

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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Earth Charter International is pleased to release this publication to mark the end of the United Nations Decade for Education for Sustainable Development (UNDESD), and celebrate the launch of the Global Action Programme on Education for Sustainable Development (ESD).

In 2003, UNESCO recognized the importance of the Earth Charter for ESD in Resolution Reference 32C/17, which states:

“...recognizing the Earth Charter as an important ethical framework for sustainable development”, affirms member states’ intention to “utilize the Earth Charter as an educational instrument, particularly in the framework of the United Nations Decade for Education for Sustainable Development”.

Over the course of the Decade, Earth Charter International has contributed to the efforts of the UNDESD by organizing workshops, courses, teacher trainings, and events. ECI has produced several publications about the Earth Charter in ESD initiatives and this publication highlights only a few of the more recent stories. The collection showcased in this publication celebrates the ongoing global effort to bring ethics and values into education at all levels.

The Earth Charter proposes that we “Integrate into...education and life-long learning the knowledge, values, and skills needed for a sustainable way of life.” The 19 stories in this publication detail initiatives to further that goal. These examples show the amazing diversity and creativity of educators around the world who are finding ways to bring sustainability values into teaching and learning, and by doing so are helping to accelerate sustainable development. One example is the experience of Nelly Kostoulas-Makrakis from the University of Crete, Greece, who said:

“I was searching for ways to overcome current tendencies toward compartmentalization of knowledge and neglect of ethics and values education that are inherent in the concept of sustainable development (SD). Through my search, I identified the Earth Charter as a potential framework that could fulfil my critical pedagogy needs.”

The stories in this publication have several themes in common. It is clear that the authors of these chapters have identified many of the same socio-ecological challenges to our collective wellbeing. They have also understood that at the heart of these challenges is the issue of our value system, and the need to change conventional ways of teaching. The experience of the University of Granada exemplifies this:

“A common goal between the Earth Charter and the University of Granada is to carry out the development of other intelligences... (we have) attempted to produce an experiential learning experience of connection to nature with an impact on emotional and spiritual dimensions.” Alfonso Fernández Herrería

And, finally, they all share the common vision that using the Earth Charter as a guide towards reorienting that global value system is a powerful method for achieving a sustainable perspective for present and future generations. These examples illustrate the transformative power of the Earth Charter to open our eyes to the beauty, interconnectedness, and integral nature of the world we live in. They also tell stories of how the Earth Charter is shaping the kind of citizens and societies that understand their responsibilities and that will joyfully celebrate all life on Earth.

"This Earth Charter experience has taught us to respect the environment and to give value to everything nature gives us; it has brought the class together". Alice, student from Italy

Earth Charter International is honored to offer this publication at the end of the UNDESD as a contribution of the UNESCO Chair on ESD with the Earth Charter. We hope that the examples of good practice in this publication will cast a bright light of hope on the future and ECI would be happy to learn that these stories inspire new educational initiatives that will also strive to take on the challenge of our societies towards values of care, compassion, respect, and universal responsibility.

Mirian Vilela, Douglas F. Williamson, and Alicia Jimenez

Earth Charter International Secretariat and Earth Charter Center Center for ESD

NON FORMAL EDUCATION



From Inside Prison Walls, the Earth Charter Builds a More Peaceful Future.

The experience at La Reforma Prison in Costa Rica

Geannina Herrera, Lorena Ramos and Marialidia Marcotulli

Introduction

The Earth Charter was put into practice as the focus of an education programme for inmates at Costa Rica's largest prison, El Centro Penitenciario La Reforma. Building upon the success of an earlier prison literacy programme, two educators in the prison education system organized inmate literacy instruction around the pillars and principles for sustainable living described in the Earth Charter document. The educators found that instruction with the Earth Charter not only supported the goal of successfully reintegrating inmates into society, but also provided important lessons on sustainable living, and fostered positive change among programme participants, other inmates, and prison staff.

The Setting

El Centro Penitenciario La Reforma is the main prison in the Central American nation of Costa Rica. La Reforma houses inmates serving sentences from three to fifty years, for convictions including theft and drug trafficking. Education levels vary among La Reforma's inmates, and many inmates possess limited reading and writing skills. La Reforma provides an instruction programme to improve reading and writing skills among inmates to better position them for successful reintegration into society upon their release.

In the early days of her work, prison educator Geannina Herrera found that inmates lacked activities that would build their sensory, physical, social, and cognitive abilities. "... in addition to depriving them of their liberty, every type of sensory stimuli is diminished including sight, hearing, taste, smell, and even touch, because the walls of the prison are filled with emptiness and overflowing with need". In 2005, Ms. Herrera began literacy instruction, building upon the success of an earlier inmate literacy programme supported by the Ministry of Justice and Ministry of Public Education.

Ms. Herrera found the prisoners needed more than simple language instruction. The overcrowding and violence in La Reforma made for hard living conditions. "Prisoners also downgrade their capacities because of the prison conditions. So the idea was to change their attitude." She wanted to go beyond simple literacy instruction and create opportunities for her pupils to regain a sense of dignity, purpose, and hope for their future. As Ms. Herrera says, "the objective of this programme was to provide the best tools for their eventual release."

From her own study of the Earth Charter, Ms. Herrera saw the document's principles as a valuable basis for her curriculum. Not only would the Earth Charter be a solid foundation for literacy instruction, but she could also use it in hands-on activities to teach positive life lessons.



2006 group of participants and educators Rita Tortós (left) and Geannina Herrera (right)

Implementation

From the beginning, the Earth Charter served as an activities guide for the education programme. The principles supporting the document's four pillars were put into practice inside and outside the classroom. Some examples of activities and the principles they implemented:

- In support of Pillar One, Principle Two, "...care for the community of life with understanding, compassion and love," students shared uplifting messages on prison notice boards, and built a butterfly garden.
- In support of Pillar Two, Principle Seven, "...adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being," students built picture frames from recycled materials and attended workshops on responsibly managing water resources.
- In support of Pillar Three, Principles 11 and 12, "...ensure universal access to education" and "uphold the right... to a natural and social environment supportive of human dignity," students refurbished their classroom using donated materials and were awarded certificates of recognition for completing the Non-Formal Education Programme in Environmental Education and Eco-literacy.
- Pillar Four, Principles 14 and 16 state "...integrate into formal education and life-long learning the knowledge, values and skills necessary for a sustainable way of life," and "...promote a culture of tolerance, nonviolence and peace." In support of these principles, students celebrated Civic Week in September, during which they performed plays, cooked traditional food, and played traditional games. They also practiced nonviolence in their interactions with other inmates and visitors from outside the prison.



Several corporate partners in both the public and private sectors have supported the programme's efforts. Public power utility Fuerza y Luz provided a member of staff to facilitate monthly environmental education workshops. The Coca-Cola Company supported the programme's plastic bottle recycling project, exchanging recycled bottles for educational materials to be used in the workshops and other capacity building projects.

Instruction using the Earth Charter proved successful, and in 2006, Ms. Herrera's colleague Rita Tortos joined her in educating inmates using the principles of the Earth Charter. The programme ran from 2005 to 2011, and options for resumption in the future are open.

Lessons Learned

Participants gained knowledge and skills in the eco-literacy programme based on the Earth Charter. They were eager to share their experiences with family during visits. They saw new options for their lives upon release from prison, including leading environmental advocacy like recycling programmes and natural resource management.

Participants gained more than just knowledge. They also grew personally and collectively, building community within the inmate population and cultivating nonviolent interaction.

This improved climate in the prison encouraged the continuation of the programme, and supported the rehabilitation of programme participants and the general inmate population. Through the improved outlook and atmosphere amongst the inmates, guards and administrators saw the value of the programme, and even contributed their own energies to ensure its success.

The education programme at La Reforma demonstrates that the Earth Charter can be a powerful educational tool, not only for teaching environmental sustainability, but also for promoting positive personal growth amongst students. Amidst the violence and deprivation at La Reforma, the Earth Charter formed and nurtured a culture of peace and hope for the future.

Resources

View a brief video about the programme, including conversations with the instructors, here: http://www.youtube.com/watch?v=Whe_y47SGtg

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Patricia Abuhab

Introduction

There is a great challenge for educators around the world: create pedagogical practices that facilitate the connection of human beings with the essence of their being and with the whole of which they are part. It is significant to note the scarcity of educational materials and activities that enable a significant and connective learning experience beyond the conventional pedagogical approaches that are extremely rational and almost always fragmented.

Although environmental education is globally established, the impact of human actions on the environment continues to increase significantly as humanity exceeds 50% of the regenerative capacity of ecosystems, according to the Living Planet Report of 2012 prepared by the WWF.

The United Nations' Decade for Education on Sustainable Development (2005-2014), seeks to integrate the principles and values expressed within the Earth Charter in all its aspects of instruction and learning, in order to face the complex social, cultural, and environmental challenges of the XXI century.

The Institute for Harmony on Earth (Instituto Harmonia na Terra – IHT) is a non-governmental organization based in Cotia, São Paulo, Brazil. For the past three years it has researched and developed educational processes for sustainability with primary focuses on Eco pedagogy and the Earth Charter. Throughout its work, it has created diverse educational programmes focused on schools and communities. Since 2001, the IHT has trained nearly 10,000 educators in various cities across Brazil, promoting courses of Eco pedagogy in which the Earth Charter is of fundamental importance.

We concluded that the creation of an educational game would be an excellent strategy to disseminate the content of the Earth Charter and stimulate practices for the actualization of its principles and values. Therefore, the creation of the Earth Charter Game arose from the necessity of developing educational strategies that provide spaces for exchange and contribute to a quality of education that aims for a motivating and lively experience with the Earth Charter.

The game was created by Patricia Abuhab and Guilherme Blauth, of the Institute for Harmony on Earth, as well as by Cláudio Casaccia and Gisela Sartori. It was launched in 2011 in both Portuguese and English. This initiative was led by the Institute for Harmony on Earth with the support of Earth Charter International.

The Earth Charter Game is an innovative and versatile tool for children, youth and adults, and promotes sustainable practices within formal and non-formal educational processes. It is unique in its conception and dynamics, capable of promoting a cooperative, systematic, and inclusive experience.

The game stimulates a joyful and engaging experience of the Earth Charter principles, also cooperation among participants, sharing of personal experiences, dialogue and practice of environmental actions. The entire content is inspired by the four pillars of the Earth Charter: respect and care for the community of life, ecological integrity, social, economic and democratic justice, non-violence and peace.

During the game, participants are encouraged to research, question, and seek relationships between concepts, thereby awakening themselves to a systematic knowledge where the mapping out of relationships is as important as or more important than the quantification of information. The game allows players to notice the various dimensions between local and global, beginning within their own homes and passing through Earth's ecosystems until reaching the center of the game, which is represented by Planet Earth. Ecological concepts such as energy dissipation, recycling, association, cycles, and symbiosis are all considered.



Implementation

Experiences with the Earth Charter Game reveal that a profound desire to experience cooperation exists in children, youth, and adults. Even though the majority of people have never come in contact with cooperative games, this experience leads to a concrete desire to win collectively. The dynamics of the game require participants to care for one another, establish alliances, and meet collective challenges, as in a particular moment of the game when all players come together, symbolizing the concept of unity.

Intentionally, the game recreates situations similar to those that humanity actually faces, and provokes reflection on the fact that the actions necessary for a more sustainable life are only possible through collaboration between individuals, cultures, and nations.

The illustration on the board of the Earth Charter Game makes reference to the ecological and cultural diversity of Planet Earth, and on it there are paths that are travelled by players without a pre-defined direction. Just as in life, each person chooses her or his destiny and while following it performs diverse activities; innumerable relations and lessons can be realized simply through visualization.

From 2011 to 2014, we organized 85 workshops reaching 3,000 people in 110 Brazilian cities with an extremely diverse public, including teachers, school managers, environmental agents, children, youth, family, and professionals of diverse areas of expertise. The objective of the workshops is to be a pedagogical instrument to strengthen the knowledge, practices, and strategies for the facilitation and better understanding of the Earth Charter Game for different age groups and audiences.



Professionals of diverse fields – Santos/SP.
Photo by: Fabiana Oliveira

In the workshops, participants learn how to deepen and simplify the experience of the principles and values expressed in the Earth Charter through practice. They learn about its drafting process, as well as the best educational strategies to use the game in the classroom and in other learning spaces. Since the game is an open and flexible tool, it is possible that future facilitators may create and adapt specific content, establishing a dynamic most appropriate to their objectives and audience.

Workshops were established in international conferences of the Earth Charter in Mexico and India, in LEAD (Leadership for Environment and Development) events, and in Canada. In 2011 many people of various ages and diverse areas of expertise participated in workshops on the game at the Open University for the Environment and Culture of Peace (UMAPAZ), São Paulo-SP, at the World Social Forum in Porto Alegre - RS, at the "Semear" Programme established by Natura within the Ubuntu network. Many schools, NGOs, and universities' departments of education and environment received this workshop,

along with groups in the SESC system at parks, events, environmental education forums, at the Brazilian Federation of Bandeirantes, among others. We have also facilitated workshops in major socio-environmental events in Brazil during 2012, such as the World Educational Forum in Porto Alegre, the VII Brazilian Forum on Environmental Education in Salvador, and at the Peoples Summit at Rio+20.

In 2012 and 2013, the IHT partnered with the municipalities of Itu, Itatinga, and Sorocaba in São Paulo and Parobé in Rio Grande do Sul to introduce the adoption of the Earth Charter Game as an educational tool working toward sustainability in municipal schools. We also offered training courses for their teachers. In Vitoria, Espírito Santo, we partnered with the Municipal Environmental Department to reproduce the game in giant size as the main attraction at the 23rd Green Fair, as well as after the event in municipal parks and environmental educational centers of the city. The board was produced in a 144 square-meter version, in order to play it by walking around its 74 houses. Some rules were adapted and the players were the pieces and they remained in constant movement, which further highlighted the effectiveness of the game's focus on unity and interconnection.

