

The Heart of the Matter: Infusing Sustainability Values in Education

Experiences of ESD with the Earth Charter



Celebrating the UN Decade of Education for Sustainable Development



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Chair on Education
for Sustainable Development
and the Earth Charter



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I.S.B.N: 978-9977-925-85-1

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H436h The Heart of the Matter: Infusing Sustainability Values in Education: Experiences of ESD with the Earth Charter [publicación digitalizada] / editado por Alicia Jiménez Elizondo y Douglas F. Williamson. – San José, C.R. : Universidad para la Paz, 2014.

1 recurso en línea (106 p.) : pdf ; 2 Mb

ISBN 978-9977-925-85-1

1. Educación. 2. Desarrollo Sostenible. I. Título.

This publication is developed under the UNESCO Chair on Education for Sustainable Development with the Earth Charter, coordinated by the Earth Charter Center for ESD.

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October, 2014



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The Earth Charter as a tool for raising environmental awareness among university students in Aguascalientes, Mexico

Francisco Javier Muñoz Aranda

Introduction

An important part of professional education in Mexico focuses on the acquisition of knowledge and abilities in a particular knowledge field, leaving aside the ethical elements that will be needed to guide the students' personal behavior and the exercise of their profession. Reinforcing environmental perception, knowledge and attitudes, as well as the human values needed for reaching sustainability, is a challenge that we assume at the Universidad Autónoma de Aguascalientes (UAA), Mexico.



The Office for Environmental Protection at UAA was created in August 2010, and subsequently identified as the Environmental Education Programme, directly linked with the Rector's office. Its objective is to reinforce a culture of sustainability in the university community, through different educational and environmentally beneficial strategies included in UAA's functions.

As a central element, the idea was to strengthen the curricula of the 56 academic programmes at UAA. The sole viable strategy that was successfully carried out was the designing and teaching of the Workshop on Education for Environment and Sustainability for the new arriving undergraduate class at UAA. During the period between August 2010 and December 2012, 5,939 university students received this training.

The workshop's objective was to spread knowledge of the basic elements concerning the current environmental situation, to raise awareness on environmental problems and to identify basic concepts of Environmental Education, strengthening the creation of proposals for solving environmental problems with a transdisciplinary approach. One of the four phases of the workshop, called awareness-raising, addresses the contents of the Earth Charter.

Out of the 5,939 students who took this workshop on Environmental Education for Sustainability, 2,563 voluntarily endorsed the contents of the Earth Charter through the official website www.cartadelatierra.org.mx/, making the State of Aguascalientes register 61.84% of total individual endorsements registered through this website at the national level¹⁶.



The history of the Earth Charter at the Universidad Autónoma de Aguascalientes, Mexico.

In Mexico, Higher Education Institutions comprise one of the sectors that most endorses the contents of the Earth Charter. The Universidad Autónoma de Aguascalientes, during the IV Congress on Natural Sciences 'Green Sciences for a Living Planet' in 2009, endorsed the Earth Charter.

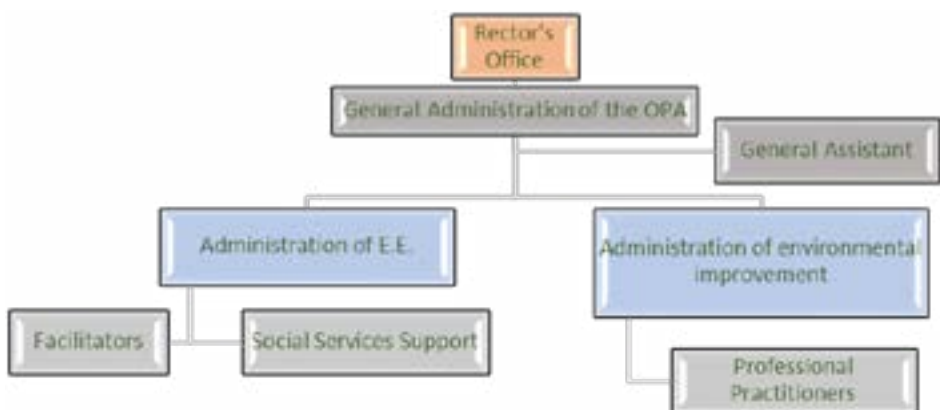
¹⁶ We are using the record of 4,144 individual endorsements at national level through the means of the Mexican Earth Charter's official website http://www.cartadelatierra.org.mx/avales_ind_estado.php

It wasn't until 2010 that the engagement of spreading the values and principles needed for achieving sustainability and the contents of the Earth Charter was renewed, and this responsibility was assigned to the recently created Office of Environmental Protection (OPA), which would carry out the most influential greening programme in the history of the Universidad Autónoma de Aguascalientes, creating a participatory and comprehensive green culture.

Some of the Office's objectives included establishing a system for environmental management, increasing the inclusion of environmental topics in the educational plans and programmes of the Universidad Autónoma de Aguascalientes, and establishing and maintaining close bonds with the Institutions and Organizations which are external to the Universidad Autónoma de Aguascalientes and have an influence in environmental issues at the national and international level.

Its mission proposes the incorporation of values of sustainable development to the substantive functions of the Universidad Autónoma de Aguascalientes through actions for inclusion, participation, and promotion of environmental culture, addressed at the university's community.

