation and the establishment of cooperation agreements with the Ministry of Environment and Natural Resources (SEMARNAT) to promote environmental education programs and sustainable use of natural resources in educational institutions.

Mexico faces the challenge of including the environment as one of the elements of competitiveness and economic and social development as envisaged in the National Development Plan (2007-2012); Also, as part of its objectives, in Mexican society develop sound environmental culture oriented to value and act with a broad sense of respect for natural resources. You need to build a vision of formal and non-formal education towards environmental sustainability that promotes positive attitudes and behaviors that ensure the current and future well-being of all Mexicans; capacity building; the promotion of

research and scientific and technological innovation; as well as monitoring and evaluation of programs and results. This will lead to review and update environmental education programs taught in school. To fulfill this strategy will need to incorporate environmental education for sustainability as a cross-cutting approach at all levels and modalities of the national education system, leading to transcend towards society in general. Furthermore, it should promote attitudes and skills necessary for informed social opinion, to participate in the prevention and solution of environmental problems.

There is a growing need and urgency of training in environmental education, and in this regard, Gonzalez (1999) mentions the growing awareness of the problems of the environment and the desirability of response from the education system are also given the challenge of finding solutions. This has led, for decades, the introduction of environmental education and the consequent need for teacher training .. It seems clear that one of the keys to the development of environmental education is the training of educators. In this sense, González (1999), mentions that from the final report of the Conference of Tbilisi (1977) are classic and recommendations applying to the various States:

- Include in the teacher training program environmental sciences and environmental education.
- Pay helps the teaching staff of training centers for teachers in this regard.
- Facilitate future teachers an appropriate environmental training for the area (urban or rural) they will pursue.

PROSPECTS FOR ENVIRONMENTAL EDUCATION

Environmental education is intended that people become aware of their surroundings and to make changes in their values, behaviors and lifestyles, as well as broaden their knowledge processes to boost prevention and resolution of environmental problems and future.

Institutions of higher education should create spaces for extra-curricular activities, conduct research and produce technology that promotes sustainable development. Avila (2009) notes that knowledge of environmental factors and their mutual relationship are basic, so that should generate knowledge and help solve or reduce local, national and global environmental problems; technical projects to control or eliminate pollution levels, to build clean production technologies, or enhanced exploitation of natural

resources. Therefore, higher education institutions must develop processes of comprehensive training in the various areas of knowledge while incorporating the environmental perspective in all undergraduate curricula for the "detection, prevention and professional management of environmental problems".

Gonzalez (1999), states that the objectives of education acclimate are implicit in environmental proposals, which are: a) Involvement of stakeholders, individually or collectively, to understand the complex nature of the natural environment as well as the created by man, which is the result of the interaction of biological, physical, social, economic and cultural aspects. b) To acquire the values, behavior, change in culture, behavior and practices to prevent and solve environmental problems skills. Espejel and Castillo (2009) refer to Ruge (1998), Batllori (2002), Viesca (1995) and the Metropolitan Environmental Commission (2000), where the matches set to some elements to consider in an education proposal environmental. 1) Make a diagnosis, 2) Acquisition of environmental knowledge and practical solutions. 3) Acquisition of environmental awareness and changing attitudes. All in order that stakeholders acquire knowledge and awareness to care for their environment. Based on these similarities, Espejel and Castillo (2009), state that in a given environmental education the following activities should be undertaken: a diagnosis to determine the knowledge, interests, needs and perceptions of students in relation to environmental problems, fulfill the objectives of environmental education, determine the media to provide information about environmental issues, take action to care for their environment, imaginativasprácticas capture educational activities for greater awareness and changing attitudes towards the environment in the student community.

Medellin (2000), proposes the creation of an environmental audit, which is aimed at analyzing the performance of activities for problems, obstacles, structures and mechanisms that hinder an environmentally responsible and sustainable action. He notes that this will enable and facilitate: a) compliance with the environmental obligations of the institution, according to the letter and spirit of the law; b) the better performance of its core functions of research, teaching and extension, particularly in terms of environmental and; c) more efficient use of materials and ensure better handling in environmental terms in the administration of the institution. Medellin (2000) also proposed in the environmental audit, the following specific objectives derived from these are met, such as:

- Eliminate, reduce, recycle, reuse or properly manage the waste generated by the activities of teaching, research, extension and management.
- Complying with environmental standards in processes of teaching, research and extension, as well as in the management of these activities and the university services.
- Make efficient and appropriate use of water, energy, soil and solar energy to reduce consumption and environmentally climatizar the campus and its buildings.
- Make efficient and appropriate use of consumables required for the functions of the university; and selecting these systems which are used, so that they can use the best materials in smaller quantities and with minimal environmental impact.
- Make university landscape consistent with the environment and ecological cycles of the region and manage environmental resources sustainably, generating both a pleasant and functional environment to work.
- Serve as a training workshop for teachers and students in the practice of good environmental management of an organization in general and a particular college; and generate educational materials to support environmental management courses at the university.
- Have a consistent internal operation with the academic position that has been built in our university, aimed at generating information and proposals to solve environmental problems, mainly regional and local (though often with national or global impact); and thus have a more ethical performance and a better public image.
- Have a pleasant workplace and create a mystical and our satisfaction with college life, insists-da in finding the transition to sustainable living and environmentally responsible.

CONCLUSIONS

Undoubtedly, environmental education is a challenge today that it concerns not only education and different levels, it is a commitment that demands made jointly and with a clear awareness of the responsibility that brings implicit and explicit.

It is vitally important role played by the Institutions of Higher Education in this sense, but still not enough just to develop awareness programs and cooperation for environmental balance, it is not enough that-be at the margin but is also necessary and decisive there permanently training human resources and

environmental specialists who function as agents of change to transform the surrounding culture, and thereby consolidate and promote the development of the fundamental functions of educational institutions higher in the area of research, teaching and extension still exist .. commitments, goals, visions and proposals of the past and present, is not enough to state that it is already doing something, it is a fact that the declining biodiversity and climate change level they will not wait for human and agree to start work really something.

However, it is noteworthy that itself has been progress in the productive sector institutions, as companies are another shaft that can make a difference in the history of environmental education and culture .. even to themselves suits them both in their production, the growth and development have environmental programs to strengthen their commercial competition .. For its part, the general considerations that may have in this matter government institutions are still weak and irresponsible .. No doubt there is still much to do about it, so we hope that this analysis will serve as a serious reflection on the great task and responsibility that falls to each individual.

Finally, environmental education, as its name implies, claim education in every sense of the word. Beyond being a challenge, it is everyone's help in this regard by integrating the awareness, knowledge, attitude, evaluation and participation, albeit personal, for surely so there would be more possibility of creating a synergy of collective and holistic consciousness, hopefully leaving institutions, the rest of society and the media, bombarded with what is now urgent to do here and now.

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