"We invited the Institute for Harmony on Earth to adapt the methodology of the Earth Charter Game and produce it in a large format. The game became very attractive, and teams filled it during the fair. Even the team of the Environmental Department, environmental teachers, and artists who together promoted the dynamic of the game, loved it and greatly enjoyed playing. The goal of playing together in a cooperative manner is very interesting, as either all win or all lose. It was the grand attraction of the Fair", said Priscila Merçon, manager of Environmental Education in the Municipal Environmental Department in Vitoria.

Translated into English, the Earth Charter Game has already reached various countries, such as Costa Rica, Mexico, India, Bolivia, Argentina, Bulgaria, Singapore, England, Canada, United States, Peru, Portugal, and Denmark. In Holland, it was played by Rudd Lubbers, Alide Roerink, and Queen Beatrix, and in Canada, Severn Suzuki played the game in her community.



Queen Beatrix, Ruud Lubbers and Alide Roerink, playing the EC Game in Amsterdam. NCDO.

Lessons Learned

In all of the experiences with the game, there has been great motivation, enthusiasm, and involvement from participants. The game offers a collaborative process for learning, enabling an authentic experience, and internalization and knowledge of the Earth Charter.

One of the most efficient forms of teaching and learning is the sharing of experiences. Expressing one's own experiences reinforces the experience, along with strengthening liberty, confidence, and intimacy in the learner. In the Earth Charter Game, players are invited to share their personal experiences related to the principles of the Earth Charter.

One of the main objectives of the game is to collectively accomplish challenges. During the game, new challenges arise that should be accomplished individually and collectively by the participants. The players understand that collective action can be energizing, and players in a position of interdependence have a more enriching and motivating experience.

The game creates a flux of knowledge that flows from the information contained in the game to the experience of each participant. It goes beyond simple questions and answers, involves the subjectivity of knowledge, as well as the sensibility of personal experience.

Each of us have diverse abilities and potential to express what we feel and create in ways that are significant, which further encourage expression and creativity. The game stimulates the formation of the individual and the collective, offering relevant content for participants to express themselves. Furthermore, it awakens abilities previously unknown or dormant within players.

For the game to develop, cooperation between all participants is essential. The game was devised in order for each player to realize the interdependence between the group, himself and the environment. Since all participants are interdependent, the elimination of one causes all to lose. In this sense, cooperation is a fundamental value expressed during rounds, through the idea that all the players need each other. Knowing how to care, as Leonardo Boff emphasizes, is a principle of planetary ethics. The Earth Charter is the document that inspires this ethic by expressing it in its ideas and principles.

The Earth Charter Game promotes expression and creativity, especially at the end of each round, when players collectively create an artistic demonstration based on one of the four principles of the Earth Charter and introduce these to the group that did not participate in the game.

In this way, the game proposes transcending the board by amplifying socio-environmental perception, highlighting links with daily life, and reuniting people from the most diverse natures and ages around a significant experience within the planetary context, that promotes individual and collective transformations toward the new paradigm that we so urgently need.

Testimonials

"I enjoyed the game as it is a very different gaming experience! I think that many people like to play games as an enjoyable form of social interaction with friends and family and so would welcome this game. In particular, I do think many people will welcome the opportunities the game provides to share intimate and personal thoughts about things that matter."

Brendan Mackey, Australian National University

"I felt very good and very different from when I participated in competitive games. In this game we have the possibility of cooperating to reach a goal and this is how it should be in real life. Why isolate ourselves if we are a single community (local, regional, global)? Furthermore, people learn a fun way of approaching the Earth Charter, such as values important for coexistence, and they share experiences of how they have applied them (sometimes without even knowing it). I believe that the game has enormous educational potential and we should think about translating it to many more languages and figure out how to implement it more in schools. Thanks for the great idea! "

Betty McDermott Dobles, Costa Rica

"I thank you for the opportunity to get to know the EC game, a very beautiful tool with images that in themselves enable many dialogues, exchange of information, and learning. As a fun instrument, it promotes the experience of the Earth Charter as a whole, its values and assumptions. Even with groups that were not familiar with the document, the game triggers curiosity and interest in the Charter."

Rosane Borba, Municipal Department of the Environment of Foz do Iguaçu – Paraná Brasil

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See the Game in Action: <http://vimeo.com/32614822>

“It Starts With One”:

SGI’s ESD Initiatives Promoting the Earth Charter

Nobuyuki Asai

Introduction

Soka Gakkai International, or SGI, is an association of lay practitioners of Nichiren Buddhism with 12 million members around the world. All of our members live and work in society and strive to put Buddhist values into practice in their daily lives.

SGI works with various partners at local, national, and international levels. One partnership that has been ongoing for nearly 15 years is with the Earth Charter movement. The Earth Charter provides a universal expression of ethical principles to foster sustainable development, and its values are entirely consonant with our own.

In the late 1990s, the SGI-affiliated Boston Research Center (subsequently renamed the Ikeda Center for Peace, Learning, and Dialogue) held a series of consultations on the draft text, bringing together influential speakers to pull together Buddhist perspectives and women’s perspectives on the Earth Charter and analyze how human rights and environmental law relate to the Charter. The impactful phrase “when basic needs have been met, human development is primarily about being more, not having more” was apparently proposed at one of the consultations held at the BRC. Consultations were also held throughout SGI-USA.

As the Earth Charter text was being finalized, there was concern that the Earth Charter was not attracting much attention in Asia. Earth Charter Commissioner Mikhail Gorbachev requested the help of SGI to raise awareness of the Charter and its principles through SGI’s existing grassroots network in Asia. One SGI staff was involved in a six-country tour of Asia to promote the Charter together with senior Earth Charter figures.

In addition, SGI President Daisaku Ikeda has consistently promoted the Earth Charter in his annual peace proposals, such as in 2002¹, stating:

The Earth Charter is not limited in its concerns to environmental issues but contains important language related to social and economic justice, democracy, nonviolence and peace. In this sense, it is a comprehensive statement of the norms and values required for effective global governance. It may be considered a guideline for humanity in the twenty-first century.

Implementation

Using Education for Sustainable Development to promote the Earth Charter

The SGI has been promoting the Earth Charter Initiative since 1997 as a valuable document for sustainability and educational tool, focusing on the following:

- 1) The birth of the Earth Charter involved a painstaking process of incorporating diverse cultural, spiritual and ethnic perspectives of different peoples around the world.
- 2) The Earth Charter was not a document produced and handed down to the people from the elite but it was born of consultations with and contributions by many grassroots actors.
- 3) The Earth Charter embodies universal values and principles that people can embrace as we coexist in this global community.
- 4) SGI has been engaged in efforts to promote education for global citizenship². The Earth Charter provides important insights for fostering future leaders with a global vision.

1 <http://www.sgi.org/sgi-president/proposals/environmental-proposal.html>

2 SGI has launched a media project titled “Education for Global Citizenship.” Its website’s URL is <http://www.educationfor-globalcitizenship.net/>.

One hurdle we encountered as we introduced the Earth Charter to a wider audience was relaying the relevance of the Charter in the daily lives of ordinary people. People appreciated the values and goals of the Earth Charter but found it difficult to imagine how they could actually contribute to resolving looming global issues. We heard comments that they felt overwhelmed and helpless and were unsure of the kind of concrete actions they could take. Our challenge was to bridge this gap.

SGL President Daisaku Ikeda offered important insights in his proposal³ ahead of WSSD (the World Summit on Sustainable Development) held in Johannesburg, South Africa in 2002 to help us overcome that hurdle. He said that education for sustainable development should be promoted with a formula of “Learn, Reflect, Empower” in mind. In other words, he stressed that the success of education for sustainable development hinged on whether or not we can empower each individual to take action. In his 2012 proposal⁴, he further elaborated on this point by emphasizing the importance of focusing our efforts on fostering each individual to take a leadership role. He urged, “The success of our efforts toward the year 2030 will depend on how deeply the movement will empower people, and beyond empowerment, to enable them to exercise leadership, takes root in communities around the world.” SGL’s educational initiatives are therefore directed at empowering individuals and enabling them to become leaders of action.

SGL’s activities are inspired by Buddhist principles. One principle which motivates our movement is the thinking that every human being is endowed with infinite potential and that each change begins with the inner transformation of a single individual. This Buddhist message of individual empowerment, that every person can make a difference, is something we have purposely integrated into our Earth Charter activities to help people understand how each individual can affect a change.

To communicate this message, it was vital to not only impart knowledge about the theories and principles but to inspire people to take action by sharing stories and case studies of those who have made a difference in making their communities more sustainable.

SGL’s strength lies in our wide grassroots network of citizens in 192 countries and regions around the world. Our organization also has vast experience in promoting public education through visual tools such as exhibitions and videos. We employed our past experiences to create effective learning resources that can be used both inside and outside the classrooms to introduce the values of the Earth Charter.

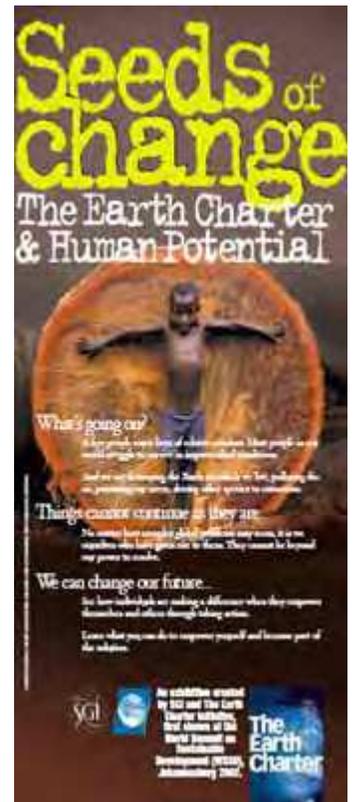
Educational resources inspired by the Earth Charter

SGL has produced some educational tools based on the spirit of the Earth Charter. Showings have often been sponsored and organized by local SGL groups in cooperation with other NGOs, schools or community groups. Thus, they have contributed to the UN Decade of Education for Sustainable Development (UN DESD).

1) Film: “A Quiet Revolution”⁵

This prize-winning film, which was produced in 2002 by the Earth Council in cooperation with UNDP and UNEP and supported by SGL, introduces villagers in India restoring ancient traditions of rainwater conservation, citizens in Slovakia tackling chemical pollution and profiles the achievements of Wangari Maathai, who began the Green Belt Movement and initiated a programme through which women in Kenya have planted over 30 million trees while regaining control over their lives. The film urges individuals to take up the challenge of becoming active protagonists in the struggle to create a peaceful, sustainable world.

Narrated by Academy Award-winning actress Meryl Streep and featuring interviews with then UN Secretary-General Kofi Annan and other experts, the film’s primary message is that even one person’s action can make a dramatic difference.



3 <http://www.sgi.org/sgi-president/proposals/environmental-proposal.html>

4 <http://www.sgi.org/sgi-president/proposals/environment-2012.html>

5 It can be viewed from <http://www.sgi.org/resource-center/video-and-audio/educational-tools/a-quiet-revolution-full-length/>.

As of September 2014, copies of the eight-language DVD version are available for free, for educational purposes.

2) Seeds of Change Exhibition⁶

This is an exhibition created by SGI and the Earth Charter International and was first shown at WSSD. Sixteen colorful panels introduce sustainable development, the role of education and the Earth Charter as a set of values and principles for sustainable living. The exhibition has been shown in 17 countries and is available in eight language versions.

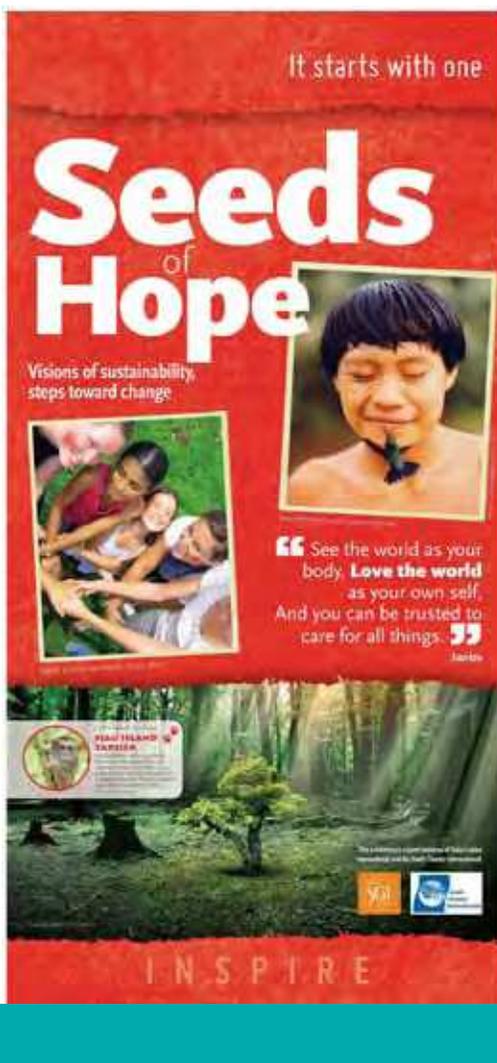
3) Seeds of Hope Exhibition⁷

This is a successor to the “Seeds of Change” exhibition and was created in 2010 as a joint initiative of SGI and Earth Charter International. “Seeds of Hope” is currently available in eight language versions.

The key message is “It starts with one,” the same slogan that Earth Charter International chose for their “Earth Charter+10” campaign in 2010. The structure of the exhibition reflects the “Learn, Reflect, Empower” formula.

This exhibition stresses our interconnectedness with the rest of the community of life and the need to broaden our sphere of compassion and concern. It encourages viewers to overcome feelings of powerlessness and highlights the fact that a single individual can initiate positive change.

It also introduces the positive vision for sustainable living expressed in the Earth Charter and gives examples of eight individuals and groups who have successfully taken action for change, from Africa to the Arctic and Eastern Europe.