The OPA's structure is as follows:



Implementation

The Environmental Education (EE) Coordination was assigned the responsibility of spreading the contents of the Earth Charter to the university community, as well as strengthening Environmental Education in general. Thus, the creation, teaching, and compulsory character of the Workshop on Environmental Education for Sustainability was designed and approved by the University's Council, with the Department of Support for Training's approval and support. The workshop lasts 30 hours divided into weekly two-hour sessions.

The structure of the Workshop on Environmental Education for Sustainability is as follows:



Competencies and evidence of learning

In order to teach these Workshops on Environmental Education for Sustainability, a multidisciplinary and transdisciplinary team of facilitators was formed, in which professionals of psychology, biology, environmental sciences, and chemical analysis participated.

Once the facilitators were integrated in the team, they were trained to teach the Workshop on Environmental Education for Sustainability and weekly meetings for each of the 15 workshop sessions' lesson plans were scheduled.

A guidebook for participants was designed for this Workshop. 620 copies were printed and distributed. This guidebook contains a compilation of readings and consultation materials. In addition, 2,000 Working Booklets were also distributed, these included the activities that each student would complete throughout the workshop.

Methodology for the Workshop on Environmental Education for Sustainability

Once the facilitators, the workshop's contents, and the basic educational materials were ready, additional materials were designed to support the teaching – learning process, such as:

Identification of Human Values: through the analysis of a variety of public figures' biographies, the students identified the human values that characterized them and subsequently, using this information, they found out who the figure chosen by the opposite team was, asking questions on the values that this person demonstrated throughout her or his life.

Butterflies photo album: in order to identify the genetic variations of a single species, a group of images of butterflies was put together for students to analyze genetic differences.

Biodiversity Table: with the aim of strengthening students' knowledge of flora and fauna, several tables were designed where, using a 'trivia' game, students could compete to correctly decipher each of the boxes.

It was mandatory for all the new arriving undergraduate students to register for the Workshop on Environmental Education for Sustainability; the working groups were composed of students from different programmes, so that each group could have members with different profiles for the analysis of environmental issues. The timetable was very flexible, so that students wouldn't need to modify their academic plan.

The workshop introduces environmental issues with a humanistic approach. It is divided into four phases of different levels of complexity but linked to each other. Each phase presents its own objectives and educational strategies, as shown below:

PHASE 1: INTRODUCTION

In this phase, the facilitator and the participants get to know each other using projection techniques. Also the general contents of the workshop are presented. Then, participants fill in an educational survey on environmental perception, and finally, they work on an activity to analyze social and environmental realities.

This phase lasts around two hours, corresponding to the first working session of the workshop.

PHASE 2: AWARENESS-RAISING

This phase focuses on the participants' awareness of values and the environmental crisis. The Earth Charter is used as an educational tool and students analyze its contents through hands-on techniques and video projections.

Although this phase is centered on promoting the participants' awareness of environmental issues, it does not aim at showing a catastrophic and desperate vision to them; on the contrary, it encourages participants to contribute to solving environmental problems.

This phase lasts around eight hours, corresponding to four working sessions.



Facilitators of the Environmental Education for Sustainability Workshops

PHASE 3: KNOWLEDGE

Focused on providing the basic knowledge on the current environmental situation, the third phase envisages the analysis of issues such as National and State environmental richness, with a particular emphasis on biodiversity. This examination is complemented with the critical analysis of some of the main environmental problems, as is the case of water quality and disposal, production and consumption processes, as well as climate change. Finally, general information on Environmental Education and its use in building sustainability is presented to the participants.

In this phase, presentation techniques, readings analysis, and complementary documentary screenings are used, all of which require a total of 16 working hours.



PHASE 4: ACTION

This phase is focused on motivating the participation of the University of Aguascalientes' student community in conservation, restoration, and environmental education actions. It is important to mention that it's in this phase where participants are bound to make an analysis of their own professions' profiles and to identify its characteristics, generating innovative propositions to exercise of their professions under an environmental approach. In addition, they commit to realize at least 15 environmental care actions and to integrate the values of the Earth Charter in their daily life.

Finally, in this phase, participants are invited to participate on a voluntary basis in the University's Environmental Network, and to endorse the Earth Charter through the official Mexican website.

This phase lasts 4 hours, and requires the use of environmental educational materials created by CECADESU/SEMARNAT (Ministry of the Environment).

Lessons learned

The project presented highly positive outcomes, among them:

- An increase in the number of students voluntarily participating in different environmental actions implemented as part of the University's environmental agenda.
- 2,563 university students endorsed the Earth Charter through the Mexican EC website.
- The Award of Ecological Merit on Formal Environmental Education (2012) that the University of Aguascalientes received from the Center for Education and Training of Sustainable Development of SEMARNAT.
- Organizing the 3rd National Meeting of Universities with the Earth Charter in 2013, an event in which 300 students from 16 Mexican universities, as well as Municipal, State, and Federal environmental authorities participated.

A current challenge we are facing today is that the new authorities have not demonstrated a strong interest in continuing these Workshops; therefore the project will need to be strengthened within the institution, establishing it as an integrated programme in the university's academic curriculum, with a fixed budget and a guarantee for continuity. At the same time, it's recommended that the contents are formally integrated in the academic curricula and not only as a complementary workshop.

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