These eight panels contain relevant phrases of the Earth Charter itself, which include:

- Protect and restore the integrity of Earth’s ecological systems, with special concern for biological diversity and the natural processes that sustain life. (Earth Charter Principle 5)
- Honor and support the young people of our communities, enabling them to fulfill their essential role in creating sustainable societies. (Earth Charter Principle 12c)
- Promote a culture of tolerance, nonviolence and peace. (Earth Charter Principle 16)

It has inspired many people across different generations, ethnicities and communities to take part in the movement.

Case studies of individuals making a difference utilizing our ESD resources

We would like to introduce a few successful examples of individuals and one project that are making a difference in their own local communities using our resources.

1) Taiwan

SGI’s women’s group in Taiwan was extremely inspired by the message of our “Seeds of Hope” exhibition and approached local schools to show the panel display on campus. As a result, 60% of the schools in Taiwan showed our “Seeds of Hope” exhibition. Cheng Ying-Hui, a graduate student and a member of SGI in Taiwan, volunteered to work as a guide for the exhibition. She was deeply inspired by the theme of sustainable development running through the exhibition and determined to do something herself. She created an e-book combining illustrations and interactive games to introduce readers to the importance of recycling and environmental protection. This e-book won a prize in the “Creative e-book contest” organized by the Taiwan Ministry of Culture.

6 <http://www.sgi.org/resource-center/ngo-resources/education-for-sustainable-development/seeds-of-change.html>.

7 <http://www.sgi.org/resource-center/ngo-resources/education-for-sustainable-development/seeds-of-hope.html>.

2) New Zealand

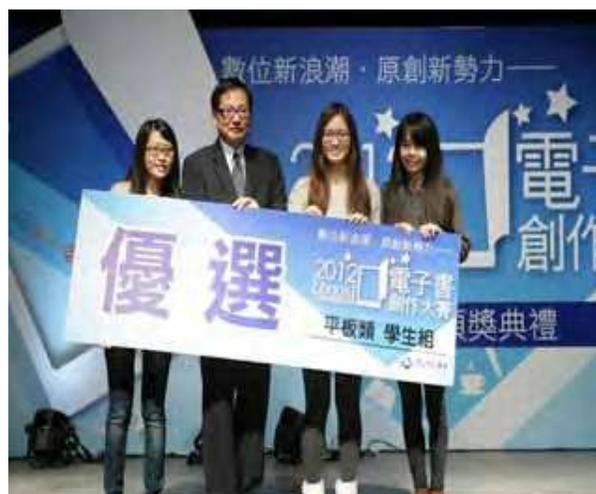
Changwe Chituta of Albany Senior High School saw the “Seeds of Hope” exhibition and decided to show the exhibition at her own school. She formed a committee of approximately ten students to actively discuss what they could do to contribute to education for sustainable development. The students created a panel that they added to the exhibition. They introduced school projects, which had a positive impact on the local community. Students felt a great sense of solidarity and accomplishment as their panels were later showcased at a forum where renowned peace activists gathered.

3) India

A group of junior high school boys, barely 11 years old, from St. Columba School in New Delhi, decided to introduce their schoolmates to the “Seeds of Hope” exhibition. Ten boys volunteered to become guides to introduce the various panels on display to their schoolmates who came to see the exhibition. To emphasize the key message of the exhibition, the children created a slogan, “The Power of One”, which they pasted on noticeboards of the school. The guides were enthusiastic about doing more research and went to the Internet to gather more information that added value to their panel presentations. The school’s director commented that the exhibition was an “eye-opener” for students, helping them realize that children their age could make a difference. One student said, “In the past, I wondered what we children can really do. But if we have the attitude that we can bring a change in our habits for the good of the society, we will be able to change the world one day.”

4) Brazil

In Brazil, SGI promotes extensive activities related to sustainability. One of them is the “Seeds of Change Project” in the municipality of Sao Paulo implemented by Brazil SGI (BSGI). It involves students, teachers, and members of the local community and includes the “Seeds of Change” exhibition, a Trail of Life Workshop, art for peace, an environmental education workshop and the planting of 800 tree seedlings and commemorative trees. The project has reached 50,000 people and trained some 1,500 environmental emissaries in the municipality of Sao Paulo. The project aims to introduce the concept of respect for life and environmental protection to some 140,000 citizens of Sao Paulo.



Harmony Press of Taiwan Soka Association (TSA), Ms. Cheng Ying-Hui on the left

BSGI’s Education Department created the Makiguchi Education Action programme to promote school garden projects and recycling activities in collaboration with public school teachers and students’ parents. This programme has been implemented in approximately 300 schools in several Brazilian cities.

In 1993, BSGI opened the Amazon Ecological Conservation Center⁸ near Manaus. For over two decades, the Center has restored degraded forest areas with an emphasis on planting methods that enable human populations and forests to coexist. It also works with local indigenous communities to help them develop their own livelihoods in sustainable ways. The Center, which runs extensive environmental education programmes, has utilized the Earth Charter to inspire students in the local schools with a new awareness about sustainability and the importance of protecting the Amazon forests. This has resulted in better classroom attendance and school grades among participating students.

5) SGI members taking initiative through NGOs

Inspired by the message of the Earth Charter, individual SGI members have taken initiative to form their own NGOs and actively promote education for sustainable development. Our organization is in communication with these groups to support their efforts.

8 Its educational activity is featured in a following footage. <http://www.sgi.org/resource-center/video-and-audio/educational-tools/nurturing-seeds-of-hope.html>

Lessons learned

Education for global citizenship is a topic being actively discussed by members of the international community. As issues facing our world become increasingly challenging and complex, there is a need to foster individuals who can transcend geographical borders and national and ethnic identities to view world issues as members of the global community. We need to train global citizens with abroad ethics and worldview who can promote better understanding and coexistence among groups driven by diverse ideologies and beliefs.

In this sense, the Earth Charter provides a universal framework of ethical values that can enable different peoples to work together to tackle issues affecting our planet. For example, the Earth Charter Preamble articulates, “We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations.”

Our past experience with ESD has led us to believe it is critical to further promote the Earth Charter as an important tool for humanity’s sustainable future.

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Cultivating Good Water and the Earth Charter. The experience of Itaipu Binacional in Brazil.

Nelton Friedrich

Introduction

Itaipu Binacional is a public company that belongs equally to Brazil and Paraguay. In 2003, at the peak of the social and political transformations that Brazil was undergoing, a new direction was given to State owned companies, to expand their social activities in the surrounding communities. Within this context, Itaipu embarked on an extensive process of reviewing its mission and goals. The company, inspired by the Earth Charter, incorporated socio-environmental responsibility, the commitment to develop new technologies, and a commitment to sustainable development into its institutional mission. This change was also inspired by the rising global trend of increased importance of companies' involvement in the social and environmental issues of the communities where they are located. This process helped to expand the company's mission and to clarify the understanding that Itaipu could play an important role in promoting the common good and caring for the community of life in its area of influence.

One of the practical results of this change is expressed in the Cultivating Good Water programme (Cultivando Água Boa - CAB), founded in that year to primarily protect water, the environment, the human community, and the rest of the community of life. The field of application for this programme is the following area of hydroelectric interest: the Rio Paraná Watershed with a surface area of about 8000 km² and approximately 1 million inhabitants distributed among 29 municipalities.

This programme became an important platform for dialogue, interaction with and among the local communities, knowledge generation, and shared management of projects implemented by the community in partnership with Itaipu. Previously, in addition to the company's focus on energy production, the relationship with the community would only happen at the institutional level (with municipalities whose towns were flooded by the reservoir areas), rather than with the actual communities in the watershed.

The programme was conceived and is being implemented based primarily on the principles and values contained in the Earth Charter (the renowned writer, theologian, and member of the Earth Charter Commission, Leonardo Boff, is both an advisor and directly involved with the philosophical orientation of the programme). However, the initiative is also inspired by other environmental documents and initiatives such as the Millennium Development Goals, Agenda 21, the Kyoto Protocol, the Treaty on Environmental Education for Sustainable Societies and Global Responsibility, the Water for All – Water for Life Document by UNESCO, National Environment Conference documents, the National Plan for Hydrological Resources, and the public policies of the Brazilian Government.

From its conception and through implementation, Cultivating Good Water elected the following structural pillars:

- (1) environmental education as a maximum priority (including diverse formal and informal education and educational communication) through an emancipatory, critical, and transformative approach, capable of captivating and moving hearts and minds toward sustainability. A collective environmental education covers all actions of the programme, penetrates social and family circles, and promotes sustainable development;
- (2) the watershed – a natural unit for planning – as an area for realization and immersion into everyday problems, belonging to communities and consequently reconstructing the local-global relationship;



Leonardo Boff speaking to teachers

- (3) socio-environmentalism as the main goal, promoting the correction of collective and individual passive environmental liabilities, constantly engaging society (aware of the urgency of the problem and conscious of its causes), valuing social politics and the inclusion of socially and economically fragmented segments;
- (4) innovative governance: participatory democracy as the lifeblood of the process, not merely presenting pre-made solutions or the promotion of an idea, but also ensuring solid opportunities for participation and fertile spaces for creativity that enable the re-signification of community life by realizing that our weakness lies in individualism and disarray;
- (5) the reconciliation of humans with nature, beginning with reflection-awareness-action (provoking questions about the socio-environmental planetary crisis, climate change, global warming, water scarcity, new epidemics, unsustainable modes of production and consumption, views that are anthropocentric, mechanistic, utilitarian, linear, fragmented, and divisive, and even questions of an existential nature).
- (6) dialogue of knowledge - including traditional, popular, and academic knowledge - and the salvaging of beliefs, feelings, rituals, myths, celebrations of belonging, cooperation, care, life, and well-being;
- (7) the understanding that “we are threads of the fabric of life” and that the holistic vision and systemic approach form the most coherent manner of understanding life, the mind, society, and therefore actions, including the making of a management model (sustainable, integral, and integrated);
- (8) the deconstruction of fear of the unknown, to dare, innovate, both within the internal realm of organizations and the external network of human relations – in order to avoid sameness and enable different ways of doing more, thinking and acting together within transformations for a sustainable future and the rise of new paradigms.



Activity with students on World Environment Day

Cultivating Good Water contains 20 programmes carried out through 65 interconnected projects, structured in an inclusive and participatory manner. The principles are: Environmental Education; Watershed Management; Territorial Information Management; Regional Sanitation; Sustainable Rural Development/Organic Life; Medicinal Plants; Participatory Monitoring of Water Quality and Environmental Evaluation; and programmes of social and technological inclusion: Sustainability of Vulnerable Segments (Indigenous communities, youth, villages, fishermen, collectors of recyclable materials, and small producers); Production of Fish in our Waters; Biodiversity in our Region/Biodiversity Corridor and research and protection of endangered species.

This range of actions is aimed at revitalizing community life, focusing on the quality and quantity of water, soils, air, and food, sustainable production, conscious consumption and sustainable cities, in order to improve the quality of life of people and of Mother Nature, comprising a unique community of life. Therefore, this will enable the application of the principle of shared responsibility, strengthening of associations, cooperation, the building of a new, clean, and more local economy, new urban and rural opportunities, and productive inclusion through new arrangements. In essence, the programme searches for a new way of being, feeling, living, producing, and consuming.

One of the principle aspects of Cultivating Good Water (CAB) directly related to the Earth Charter is the strengthening of local communities, enabling and empowering them to take care of themselves and the territory where they live, thereby constructing a planetary citizenship and a local-global connection. The programme involves local partners in every capacity, working toward co-responsibility with more ample community participation. There are more than 2,000 partner institutions among various universities, organizations, government sectors, NGOs, civil society organizations, and 29 management committees.

The diverse and multi-faceted character of the programme guarantees management based on care for the environment and human beings, and signifies a path of hope toward the construction of an environmentally right and sustainable area.

The fundamental axis of CAB is environmental education, and the foundation of environmental education is in the Earth Charter, that is established through a process of transversality that encompasses all actions directed toward the construction of values and knowledge inspired by the ethics of care and respect for life and the natural resources that sustain it.

From UNESCO, the programme brought the understanding that education is not an end in itself, but rather a fundamental right and key instrument for changing values, behaviors, and lifestyles. In order to reach a sustainable future, it is necessary to formulate a consciousness among the population of the importance of the environment, and one of the ways in which people are able to obtain this consciousness and the abilities necessary for the improvement of their quality of life is through environmental education.

In the 29 municipalities covered by the programme, there are 29 collective educators and hundreds of environmental educators who foster the principles of the Earth Charter on diverse fronts, especially through workshops and informational speeches that lead inhabitants of the watershed to identify and live out the principles of the Earth Charter in their daily practices and in the recuperation of socio-environmental liabilities within communities.

Implementation

The role of environmental education, the principles of the Earth Charter, and community ownership becomes evident in the implementation stages of CAB, which are the following:



Kids at the Water Pact ceremony

1. Awareness: with great participation from communities, leaders and the local powers seek to raise awareness by deepening reflections for action. Without placing blame, a rich dialogue on climate change, water scarcity, waste management, environmental liabilities, community situations, social values, and questions about lifestyles occur.

2. Workshops for the Future: there are three moments (1) Concerns Wall, (2) Tree of Hope, and (3) Way Forward.

Concerns Wall: the facilitator of the workshop stimulates and encourages the participants to open their hearts and present their concerns, critiques, complaints, and anxieties. Everything is noted and a string of concerns emerges. This, in turn, motivates us not to have only concerns about our daily lives.

Tree of Hope: this is the moment for proposals. Each dream presented by members of the community is discussed, only that which is agreed to by

all is what shall be attached to the tree of hope. This way it shall no longer remain merely an individual dream, but a collective one. This moves us from concerns to the dreams expressed by communities.

Way Forward: inspired by the final part of the Earth Charter, the way forward is the work plan for the watershed, reflected, discussed, and decided upon by local communities, with the understanding that many actions, changes and improvements depend solely on them; others ask for a sharing of responsibilities (communities, municipalities, Itaipu, cooperatives, social movements, entities, and other spheres of power). The work plan became known as Agenda 21 of the Area; "of the area where I live and work, where I have dreams, family, friends, frustrations, anguishes, loves, and flavors".

3. Within the sequence of this process, the Water Pact occurs, a moment to celebrate and join together. All the communities of the watershed find themselves in a beautiful and captivating ceremony, with rituals and mystical actions coordinated and played by its residents. It begins with the ritual of water, then fire, earth, air, peace, and the description of what happens in the process of reaching awareness through workshops on the way forward. Global-local and local-global connections are made, referencing documents like the Earth Charter and the values of the Ethics of Care, the reinforcement of shared responsibility and the reaffirmation of the desire to execute together what was collectively defined, such as Agenda 21, including the signing

of conventions, agreements, and terms of compromise. Rituals, music, theatre, poems, games, and many other actions by local actors inspire emotions and encourage feelings of belonging. The last act of the Pact is its signing, which is commemorated (with high symbolic value) through the sharing of an enormous cake displaying a drawing in the icing of the watershed drawn by the community.

Lessons learned

In 10 years of carrying out the programme, more than 250 Workshops of the Future, totaling about 10,000 participants, were held throughout the territory, which mobilized the communities toward solutions for environmental liabilities in 197 watersheds; the recuperation of 21,000 hectares of previously degraded agricultural soils; the readjustment of nearly 2,000 kilometers of rural highway that contributed to the erosion and contamination of rivers; and the protection of nearly 1,400 linear kilometers of forest surrounding rivers and streams of the region, among other significant results.

With regenerated forests, species of flora and fauna begin to reappear, attracting bees again and, therefore beekeeping. Coofamel (the Cooperation of Beekeepers), established six years ago, has 417 points-of-sale throughout the country, and has presented the region with new opportunities for beekeeping, including introducing the jataí bee, whose honey contains medicinal properties.

It is worth reiterating the important roles of transformative education, conviction, the awakening of a socio-environmental consciousness and the reunification of humans with nature. Without collective individuals and citizen participation, we would not have the behaviors and attitudes that have enabled such results.

Specifically within this area, the programme has already involved more than 19,400 environmental educators directly in actions and trained 720 managers for watershed management; 201 Earth Charter and Climate Change workshops were offered, involving 3,950 participants, including teachers, indigenous people, collectors of recyclable materials, environmental educators, public managers, fishermen, organic farmers, and cultivators of medicinal plants.

Complementing the Earth Charter Workshops (many of them personally conducted by Leonardo Boff), 140 workshops of Eco pedagogy have been established for teachers. A manual for Eco pedagogy was developed and distributed throughout the region. From this work, the 2011 distribution of 100,000 copies of the Earth Charter Children's Version containing bio-regionalized illustrations followed, in order to encourage the replication of this work by students of the entire watershed area.

Between 2011 and 2012, schools implemented their Eco pedagogical projects with methodological support from the Environmental Education Programme of Itaipu. The best practices were selected based on a contest, and the prize was converted toward strengthening projects.

The systemic approach that characterizes the programme and builds the interface between environmental education and the Sustainable Rural Development Programme/Organic Life, enables the insertion of organic food in school lunches within municipal schools of the region. Add to this the bi-annual promotion of recipe contests for healthy lunches, preceded by courses in conscious consumerism and healthy cooking (870 school cafeteria workers participated in the last contest).

This is a real revolution, shifting the condition of the school cooks from previously being anonymous mixers and warmers up of industrial food to a new leadership role for the cooks fostering responsible consumption and care with their meals, as authors of cookbooks, as well as contributing to a rich debate and movement around the healthy food chain, healthy living, and a sustainable planet. The Letter for an Organic World, with 135,000 examples distributed to schools, and the Matita Theatre Piece (becoming conscious about organic food) complement this initiative.



Itaipu Hydroelectric plant

The uplifting mobilization resulting from environmental education enabled the internalization of various public policies in the region. An example of this is the Research-Action-Participant proposal (Pesquisa-Ação-Participante - PAP) – or People who Learn by Participating. Together with the Department of Environmental Education of the Ministry of the Environment (DEA/MMA) and the Ministry of Education, Cultivating Good Water contributed to the promotion and formation of the Environment Educators programme (Formação de Educadores Ambientais - ProFEA) in the region, and the continuation of strategic educating.

The results of the PAP groups are extremely positive. In the first process of training educators, 1,907 people were trained, creating 81 learning communities. In Medianeira, for example, the Community Learning Garden Belo Horizonte, in partnership with environmental educators, began work to train people in the neighborhood, making a calendar for personal encounters. The community improved its social ties and many positive socio-environmental incentives flourished.

One of these is the Apoena project “caring for nature and promoting health”, created by local activists and people of the most diverse segments of society, from teachers, to collectors of recyclable materials, to youth, farmers, and educators. It is also important to note that the community has been able, through popular pressure (including public demonstrations, communication initiatives, and direct communication within organizations and through legislative and executive power), to adopt the Municipal Park, which was revitalized.

Finally, it is important to mention the green rooms and spaces, which serve as transmitters of information and formulators of socio-environmental actions installed in BP3 municipalities (municipalities from Parana region); the training of community communicators, with an emphasis on edu-communication; actions directed toward the implementation of sanitation programmes in 52 municipalities in Western Paraná; the membership of participating municipalities within CAB within the movement of Sustainable Cities (containing commitments and goals to be reached in relation to sustainability); the construction of water tanks within schools, preceded by Eco pedagogical projects on culture, the reuse of water and the adoption of organic gardens; as well as the participatory monitoring of water quality using bio indicators (the community learns to “read the small organisms that are in the water”, using a magnifying glass and physics-chemical kit, and can attest to whether the water quality is good or polluted). All this generates a profound change in the behavior and outlook toward water and bodies of water.

For its size and the scope of its actions, the Cultivating Good Water programme was awarded the Earth Charter Prize (Earth Charter + 5), which took place in Amsterdam, Holland, in commemoration of the five years anniversary of the launching of the Earth Charter.

In Leonardo Boff’s evaluation, “Even within the current global system, which is highly unsustainable, the Cultivating Good Water project breaks with the dominant logic and shows that it is possible, from the bottom up and stemming from the people and communities, in the frames of a given ecological region, to create a miniature bio-civilization, a model of that which can, and possibly should, be the future of a reunited humanity on this unique Planet Earth”.

“The impact it generated in our community was a surprise. The recovery and readjustment of the soil, as well as the installation of a new community water supply system, resulted in the water quality and the amount of water improving significantly. The regeneration of the riverbank vegetation has given the community a new look. One can even say that the weather has improved. “(Milton Dillmann, Sanga Buriti, Itaipulândia).”

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Handbook for teaching sustainability values using the Earth Charter, Germany

Douglas F. Williamson

The “Erd-Charta Praxishandbuch” (Earth Charter Practice Handbook) is a publication by the German Earth Charter affiliate Ecumenical One World Initiative (EOWI). It is an innovative manual on how to put the spirit of the Earth Charter into practice through non-formal educational methods. The editors of the book, Anja Becker and her team from EOWI draw on many years of teaching experience to showcase the manual’s many activities and ideas.



Introduction

The development of the Praxishandbuch

In mid-2012, EOWI (<http://erdcharta.de>), the organization responsible for the coordination of the Earth Charter activities in Germany, published the “Erd-Charta Praxishandbuch” (Earth Charter Practice Handbook), which is a complex and imaginative manual on how the principles of the Earth Charter can be successfully put into practice.



According to Anja Becker, the organization’s director, the publication’s approach seeks to overcome two shortcomings of Germany’s educational system. The first one is related to the strict separation of different subjects, which makes it difficult to consider “sustainable development as one big related topic”. The second fault is related to the traditional focus “on teaching information, instead of competencies”. Such competencies are, for example, “how to make decisions in complex ethical situations” or “an ethical view of the world and the future of life”, states Ms. Becker. In order to teach those competencies, the Praxishandbuch employs a holistic approach gleaned from the many years of teaching experience of the book’s authors and editors in schools and other organizations. Over time, topics and teaching methods were adjusted and improved according to the needs and knowledge of the targeted group. As a teacher, Ms. Becker noticed quickly the many opportunities that the Earth Charter offers. She was surprised when she realized that the Earth Charter was not only suitable material for secondary and higher education, but that it also works really well “in classes with younger kids and even in schools with students with special needs”. To her, this was proof of how valuable the document can be for all kinds of educational work and how well it supports an inter- and trans-disciplinary view of global problems and the interdependencies of practically everything.

Several years ago, Ms. Becker and her colleagues started to write down the activities, workshops, modules, and methods they had developed. More recently, seeing that the amount of material had increased considerably, Ms. Becker and her team decided to compile their experiences into a book. The publication was completed with the support of the German Federal Ministry for Economic Cooperation and Development, as well as several other German and international development agencies.

Implementation

Methodological aspects

Ms. Becker believes that the strength of the Erd-Charta Praxishandbuch is that it helps to internalize all of the sixteen Earth Charter principles through an array of new methods for teaching sustainable development. Those are:

- The students participate when it comes to the selection of the topics.
- Students learn how to find solutions together within the framework of a group.
- The focus lies on a comprehensive approach that connects different disciplines with each other.
- Special importance is put on project work. The problems and situations chosen as starting points are supposed to be as realistic as possible.
- The participants learn in a "self-directed" manner.
- Individual initiatives are enabled within groups.

These approaches are also connected with the belief that knowledge develops through an interaction of the students with their learning environment. To facilitate this approach, a variety of methods are employed, including independent learning, field trips, map exercises, scenarios, future workshops, and learning across generations, among others.

To facilitate implementing these methods, the Praxishandbuch is structured according to methodological modules that enable the implementation of workshops, project days, and weekend seminars. These modules are organized into four categories.

The first modules cover introductory steps such as "Speed dating" or "Barometer of opinion", which seek to break the ice between group members and create an open, positive, and productive working environment. In the next category, methodological modules, such as "Mosaic of Opinions" or "World Politics in the Classroom", help to deliver the means to tackle a certain subject through applying the framework of the Earth Charter. A third group of modules covers recreational activities between the actual content modules, for which Ms. Becker and her team have developed ideas such as the "Survival Island" or the "Human Knot". Lastly, modules for closure intend to bring the workshop to a conclusion and to allow thought for future actions and behavior. Successful ideas include the "Jubilation rocket" or the "I pack my bags" games.



Using this methodology, Anja Becker explains, it is possible to develop design competencies ("Gestaltungskompetenz"), which she considers skills that are becoming increasingly important in a world where knowledge is aging faster and faster. Ms. Becker is confident that if people acquire design competencies, such as "empathy and joint action" or "motivating oneself as well as others in order to become active", they would be able to actively tackle and solve the economic, ecological, and social challenges of the future. At the same time, she and her team are constantly trying to develop their teaching methods further, adjusting them to specific target groups to make sure that students are getting involved on both a methodological and an emotional level.

Lessons learned

For Ms. Becker and her colleagues, the power of the Praxishandbuch lies in its ability to appeal to people with its holistic, creative, and interactive approach. "It is simply awesome if you see how we influence others with our workshops, which we design according to the methods described in our handbook". She added that teachers would routinely observe and express surprise at students experiencing a kind of conversion from not having any interest to becoming very enthusiastic about the Earth Charter.

Ms. Becker has also noticed that many participants who take these workshops become more active in bringing Earth Charter principles to life. She reports that the workshops often inspire profound changes when it comes to participants' lifestyles and have influenced participants' career choices. "For instance" Ms. Becker recalls, "one of our students decided to dedicate her bachelor's thesis to the Earth Charter, while another participant, a student of business administration, changed the course of

her studies to sustainable development." Furthermore, many students chose internships in non-profit organizations supporting development assistance, founded student associations at their universities, became Earth Charter ambassadors, or simply started to raise attention on global topics through social media sites like Facebook on their own.

Other organizations and teachers that have ordered the Praxishandbuch and started to use it in their classes have given positive feedback to Ms. Becker and her team, emphasizing the encouraging effects they were able to achieve through applying the methods. The handbook is especially beneficial for mixed age groups as well.

Particularly important for assessing the success of the Praxishandbuch's teaching methods are the people who work as, what Ms. Becker calls, "knowledge multipliers". Since 2010, 32 students have become knowledge multipliers through the educational work of EOWI. Two years after receiving their initial education, roughly half of them are still active, and two told Ms. Becker and her team that their work as knowledge multipliers has affected their lives and career choices. For instance, Robert, a young student of mathematics, learned about the work of Ms. Becker and her team on the Internet. Already a knowledge multiplier, Robert then decided to dedicate his dissertation to sustainability topics. Another, Heike, a banker and forest warden by profession, started to work in spring 2011 as a coordinator for a development campaign. Both of them represent excellent examples of the Praxishandbuch's potential.

Another knowledge multiplier, a teacher from the German town Rothenburg, mentioned that one of her pupils once asked her whether they could do something related to the Earth Charter in class again. "At that moment, I realized that the topics of the Earth Charter had developed into recurring and well-positioned elements of my curriculum", she remembers. Statements like these make Anja Becker believe that she and her team are getting a bit closer to the ultimate goal of the Praxishandbuch: helping people to "understand that everything is connected and that our unsustainable ways of living have detrimental consequences to the planet and other human beings." To address these issues, she says, the Earth Charter is the ideal instrument for creating a positive vision that "really drops into your consciousness".

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Educating and Creating Awareness about the value of life and Sacred Nature among Maya Q'eqchi youth in Guatemala

Marleny Rosales Meda and María Susana Hermes

Introduction

This case is from the Lachuá Ecoregion, located in the northwest of Alta Verapaz in Guatemala. This region is a declared RAMSAR International Wetland Convention site. Fifty five Maya-Q'eqchi' indigenous communities live in this area, and their survival depends on the responsible use of natural resources. This region is highly vulnerable currently due to strong social and economic pressures that are accelerating the loss of biodiversity and threatening the traditional way of life of these communities. It is imperative to sensitize the local population about the importance and value of the natural and cultural wealth of the region, through an integral and objective way, oriented to empower the youngest inhabitants who, in the short term, will be the ones responsible for making decisions regarding use and management of their lands.

With this objective, since 2009, we, the Nature Conservation and Community Development Organization (ORCONDECO), created and implemented the Environmental and Cultural Scholar Education Programme (PEACE in Spanish) with Maya-Q'eqchi' children and youth in 56 schools. PEACE has been working to create a strong connection between the importance of nature conservation and traditional knowledge, the Mayan worldview and spirituality, and whose focus and efforts are achieving important and positive changes in families, schools, and communities.

In 2010, we learned about the Earth Charter Movement and became an affiliate of Earth Charter International. We find that the Charter is a very valuable tool that integrates and agrees with all the values and aspects that we work with. We have integrated the content of the Earth Charter in the training and sensitizing activities that we offer annually to over 2,200 children and youth of the 56 primary schools and basic institutes. The following details our experience with the Earth Charter at PEACE and some of the main results and developments achieved.



Girls from Xalaché school in front of a mural that presents environmental problems in their community and some solutions. They presented this mural to local authorities. Photo by: Marleny Rosales, ORCONDECO.

Context

ORCONDECO is a civil society organization formed by young professionals and specialists in different areas from Guatemala that have decided to join efforts towards respect and conservation of nature, sustainable use of biodiversity, and the recognition and promotion of cultural, environmental, social, and economic values in Guatemala.

Our area of work is the Lachuá Ecoregion (535 km²), which has one of the highest rates of biodiversity in Guatemala. It is located northeast of the Alta Verapaz state, and contains the Laguna Lachuá National Park (LLNP) and 55 indigenous communities of the Maya-Q'eqchi' indigenous people. It is a tropical wetland of high international importance recognized by the RAMSAR Convention and is a part of the Ibero-American Model Forest Network. The LLNP and neighboring regions north, east, and west provide continuous habitat for a high diversity of priority species for conservation due to their status as threatened or endangered. In 2002, we started to work and our team included biologists, researchers, and environmental educators in the Lachuá Ecoregion and neighboring regions.

Most human communities that inhabit the Lachuá Ecoregion and neighboring villages belong to the Maya-Q'eqchi' indigenous people, and their subsistence is primarily based on the production of corn and beans. During the 1980s, this region was strongly impacted by internal armed conflict. Most of the local inhabitants are victims and survivors of this war, during which they were stripped of and forcefully removed from their ancestral lands. Following their displacement, they settled in national lands and large private existing estates surrounding the PNLL where they struggle to survive.

Currently, our area of work is highly vulnerable due to the strong economic and social pressures that are accelerating the loss of natural resources and biodiversity. Political pressure and development of mega-projects that promote the massive sale of lands, oil exploitation, the establishment of large hydroelectric plants, massive harvesting of African palm monoculture for biofuel production, the establishment of lands to generate extensive cattle raising, and drug trafficking are exerting a great amount of pressure and demand on natural resources, thereby threatening the local communities' traditional forms of living, as well as exacerbating cultural identity loss amongst the local youth due to transculturation.

As a response to these threats, during 2008-2009, we created and implemented two new educational programmes: The Bilingual Participatory Environmental Education Programme (focused on adults, communities, and indigenous authorities) and the Environmental and Cultural Scholar Education Programme (PEACE; focusing on children and local youth participation). These programmes have raised awareness about the importance of the region's natural and cultural wealth in an integral and objective way, and are oriented to empowering local inhabitants to safeguard those resources in the near future by making informed and conscious decisions in favor of nature conservation, sustainable development, and the strengthening of cultural identity and human dignity.

Every year, our target population has been around 2,200 Maya-Q'eqchi' students in primary, basic, and diversified levels of 56 educational establishments from three counties in Alta Verapaz. During this period, we also trained local residents to become environmental educators in their own communities. Also, PEACE has had, since it started, a systematic, multi-scale evaluation process to measure the project's impact on students, educators, and teaching, which helps to adapt the process to local needs. We can highlight the following main achievements: a) sensitizing children and youth about the integral value of nature, which involves a shift away from a utilitarian vision; b) revaluing and rescuing oral history, social-cultural identity, traditional values, and the Maya-Q'eqchi' worldview; c) the empowerment of children and youth by increasing their knowledge and strengthening the values needed to actively participate in the conservation and defense of their natural resources; d) government support obtained by the legal accreditation and certification offered by the Ministries of Education and Environment of Guatemala.

Implementation

Since 2010, ORCONDECO has included the Earth Charter in an average of two to three annual PEACE educational trainings. We have made a pedagogical interpretation and contextualization of the Earth Charter principles so that they can be understood by children and youth. Through such contextualization we adapt the Earth Charter to the reality and needs of the local residents and suggest concrete collaborative actions to improve the quality of life in the Lachuá Ecoregion wetland, in the community, school, family, and in day-to-day life. Subsequently, we translated the Earth Charter to the Maya-Q'eqchi' language and we socialized it with teachers and principals in all 56 schools that participate in PEACE by giving them a copy of the contextualized Earth Charter and sharing the initiatives and affiliation to our Association. In the socialization process, teachers highlighted the importance of following the Earth Charter principles so that they can be learned, internalized, and included in their daily educational activities. All principles are compatible and can be integrated fully with the contents and educational competences that are established by the National Base Curriculum of Guatemala.



Kids from Lachuá Ecoregion after a workshop with the Earth Charter. Photo by: Alfonso Misti, ORCONDECO.

In the educational trainings that we have developed through PEACE, we have integrated several Earth Charter principles into the theme units in which we highlight the ecological, economic, cultural, and existing value of nature and the revaluing and cultural appreciation of the Maya-Q'eqchi'.

For each of these units, we developed specific and contextualized themes according to local needs and, generally, we point out one of the principles of the Earth Charter that is related to the relevant theme. We also share that in this great international effort there are many other people that are working, just like we are, towards having a dignified life by respecting all forms of life that exist in nature and giving value to culture all over the world.

Each PEACE workshop is developed in the Maya-Q'eqchi' language in a participatory way by our environmental facilitators. Also, we have performed knowledge and appreciation evaluations at the end of each workshop in each of the levels and schools involved in PEACE.

In 2012, we used an illustrated presentation that we created as a tool to share the Earth Charter principles and some examples of its local application. In 2014, we used the Earth Charter posters (youth version) that were in part created by the Earth Charter Center for Education for Sustainable Development at the University for Peace in Costa Rica, and we worked with the practical application of each of the principals taught on a personal, familiar, scholastic, and community level. Since 2010, we have obtained an average of 80.8 points in the highschool level and 79.7 points in the primary level in the knowledge evaluation of students on the theme units of PEACE developed with EC. This is a favorable indicator showing that the knowledge and values transmitted and applied in the PEACE programme have been understood and internalized widely by the student population.

Lessons learned

In over 12 years of experiences and valuable lessons in Lachuá, we have learned, amongst other things, that true and transcendent conservation and biodiversity management is a long term process that cannot be done without knowing, understanding, and involving local citizens and their multiple values and cultural, ecological, and economic needs, as they are the real owners and managers of their land and their environment. In the Mayan worldview, nature plays a central role, as "...everything that exists in the Universe is alive, it complements itself and keeps itself in balance. Humans are part of it, it is not out of it and we must be carriers of an ethic that discards the temptation of dominating it." (Matul, 2007). "For the Mayan way of thinking, everything is carefully intertwined, everything is interdependent and seeks the same objective: energetic balance. There cannot and should not be then any supremacy of one kingdom over the other, there must not be a fight of humans against nature. Everyone needs each other. The existence of people who have abandoned nature is simply impossible." (Cabrera, 2007). These principles allow the understanding and appreciation of nature as our Mother, as Mother Earth, to whom we owe respect and have the obligation of caring for and defending. This wisdom is valuable, is alive in many Maya-Q'eqchi' elders, and is manifested through values, advice, ritual, and ancestral practices, among others.



Fourth grade girl doing part of an evaluation exercise after a PEACE workshop. Photo by: María Hermes, ORCONDECO

The Earth Charter integrates these values and many other aspects that are inherent to the Mayan worldview, which is why we consider it a valuable learning-teaching tool. Its ethical vision recognizes the value and care of nature, as well as the respect and appreciation for life in all of its forms, expressing in a simple way actions that we can all implement in our day-to-day lives to contribute to harmonious social-environmental conservation. We think of the Earth Charter as an important support in the educational and sensitizing process that we have developed and shared with the Maya-Q'eqchi' youth, that thousands of people from different cultures and regions around the world are getting involved with and making valuable efforts with the same feeling and intention as their traditional values, and that, little by little, together we are building the future that we desire and deserve.

Our work experience in the Lachuá Ecoregion is an example of viable and contextualized application of the Earth Charter to strengthen an environmental-cultural educational process for the long term. Through PEACE, students and teachers have been able to get acquainted with the international Earth Charter Initiative, they understand the links between these global values and their local context, and, in this way they become an active part of this global movement in their own setting. From the PEACE-Earth Charter trainings, numerous other voluntary conservation initiatives have emerged in educational centers, such as community reforestation trainings, cleaning campaigns of bodies of water, recycling and sustainable consumption campaigns, internal school agreements to avoid hunting and/or hurting wild animals, and presentations on Maya-Q'eqchi' values and cultural identity related to nature, amongst other trainings. This gives us great satisfaction and pride as these have been local efforts that have benefited whole communities and neighboring regions.

One of the weaknesses that we have found throughout this experience is that there is some uncertainty in the permanence of the teachers from the schools where we carried out the PEACE programme, due to changes and movement of working positions. This weakens the follow-up process and application of the themes developed in PEACE and Earth Charter in other subjects and prevents the shared knowledge from being integrated as cross-cutting topics in different subjects of the schools' curriculum. However, we hope that this situation is resolved and stabilized in order to provide continuity to the process and to the initiatives developed by the students in medium and long term.

As an association, we feel very happy and proud of being an Earth Charter International Affiliate. We consider that the Earth Charter can become a valuable education tool if it is contextualized and if the application of the Earth Charter can be discussed on concrete and local objectives so that it can be better understood by the majority of the population by visualizing and valuing its broad implementation and positive impact. In the future, we are interested in integrating the Earth Charter into the Bilingual Participatory Environmental Education Programme (focused on adults, communities, and indigenous authorities) so that these key groups can use the EC as a support and orientation tool in decision making processes on conservation and responsible and respectful management of natural resources at the community and regional levels. We also hope to broadly disseminate the EC and integrate many more sectores of the Maya Q'eqchi' population with whom we work in Guatemala in this valuable process.

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References

Cabrera, E. 2007. La Cosmométrica Sacra. In Cosmovisión Maya. Matul, D. and Cabrera, E. Liga Maya. Tomo I. Guatemala. 335p.

Matul, D. 2007. Fibras del Corazón. In Cosmovisión Maya. Matul, D. and Cabrera, E. Liga Maya. Tomo I. Guatemala.

The Earth Charter: A tool to guide community environmental education and action in Seychelles

Michele Martin, PhD

Introduction

Seychelles is a small island developing state (SIDS) located in the middle of the Indian Ocean, just below the equator. Never heard of it? If this is the case, you are not alone! Many people have never heard of this tiny archipelago of some 115 islands although it is the only group of mid-ocean granitic islands in the world. Seychelles boasts a wide diversity of plants and animals found nowhere else in the world, the most famous of which is the Coco-de-Mer palm, which bears the largest seed on the planet.

Those who have heard of Seychelles associate it with paradise and five star holidays in nature for the elite. They are not far off from the truth because, indeed, over 50% of the tiny landmass of 455km² is set aside as nature reserves, and the country's strict environmental laws have, until now, helped to ensure some degree of protection for the mountains, forests, reefs, rivers, beaches, and wetlands, at least compared to many other SIDS. On the whole, Seychelles is considered to be a middle-income country, and has successfully achieved most of the MDG targets, putting it ahead of most other countries in the African region.



However, scratch below the surface and the paradise metaphor starts to fray; you find the usual problems associated with human activity despite well intentioned environmental laws: habitat loss, pollution, scarcity of water, rising consumerism and waste; and then of course the impacts of climate change: water scarcity, floods and landslides, coastal erosion and coral bleaching. Alongside environmental problems we also have socio-economic challenges experienced by many other countries: alcoholism, drug abuse, domestic violence, underemployment, and health issues associated with an increasingly sedentary lifestyle and westernized diet.

These socio-ecological challenges are what prompted our NGO, Sustainability for Seychelles, to explore how the Earth Charter (EC) could be used as an educational tool to help Seychelles get back on the path to sustainability. I had started using the EC initially as part of my PhD research on environmental education in schools, introducing it to teachers as a tool for the classroom (see the Earth Charter in Action book), but as my focus shifted to communities with my work for Sustainability for Seychelles, I could see how the EC could be extremely beneficial in informal ESD settings as well.

Prior to the 1700s, the Seychelles islands were uninhabited by humans, as far as we know. Now, the islands are home to about 90,000 people, most of mixed (Creole) African, Indian, Chinese, Arab and European backgrounds. There is also a significant resident population of foreign workers, most employed in the tourism and construction sectors. Most people live on the three largest islands while the remaining islands either host exclusive hotels or are uninhabited. The economy of Seychelles is based on natural resources; the two largest industries earning income for the country are tourism and the tuna fishery.

Like most other former British and French island colonies, the early history of the islands tells a story of plantations and slavery. But since independence in 1976, the Creole culture of the islands has provided a sort of unifying theme across race, economic status, and class, with a common appreciation among the inhabitants for Creole foods, the language, music, dance, and religion.

The environmental movement in Seychelles has been active for a couple of decades now, resulting in a healthy number of non-governmental organizations, which today play a significant role in promoting conservation, alongside government environmental agencies. Seychelles has since the early 1990s also had a national environmental management plan to guide efforts to safeguard the environment. Over the years, there has been an increasing awareness of the need for a cross-sectoral approach to environmental management, but this is much easier said than done, and today, we still find that efforts to improve the socio-economic challenges are separate from efforts to ensure ecological sustainability.

Implementation

The beautiful thing about the Earth Charter is that it makes it so obvious that in order for us to create a more sustainable, equitable, and peaceful world, we must address social issues alongside environmental ones. By 2010, our NGO realized that the Earth Charter could help us to improve cross-sectoral collaboration in Seychelles. Our first move was to translate the document into Kreol, the mother tongue of most Seychellois. We also hosted a workshop for members of secondary school wildlife clubs to introduce them to the Earth Charter and create artwork representing the different principles that could be used to illustrate a poster.

The Kreol Institute undertook the big translation task for us, and helped us design a poster highlighting the main principles. In a formal ceremony hosted by the Minister of Foreign Affairs Jean-Paul Adam in 2012, we finally presented the Kreol version of the Earth Charter to the Seychellois people, and invited schools, businesses, governmental agencies, citizens' groups and others to use the Earth Charter to guide their work. The event was well covered by the local media, and we distributed the Earth Charter poster to many organizations and schools.

More recently Sustainability for Seychelles has started working with grassroots community groups, creating education processes to help them organize themselves to take action at community level. We began to use the Earth Charter as a critical tool to help them consider some of the particular socio-ecological challenges in their community and guide the development of action plans that addressed both environmental and social issues.



Earth Charter poster

The CBO (community-based organization) is still nascent in Seychelles. In past years, the government-run district offices had tried to help communities start up environmental clubs, but this approach did not prove to be sustainable as many people associated the groups with politics.

Seychelles is a democracy, but it is a very small community and somewhat polarized politically. Most people are unwilling to stick their necks out to vocally protest an unsustainable development or poorly conceived government policy for fear of offending someone or causing trouble. This goes some way toward explaining why such grassroots groups have not existed in the past. In order for a CBO to be effective in Seychelles, it is necessary that they remain

non-partisan and independent, but at the same time they have to work in collaboration with government agencies if they are to succeed in their projects. Open criticism and direct protest are not necessarily productive strategies in this small island environment.

The Earth Charter is written in a spirit that promotes dialogue, collaboration, and a peaceful society, but also a healthy democracy in which people can voice their concerns and participate in decision-making in their communities. Creating a space for democratic decision-making (where previously all decisions were made by government on behalf of their electorate) is a learning process that Seychelles is now in the midst of. The EC is an ideal tool to help us along the way.

Using the Earth Charter to build capacity on community organizations

In the last couple of years, several CBOs have sprouted up, some independently, and some with the support of an individual or other group. Thanks to a grant from the GEF Small Grants Programme in 2013, Sustainability for Seychelles has been able to work with CBOs to help them build their capacity for participating in sustainable development decision-making and action in their districts. To support this work, in 2014 we printed a new Earth Charter poster, in English and Creole, which has been widely distributed to all of the CBOs as well as to the district administration offices in all communities.

We have developed a methodology, based loosely around the principles of the EC, to help CBOs devise an action plan that can address both social and ecological issues of concern.



The methodology is described below:

- 1) Undertake a community survey, done by members of our NGO in collaboration with members of the community group. The survey gathers information from adult community members about the social and environmental strengths and weaknesses in their community, and what actions they think are needed to make the community a better place to live. We also ask respondents about their involvement in sustainable development decision-making at the community level and whether they feel that there are sufficient opportunities to get involved. Our NGO does the analysis and generates a report, which can then be used as a reference point by the community group. If the community group has the capacity, they can do the analysis themselves, with our support where needed.
- 2) Organize a community action-planning workshop (full or half-day) which centers on the Earth Charter. This workshop is usually held on a Saturday or Sunday in a nice venue to attract participants – often hotels will offer their conference room and even provide refreshments. The participants are sometimes selected by the CBO, or the workshop is advertised and open to the public. During the workshop, we present the findings of the survey and discuss the key issues facing the community. This is followed by a creative group work exercise to introduce participants to the principles of the EC, and then they work in these same groups to devise realistic actions to address concerns raised in the survey. The actions can be organized under each of the four pillars of the EC – (1) respect and care for the community of life, (2) ecological integrity, (3) social and economic justice, and (4) democracy, non-violence and peace. We also help them prioritize the actions, devise a rough time frame for implementation, and consider sources of funding to support their work.
- 3) Once the action plan has been created, it provides structure for the work of the CBO for a few years, and serves as an education tool for communicating what they want to do to other community partners and potential funders. Using the action plan, the group leads the implementation process, and our NGO provides moral support, some equipment and other resources when available, and opportunities for networking with other CBOs in Seychelles.

Lessons learned

Using the Earth Charter as an educational and practical tool to guide holistic and sustainable action for stronger communities makes a lot of sense. The Earth Charter was never meant to be a document floating in cyberspace or sitting on a shelf. It is a call to action, and a guideline to a more sustainable world that can easily be tailored and adapted to different socio-cultural and ecological contexts. Its strength is that it places issues of social justice and concern alongside ecological issues, thus inspiring social and environmental activists to see that they are all working towards the same goals of a better planet for people and the rest of nature, and that collaboration is the best strategy.

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Links:

Countrymeters. Seychelles population. Retrieved from <http://countrymeters.info/en/Seychelles>

**PRIMARY AND SECONDARY
EDUCATION**



Australia's Green Lane Diary initiative reinforces the Earth Charter

Louise Erbacher

“Don't let environmental problems get you down. Kids have the power to make a difference:

Think + Act + Share = Change”

Introduction

This is the mantra of Green Cross Australia's environmental education programme, the Green Lane Diary and it reflects the Chinese proverb, “It is better to light a candle than to curse the darkness.” Every individual student who is empowered to take action as a result of her or his participation in the Green Lane Diary programme acts as another light in the darkness, a positive step forward along the journey towards a more peaceful, just, and sustainable world. The Green Lane Diary is therefore a shining example of the principles of the United Nations Decade of Education for Sustainable Development (UNDESD) because it maintains a strong focus on positive, transformative action.

At the 2006 International Earth Dialogues Forum in Brisbane, a joint agreement was signed between former Soviet President Mikhail Gorbachev, former Australian Premier Peter Beattie, and former Lord Mayor Campbell Newman to firstly incorporate the values of the Earth Charter into education and secondly to establish an Australian chapter of the not-for-profit organization, Green Cross International. Hailed as the ‘red cross for the environment’ Green Cross Australia was later launched in 2007 as a result of the hard work of a number of committed volunteers from across the corporate, government and community sectors. One of the first projects to emerge from Green Cross Australia was the children's poster version of the Earth Charter.

In partnership with the Queensland Education Department, the Environmental Protection Authority and Origin Energy, Green Cross Australia supported schools across Australia to develop their own version of the principles of the Earth Charter, which were then published in 2007 and distributed to schools nation-wide as a visual representation of the Earth Charter values.

Inspired by Green Cross Japan's ‘Green Lane Environmental Diary’, Green Cross Australia's Green Lane Diary has impacted more than 115,000 Australian students since the launch of the programme in 2010. The online sustainability education initiative provides young people with accurate information and practical solutions to a range of environmental issues via an interactive website and magazine. Linked to the General Capabilities, Cross-Curriculum priorities and key learning areas of the Australian Curriculum, the Green Lane Diary also reflects a number of the principles of the Earth Charter, namely interconnectedness, intergenerational equity, and the responsibility of human beings to protect Earth and all its systems. Rather than teaching about the values and principles of the Earth Charter, the Green Lane Diary provides a platform for reinforcing the Earth Charter through transformative learning. The goal of the programme is to educate, inform, and empower students to connect with the world around them and to take action on a range of environmental issues in their local community and beyond. Students who have made a significant effort to create a more peaceful, just and sustainable world are then acknowledged for their achievements at the annual Green Lane Hero Awards ceremony, held in November each year.



Implementation

In 2010, after securing sponsorship agreements with governments, business, and not-for-profit organizations, Green Cross Australia released the Green Lane Diary environmental education programme. Coinciding with the Queensland Education Department's Year of Environmental Sustainability in 2010, the Green Lane Diary reached over 14,000 students from across Australia in its inaugural year. The weekly topics in the Green Lane Diary magazine were carefully selected to not only reflect the values of the Earth Charter and the [Melbourne Declaration's Educational Goals for Young Australians](#), but also to align with the key learning areas of the Australian Curriculum – namely Geography, Science, English, and Civics and Citizenship.



OLR Kenmore Green Thumbs

Through engaging with the Green Lane Diary educational materials, students were provided with an opportunity to develop the skills of active citizenship, ethical understanding, and critical and creative thinking. They developed the knowledge, values and skills necessary to protect the common good and to sustain and improve natural and social environments for present and future generations. From an ecological perspective, students learned about the impacts of production and consumption on biodiversity and Earth's systems and they explored alternative solutions including renewable energy, recycling, and sustainable design. They investigated the effects of rising sea levels and extreme weather events on Pacific Island nations and communities in regional and coastal areas of Australia and developed their own fundraising projects to install water filtration systems in communities around the world. In terms of the principles of the Earth Charter, students transformed the following values into action through their engagement in the Green Lane Diary programme:

1. Respect Earth and life in all its diversity
2. Care for the community of life with understanding, compassion, and love.
3. Build democratic societies that are just, participatory, sustainable, and peaceful.
4. Secure Earth's bounty and beauty for present and future generations.
5. Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life.
6. Prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach.
7. Adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being.
8. Advance the study of ecological sustainability and promote the open exchange and wide application of the knowledge acquired.
9. Eradicate poverty as an ethical, social, and environmental imperative.
10. Ensure that economic activities and institutions at all levels promote human development in an equitable and sustainable manner.
11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care, and economic opportunity.
12. Uphold the right of all, without discrimination, to a natural and social environment supportive of human dignity, bodily health, and spiritual well-being, with special attention to the rights of indigenous peoples and minorities.

13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice.

14. Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life

15. Treat all living beings with respect and consideration.

16. Promote a culture of tolerance, nonviolence, and peace.

The focused attention on alignment between education at the national level through the Australian Curriculum and the Melbourne Declaration and at the international level through the values of the Earth Charter and the principles of education for sustainable development (ESD) enabled teachers to embed sustainability into the curriculum rather than teaching the concepts as part of an 'added extra'. Sustainability topics including conservation of resources, indigenous histories and cultures, active citizenship, lifelong learning, future perspectives, biodiversity, and sustainable design principles were well-researched and teachers were provided with [comprehensive educational materials](#) to support the delivery of the Green Lane Diary in the classroom context. In this manner, the Green Lane Diary was innovative in its approach because it supported the incorporation of ESD principles into classroom pedagogy. At the same time, the programme was open-ended to allow for different school communities to create their own responses to environmental issues.

Regardless of their regional location or socio-economic status, schools all over the country could take ownership of the Green Lane Diary programme and use it as a vehicle to enact change in their own communities. While there are a number of statistics available in terms of how many students engaged with the Green Lane Diary programme over the past few years, it is very difficult to gather data on the depth of community empowerment that occurred in each context. Teachers, parents and the students themselves provided anecdotal evidence of the transformational effects of the Green Lane Diary and the way their values were changed as a result of participating in the programme but measuring the changes to behavior is not something that can be easily achieved. The Diary itself did attempt to measure the number of actions adopted through the "Action Tracker" mechanism on the website and via the Eco-Monitor element contained in students' Green Lane Diary scrapbooks but the long-term effects of these actions remains unknown.

The problem of the overcrowded curriculum has long plagued environmental educators who have worked tirelessly to embed sustainability into the curriculum. The Green Lane Diary is a welcome addition to the field of education for sustainability because it manages to simultaneously align with existing curriculum frameworks whilst providing opportunities for transformative and experiential learning. This is a significant achievement when considering the fact that the Green Lane Diary is not managed by a government body, but rather it has been almost entirely coordinated and distributed by a not-for-profit organization. Over the years, the Green Lane Diary has triggered the establishment of a network of educators whose connections have led to the development of a comprehensive body of best practice case studies in education for sustainable development. Through its practical, innovative, and collaborative approach, the Green Lane Diary programme has instilled a sense of confidence in many educators who would otherwise have remained on the edge of ESD. Essentially, the programme has supported educators to transform the values of the Earth Charter into action as students learn how to develop sustainable solutions to environmental issues.



OLR Kenmore Green Lane Diary Winners

Lessons learned

In spite of these considerable achievements, the Green Lane Diary programme must now forge a new path as it navigates its way through an environment with significantly diminished levels of sponsorship and financial support. The downturn of the international economy and changes to the political climate have meant that for the first time since its launch in 2010, schools must now pay a fee to receive printed copies of the Green Lane Diary magazine. The current lack of financial support seems disproportionate to the uptake of the programme in schools across Australia, especially considering the instrumental role of the Green Lane Diary in not only raising the profile of the goals of the UNDESSED but also in terms of demonstrating practical ways for transforming the values of the Earth Charter into action.

Perhaps the solution lies not so much in securing financial support, but rather in terms of securing support at the policy level for ESD and the values of the Earth Charter. With the introduction of the Australian Curriculum and the subsequent prioritization of sustainability, indigenous histories, and cultures and engagement with Asia, it seems that the government is finally beginning to recognize the importance of sustainability principles and it is very easy to see the similarities between the Melbourne Declaration's Educational Goals for Young Australians and the principles of the Earth Charter. As a result, ESD is no longer on the fringes of pedagogy and is now becoming much more mainstream with some state governments mandating policies on sustainable management of resources in schools. The focus should therefore be on how much has been achieved over the course of the UNDESSED as a result of practical, inspiring examples of the Earth Charter in action, such as the Green Lane Diary programme. Strategic partnerships between government organizations, corporations, and curriculum agencies at the national level and between UNESCO and Earth Charter International at the global level could prove to be a positive step in the right direction for the Green Lane Diary. Above all, the most important goal is to maintain the momentum that has already been achieved, thereby keeping all the candles burning brightly.

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Links:

Green Cross Australia. 2014. "Green Lane Diary" <http://www.greenlanediary.com>

MCEETYA. 2008. "National Declaration on the Educational Goals for Young Australians." http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf

“Affirm faith in the inherent dignity of all human beings and in the intellectual, artistic, ethical, and spiritual potential of humanity.”

Earth Charter

Introduction

The National School of Primary and Secondary Studies (Colégio Nacional de 1º e 2º Graus) is a private educational institution that will celebrate its 30th anniversary in 2015. As a young institution, it endeavors to confront the largest challenges that humanity has faced in recent times. It is situated in the Southeastern region of Brazil, in the state of Minas Gerais, which is an affluent and prosperous region compared to the other regions of the country's interior.



The institution possesses four teaching facilities in the cities of Uberlândia, Araguari, Ituiutaba (MG – Minas Gerais), and Catalão (GO - Goiás), which organize themselves within the following educational levels: Early Childhood Education, Elementary Education (cycles I and II) and Secondary Education, comprising the so-called “Basic Education” and Preparatory Courses, focused on the development of skills and competencies of students who will compete within the selective processes of the various Brazilian universities.

Throughout its existence, the institution has learned to educate children and adolescents as citizens concerned about social realities, and has realized that its educational purpose is centered on the formation of participatory individuals, capable of valuing diverse forms of existence and thought, assessing social conditions, promoting their participation in community issues, assuming a social role, and acting ethically, autonomously and creatively. Therefore, all pedagogical practices aim for citizenship and are committed to broader social interests.

The National School (Colégio Nacional) supports social and educational projects, some of them carried out by non-profit institutions. In this sense, more than simply contributing, it learns to live through constant reflection and promote the reconstruction of same practices.

Never before has there been so much discussion about the importance and urgency of the conscious use of natural resources. In addition to inserting the topic in a transversal manner, through interdisciplinary and action-oriented projects, the institution contributes toward broadening the scope of this discussion by direct community intervention, educational campaigns, and supporting causes engaged in contributing to the appreciation of integrated ways of life that work with, rather than against, nature, and are for the diversity, stability, and sustainability of natural ecosystems, rather than their exploitation.

The actions of the National School (Colégio Nacional) are guided by the Earth Charter. As a result of this institutional perspective, during its second Strategic Management Seminar in 2010, it defined its higher purpose as being: “Our cause, our life – To promote the common good through education, with a commitment to better care for the self, for the other, for this place, and to value respect for diversity, sustainable development, creative stimulation, and the never ending search for innovation, referenced in our history and in scientific and technological advancement”.

Implementation

“There is a Way (Tem Jeito Sim)”

This is the name given to the educational programme that defines the curricular guidelines and educational policy established for all branches of the National School (Colégio Nacional). Its objective is the formation of historic individuals⁹, both morally and intellectually autonomous, who act in a critical, participatory, and citizen-like manner in society. Its challenges are to bring educators to comprehend, reflect, and become aware that the manner in which childhood, adolescence, youth, and adulthood are lived is changing; the certainty of the need for a new attitude toward the acquisition of knowledge; clarity of the intertemporal dimension that exists in the childhood and youth phases of the lifecycle; and, primarily, commitment to education and human development through processes for the attainment of wisdom, knowledge, symbolic systems, sciences, arts, memory, identity, values, and cultures.

Based on the ever-growing awareness of the importance of understanding the Human-Nature relationship, and underpinned by the principles of the Earth Charter, the “There is a Way (Tem Jeito Sim)” programme, subdivided into four sub-projects, will be carried out alongside the entire Basic School system - the projects: “Me (Eu)” for early childhood education; “Me In (Eu Em)” for Elementary Education cycle I, “Me With (Eu Com)” for Elementary Education cycle II and “Me For (Eu Para)” focused on Secondary Education.

For analysis within this article, the pedagogical staff and faculty have selected the behaviors developed within the “Me With (Eu Com)” project – Elementary Education cycle II, as it pertains to the promotion of a sense of belonging among students as its highest principle. Through this project, the “There is a Way (Tem Jeito Sim)” programme aims for the formation of social individuals, promoting the recommendation of interventions necessary for the improvement of the quality of life of individuals enrolled in the school. The formation of this planetary citizen, who sees himself/herself as a constituent part of nature, and thus fulfills a fundamental role in the conservation and preservation of his/her environment, is the foremost objective of the educational programme, committed to the cycle of human life. It is important to understand that skills and abilities are developed within the framework of lived experiences, and that the space for interaction and social relations provided by the school is fundamental for the development of rational intelligence, and offers an educational space that promotes the belonging and interaction necessary for the development of both the moral and intellectual autonomy of students, in addition to awareness of social, psychosocial, linguistic, and ethical dimensions.

The “There is a Way (Tem Jeito Sim)” programme faces the challenge of constructing an interdisciplinary approach that breaks away from the fragmentation of knowledge from diverse disciplines and proposes integration of disciplines as a whole, as well as within individual disciplines. This establishment of intercommunication between disciplines favors a horizontal and vertical analysis of the learning content, providing students with gradual, procedural, and systematic acquisition of concepts and phenomena.

⁹ Historic individuals are those who respect their origin, their own history which includes their family history, their community and their country. Individuals that respect themselves and their values will be in turn more respectful and patient with others, with their culture and values. It is impossible to know about the history of others without knowing our own history. We understand that this has been the root for many conflicts. Therefore when one respect oneself it is easier to understand the other.

By seeking a space to facilitate implementation of this vision within the school, the “There is a Way (Tem Jeito Sim)” programme, through the “Me with (Eu Com)” project, was able to incorporate the emergence of science and citizenship as disciplines of a diversified curricular foundation.



The discipline of Science and Citizenship (the transversal axis of the programme) aims to guarantee spaces of coexistence that ensure meaningful learning, understandings of social, political, and economic contexts by students, and the experience of a dialogical and investigative methodology for teachers, students, and other educational agents within the school.

The difficulties to implement this discipline are centered in two significant aspects:

- 1) The teacher training has lead teachers to perceive that the main purpose of their work is to transfer information;
- 2) And from the student’s perspective they see the education experience solely as a tool to pass exams.

Breaking from this logic creates a desire that instigates the search for knowledge creation and forms a cohesive body of educators and learners who enable the construction of collective thinking. In addition, it demonstrates the social function of the school and its responsibility with the collective, and most importantly gives meaning to the learning content by transforming the school space into a space for creation, curiosity, and investigation.

Without understanding that the human race is made up of individuals who differ in their opinions, experiences, and attitudes, and without respect for these differences, including beliefs, customs, and cultures, there is no way of working toward a more egalitarian society and even less hope of working collectively. Therefore, the “There is a Way (Tem Jeito Sim)” programme, through the “Me With (Eu Com)” project and the discipline of “Science and Citizenship (Ciência e Cidadania)”, aims to develop the autonomy of individuals involved in the creation of knowledge, thus strengthening teacher-student relationships that form a partnership within this framework.

The Discipline ‘Science and Citizenship’

The main characteristic of this discipline is to place students in a role as subjects of their own learning. Using the problems that arise in the world and within social relations, students are able to propose solutions, point to alternatives, comprehend limitations, and especially adopt an attitude of citizenship and collective responsibility.

The globalizing activities developed within this discipline allow for an interconnection between the diverse realms of knowledge, permeating themes and allowing the knowledge contributed by students to also be considered. Dialogue and unstructured sharing of opinions and ideas are promoted in this discipline, because to learn it is important that students feel free to share their thoughts, without judgments. This sharing contributes toward both a collective and individual analysis of a specific situation, and advances a partial systematization, and final synthesis or conclusion about the research findings about a specific problem and possible solutions.

The topics of study, as suggested by teachers and students, generate common threads that help to bring together the findings from different sciences, with the purpose of responding to current demands and problem situations and/or the necessity and curiosity of students and teachers.

For the implementation of this work, a group of educators was formed in 2014. These are Science and Citizenship teachers within the four educational units that, along with their Pedagogical Coordinators, create space for reading, reflection, deepening of knowledge, and proposals for action.

Employing the principles of the Earth Charter, creating a didactic process that utilizes a dialogical and investigative methodology, as well as educational and technological resources that facilitate research, educators favor the development of the child-youth protagonist role and the introduction of ideas that incorporate the following into the daily school routine: observation, attention, debate, and action toward the construction of a socio-ecological attitude; raising awareness among the educational community toward the reflection of how the school ecosystem interacts with its location and with Planet Earth; development of educational projects based on the principles and values of the Earth Charter; specification of guidelines that may be utilized within instructional materials determined by the students themselves and/or the school community.

Based on the concepts extracted from the book “Ecological Literacy (Alfabetização Ecológica)” and the Earth Charter, the educators of the National School (Colégio Nacional) developed a work proposal that takes into consideration the study and observation of the educational space, through a web of human relations. These educators regard the concept of place, constructed throughout human history and the geological past, to be a premise for this framework. They understand that an ecosystem not only possesses a variety of microsystems across its landscape (particularly flora and fauna), but also inhabitants (with a social, economic, and political order), and that together these form networks of systemic and auto-dependent relations.

Instructional Sequence Developed by the Discipline in 2014

1. The objective of the Science and Citizen (Ciência e Cidadania) discipline within Elementary Education cycle II is to:

Use the Earth Charter as a resource for teaching and learning with the purpose of:

- Incorporating observation, attention, debate, and action toward the construction of a socio-ecological attitude into the daily school routine.
- Raising awareness with the educational community about how the school ecosystem interacts with its location and with Planet Earth.
- Developing educational projects based on the principles and values of the Earth Charter.
- Specifying guidelines that may be utilized within instructional materials determined by the students themselves and/or the school community.

2. Synthesis Framework

INSTRUCTIONAL SEQUENCE	
1.	Presentation: of the teacher, students, objectives of the discipline, development of an agenda.
2.	Individual work: reading the comic strip: "Monica's Crew - Caring for the World (Turma da Mônica - Cuidando do Mundo)".
3.	Group work: Discussion about the text: "What does it Mean to Take Care of the World? (O que Significa Cuidar do Mundo?)" How would you take care of something so big? Where would you begin?
4.	Classroom Group: Impressions of the text among the groups. Electing a presenter and a note-keeper.
5.	Discussion Circle: Topic: Looking toward our school, what alterations would be necessary for us to contribute to the improvement of the planet?
6.	Video Presentation: "The Power of Ten - From Micro to Macro (Potência de Dez - Do Micro ao Macrocosmo)"
7.	Reflection: What elements of the film resonated with you? What feelings did it trigger? Who are we within this greater immensity? Within our physical space (the school) are we contributing to the improvement of the planet?

8.	Group work: Construction of two lists: What is not being done well and should be changed within our school? What is very good about our school and must be continued?
9.	Interaction of groups: Choose two students to present the work of each group. Those who worked on the list of negative points within their group should present the list of positive points and vice-versa, in order to promote a balance of energies.
10.	Systematization by the teacher: Reading of the group lists, discussion about any significant aspects and numbering of items.
11.	Starting the project: The teacher should direct the organization of the items in a manner that guarantees that each year of the cycle is assigned one issue to be resolved (topic to be researched by the students).
12.	Problematization: Based on the selected topic, the teacher should elaborate the problematization(s) of the project for the students. Each group should research the various aspects of the same topic.
13.	Specification of the Project - Justification: Assist groups to identify a justification for the project (they don't know yet how to systematize). They should talk about why they chose this topic and this problematization, and record their impressions. These texts should undergo editing and linguistic analysis. Teachers of the Portuguese language may assist with this task.
14.	Specification of the Project - Objectives: Assist the various groups in defining their objectives. The objectives should be clear, precise and observable, since we are dealing with procedural content and seeking a differentiated attitude.
15.	Specification of the Project - Goals: The teacher should inform students that actions need to be developed within a specific amount of time, and thus a small amount continuously is preferable to a large amount intermittently.
16.	Specification of the Project - Actions: The teacher should assist and accompany the actions of students. Often, the viability of the project depends on the structure of the school and/or of the subjects involved (Managers, Pedagogical Coordinators, other teachers, Coordinator of Institutional Projects, etc.).
17.	Specification of the Project - Evaluation: The progress of the project should constantly be evaluated by teachers and students
18.	Final Product: All of the work done by the students should be recorded in a journal that will be distributed to the other students at the National Forum for Citizen Action (FNAC – Fórum Nacional de Ação Cidadã).

3. Materials to be used in the classroom:

- Copies of the comic strip "Monica's Crew - Caring for the World (Turma da Mônica - Cuidando do Mundo)"
- Book "Ecological Literacy (Alfabetização Ecológica)" by Fritjof Capra, for deeper context
- Youtube - film: "The Power of Ten (Potência de Dez)"
- Sulfite paper
- Masking tape
- Construction paper
- Scissors

Lessons learned

The space for study, deepening of knowledge, reflection, and proposal of ideas has promoted greater understanding among teachers, Pedagogical Coordinators, and Advisors, contributing to the exchange of knowledge and the promotion of values such as respect, esteem, and consideration. The relational competence of teachers and students that is highly necessary for the development of both intra- and interpersonal intelligence was observed, analyzed, and discussed. Child and youth protagonism found a space to advance and develop in this discipline.

The biggest challenge lies in the creation of a new outlook: we simultaneously are nature, and with it we also interact; on its survival our own survival depends. The formation of planetary citizens, part of nature, and thus in constant symbiosis, is a difficult task; to change the mental model of adults in order to ensure a sustainable attitude in the learner is the tireless goal of this work.



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Links

Below are two blogs and related facebook pages that were created for the Elementary Education cycle II component of the Science and Citizenship (CC - Ciência e Cidadania) project. These blogs and pages are in their initial stages, and students will gradually publish more information as it becomes available.

Blogs:

www.reciclagemnacionalitba.blogspot.com.br
www.aguapreciosanac.blogspot.com.br

Facebook Pages:

Erased Heroes (Heróis Apagados)

<https://www.facebook.com/pages/Herois-apagados/1393666950855688?ref=ts&fref=ts>

Respect for All (Respeito com Todos)

<https://www.facebook.com/pages/Respeito-com-TODOS/1512356042319050?ref=ts&fref=ts>

References:

Capra, Fritjof et al. 2006. Alfabetização Ecológica: A Educação das Crianças para um Mundo Sustentável, Trad. Carmem Fischer, São Paulo, Cultrix.

Capra, Fritjof. 1996. A Teia da Vida. Trad. Newton Roberval Eichenberg, São Paulo, Cultrix,

Delors, Jacques. 2012. Educação: um tesouro a descobrir, São Paulo, Cortez, Brasília, DF, UNESCO.

Staff in Charge:

Teachers of the discipline: Cristiane Emanuelle Pereira de Grande; Frederico Melo Vasques de Castro; Gabriel Victor Munhoz; Kalita Tavares da Silva.

Special Projects Coordinator of the National School (Colégio Nacional): Sandra Adriana Nunes.

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Earth Charter Consultant: Maria Terezinha Carrara Lélis.

Preserving Our Community of Life: Integrating the Earth Charter's Philosophy into the Eco-School Programme of Puerto Rico

Minnette Rodríguez Harrison

Introduction

Throughout the 21st century, developing curriculum that complements the students' learning experience has become more and more challenging. Thus, curriculum development that strives to link academic and practical situations has become increasingly complicated. An educational environment that facilitates the development of bio-sensitivity and interdependence between organisms and the environment is crucial for students' success; monarch butterflies have been used as catalysts for the bio-sensitivity process in the Specialized Ballet School of Julián E. Blanco, which has utilized the Earth Charter's principles throughout the process.

The Specialized Ballet School of Julián E. Blanco has integrated the Earth Charter's principles into the school's curriculum since 2012, which demonstrates the eco-school's shared vision with UNESCO in support of the Decade of Education for Sustainable Development (DESD). Julián E. Blanco endorsed the Earth Charter's principles in response to the alliance between Earth Charter International (ECI) and the Foundation for Environmental Education (FEE) (Poland, 2011).



The introduction phase of the Earth Charter's principles in the Specialized Ballet School of Julián E. Blanco took place in the science department's curriculum. Presently, the principles have spread throughout the entire school body and even into the surrounding community; the entire school has now integrated the Earth Charter's philosophy into curriculum development. Education on peace and tolerance of differing forms of life has led to an increase in sustainable actions among the student body.

Context

In 2012 and in collaboration with the Eco-school Programme in Puerto Rico, we created guidelines with five environmental lessons to initiate the implementation of the Earth Charter principles throughout all participating educational facilities. In these guidelines, we identified as one of the objectives the creation of a school butterfly farm to promote the development of environmental values that will later evolve into the everyday performance of sustainable actions. Such actions, as proposed by the Earth Charter, include respect for the community of life, universal responsibility, and the promotion of the common good. This project allowed eco-school teachers to integrate this international document (the Earth Charter) in their curriculum. Within a year, two additional schools adopted the School Butterfly Farm Project. The programme is a positive asset to a school's curriculum because it encourages direct contact with nature, assists the students' development of scientific and analytical skills, and encourages respect and understanding of the environment.

Pérez-Asso, Genaro & Garrido (2009) suggest a framework that supports forming an infrastructure that would guarantee successful reproduction of species (in our case the reproduction of monarch butterflies), and whose goal would be the subsequent liberation of the butterflies in adequate areas for the species' development. Our students became guardians and caregivers for the butterflies, with these actions they began contributing with the protection of Earth's biodiversity. High school students cared for the monarch butterflies while the construction of the butterfly farm and garden were ongoing throughout 2012 and 2013.

The Specialized Ballet School Julián E. Blanco integrates academic studies and ballet to promote the art of dance through systemic learning and teaching approaches that allows to:

- a) develop artistic sensibility;
- b) develop the growth of artistic and technical abilities on ballet and other forms of dance; and
- c) accomplish academic excellence.

Our school provides an academic programme for grades five through twelve. All grades share a common goal of accomplishing integral student development through academic excellence and ballet, which awakens students' human and esthetic sensitivity. The School is located in an urban zone that is severely lacking green space. Therefore, it is vital for our education community to create space that contributes to the conservation of the ecological processes throughout the city. It is necessary for the students to understand how their actions impact urban ecosystems, and how the students can modify their actions to benefit others, "as we are one human family and one Earth community with a common destiny" (Barnett, et al., 2011).



The Problem

When we started the Butterfly Farm School Project in the Ballet Specialized School, a lack of concrete environmental policy was discovered. In a self-evaluation process that we carried out, a plan emerged to construct a concrete environmental policy that could be put into practice by the entire school. The initial phase of the school project encountered various challenges, such as the acceptance and ownership of the project by the school community members; some showed initial resistance to the project's framework. Thus, the Environmental Committee in charge of the Eco-School Programme developed a framework for an environmental policy that focused on finding solutions to pressing environmental issues, such as solid waste management. Promotion of sensitivity and environmental education were included in the plan with the objective of establishing a culture of environmental responsibility among students, faculty, and the community. This was done to promote the education community's participation in the butterfly farm project. During the butterfly farm project's promotion phase, emphasis was placed on adaptability of the programme to all subjects. The Eco-School Programme facilitated this process as part of its vision to encourage the education community's involvement in sustainability actions. Two topics were integrated into the school's curriculum in order to achieve Eco-Schools vision, to establish our environmental policy and to facilitate the development of environmental literacy: solid waste management and biodiversity. Several activities regarding solid waste management were developed throughout the year. The monarch butterflies played a significant role in educating students on the subject of biodiversity, and the Earth Charter was the cross cutting element.

Implementation

During the initial phase of the project, the students conducted research on current and prior environmental agreements, which familiarized them with the chronology of development of the Earth Charter's principles. An action plan was then carried out that consisted of integrative activities in which students developed environmental management actions, utilizing monarch butterflies as the focus and the Earth Charter principles as the framework.

The Butterfly Farm School Project 's framework included four components: the protection and care of the monarch butterflies; the management and utilization of a composting operation as a measure to reduce solid waste while creating a natural fertilizer to nurture both hosts plants and nectar plans; the creation of a website; and the development of a scientific magazine.

Doing composting was helpful for the students to learn sustainable behavior. They complemented this with forming a learning community with other groups to develop a paper on the fundamental values of the Earth Charter.

After the decomposition process finished and compost was prepared, the compost was employed by the students to sow plants in the school's butterfly garden, which taught the students the significance of species protection.

Action oriented research was carried out to observe how the interaction with the monarch butterfly (*Danaus plexippus*) helped the students to understand its life cycle. Not only did they learned this, but while doing research students showed respect for this form of life. The Earth Charter's principles were mentioned in this research when discussing the process of understanding, compassion, and care (Boff, 2005).



In the butterfly farm project, students observed and provided care for the butterflies throughout the four stages of their metamorphosis cycle: egg; larva; pupa; and adulthood. For example, from a plant with sixty-two monarch butterfly eggs, students observed forty-eight newborn larvae, and conducted a larvae-feeding process by utilizing host plants; all forty-eight larvae became pupa, and later forty-seven butterflies entered adulthood (twenty-one males and twenty-six females). Later, each butterfly was released into the wild. A ninth grade student commented, "By taking care of the butterflies I learned to secure them, feed them and to be responsible. I learned how to hold them and really like to recognize their right to live." Through this direct experience students were able to "protect and restore the integrity of Earth's ecological systems with special concern for biological diversity and the natural processes that sustain life" (EC Principle 5: Ecological Integrity).

Technology was also utilized to create a website to facilitate communication, provide resources, and scientific educational materials, and log educational experiences and executed activities. The introduction of digital communication was part of Julián E. Blanco's mission to decrease solid waste throughout the school and in the surrounding community. High school students published a scientific magazine with the objective to capture the attention of readers interested in scientific studies and turn this magazine in an education resource for the entire school community. Later, the document was digitalized and promoted through the school's science website: <http://cienciajeb.blogspot.com/>.

The creation of the magazine became part of the environmental campaign, "Zero Waste," which was established by the Eco-School Programme. The content of the document was later elaborated on by students and included the drafting of an ecological commitment, a connection to the Earth Charter's principles, the "Litter Less" campaign, the Butterfly Farm Project and other information. In order to integrate the Earth Charter's philosophy into the school's curriculum and participate in activities during Earth month, students endorsed the Earth Charter.

These activities helped students at the Ballet Specialized School to value environmental education to help preserve planet Earth. Our education community was able to show with practical actions (a butterfly farm) how to care and protect natural resources for future generations.

Lessons learned

Participating students' feedback are the best evidence of success in the learning process. A twelfth grade student commented, *"Throughout the environmental science courses this semester, our classes were able to raise awareness about how humans affect nature; it is our responsibility to solve the problems we've created. I've realized this in different ways, studying history and the environmental treaties, and with doing practical work like composting. The course allowed us to create a vision that could lead us to be more sustainable."*

She also said, *"The most important thing I learned was to start having a clearer idea of what environmental science is, and through an online quiz, to know what my ecological footprint is. I learned about my daily waste consumption, and I hope to reduce these numbers over time and avoid future damage to our planet."*

Upon completion of numerous environmental activities, students were able to recognize environmental challenges surrounding them on a daily basis and brainstorm solutions and alternative actions to these ongoing issues

by utilizing analytical skills that can be applied to other academic areas (Krinock & Robb, 1999). Undoubtedly, the integration of the Earth Charter's philosophy has facilitated discourse on environmental subjects that were put into practice, which incorporate peace, deep understanding, and holistic approaches at Julián E. Blanco.

Future academic projects will continue to incorporate the Earth Charter's principles, and Julián E. Blanco strives to encourage endorsement of the Earth Charter at additional educational facilities. Our school plans to integrate ballet and the care of butterflies; students are currently researching possible ideas and strategies to create artistic expressions that could possibly include theatre, music, or dance.

The Way Forward presents new beginnings, challenges, and opportunities to coexist and care for our home, our only home, Planet Earth, and the students of Julián E. Blanco strive to search for ways to achieve this.

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Links:

http://www.suagm.edu/umet/biblioteca/UMTESIS/Tesis_Ambientales/educacion_ambiental/2012/MRodriguez%202012.pdf
<http://intraedu.dde.pr/Comunicados%20Oficiales/201402030002.pdf>
<http://www.fee-international.org/en/Material/Files/FEEAnniversaryPublication.pdf>
www.opaspr.org
<http://earthcharterinaction.org/contenido/articles/309/1/Nueva-alianza-entre-CTI-y-Eco-Schools/Page1.html>

References:

- Aguirre, M. 2001. Técnicas de Assessment. Assessment en la sala de clases: Modelos Prácticos para Obtener, Organizar y Presentar Información del Proceso de Enseñanza Aprendizaje. Puerto Rico: Publicaciones Yuquiyú.
- Barnett, M., Meredith, H.V., Straus, E. & Cotter, L. 2011. Urban environmental education: leveraging technology and ecology to engage students in studying the environment. *International Research in Geographical and Environmental Education* 20 (3):199–214.
- Boff, L. 2005. Ensayo temático: Respeto y cuidado hacia la comunidad de la vida mediante entendimiento, compasión y amor. In: *La Carta de la Tierra en Acción: Hacia un mundo sostenible* (pp. 43-46). Amsterdam, Kit Publishers B.V.
- Cunningham, W. & Cunningham, M.A. 2006. Sustainability and Human Development. *Principles of Environmental Science*. 3 ed. New York: McGraw-Hill Companies, Inc.
- Figarella, F. 2012. El enfoque constructivista y las interacciones en la sala de clases (pp. 19-53). 2da. edición. Puerto Rico: Editorial Isla Negra.
- Krinock, K., & Robb, L. 1999. Problem Solved: How to coach cognition. *Educational Leadership*:29-32.
- La Carta de la Tierra. 2000. Recuperado de <http://earthcharterinaction.org/contenido/pages/Lea-la-Carta.html>
- La Carta de la Tierra Internacional. 2009. Guía para utilizar la Carta de la Tierra en la Educación (versión 1). Recuperado de http://www.earthcharterinaction.org/invent/images/uploads/EC_Education_Guide_2%20APRIL_2009_SPA.pdf.
- Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura [UNESCO] 2007. Los dos primeros años del Decenio de la Educación para el Desarrollo Sostenible (2005-2014). Paris: UNESCO.

Pérez-Asso, A., Genaro, J., & Garrido, O. 2009. Las Mariposas de Puerto Rico (Butterflies of Puerto Rico) (pp. 12-136). Puerto Rico: Editorial Cocuyo.

Secretaría Internacional de la Carta de la Tierra. 2008 a. Folleto Informativo de la Carta de la Tierra Internacional. Recuperado de <http://www.earthcharterinaction.org/invent/images/uploads/Handbook%20SPN.pdf>

Secretaría Internacional de la Carta de la Tierra. 2008 b. Experiencias Educativas con la carta de la Tierra. Recuperado de <http://www.earthcharterinaction.org/invent/images/uploads/Experiencias%20Educativas%20con%20la%20Carta%20de%20la%20Tierra.pdf>

Secretaría Internacional de la Carta de la Tierra. 2005 a. Educando para un Estilo de Vida Sostenible con la Carta de la Tierra: Guía para docentes de Educación Básica.

Recuperado de <http://www.earthcharterinaction.org/invent/images/uploads/Educando%20para%20un%20Estilo%20de%20Vida%20Sostenible.pdf>

Secretaría Internacional de la Carta de la Tierra. 2005 b. Llevando la sostenibilidad a las Aulas: Una guía de la Carta de la Tierra para Educadores. Recuperado de <http://www.earthcharterinaction.org/invent/images/uploads/ECTG%20%28Spanish%29.pdf>

Vilela, M., & Blaze, P. 2006). Historia y procedencia de la Carta de la Tierra. La Carta de la Tierra en Acción: Hacia un mundo sostenible (pp. 17-21). Ámsterdam, Los Países Bajos: Editorial Kit Publishers B.V.

Creative Earth Charter Challenge for Youth, A European Experience with the Earth Charter

Éva Kálmán and Howard Curtis

In a European Union Comenius Region Partnership project, Bournemouth Borough Council's Local Education Authority (England) and Eger's Small Region Multifunctional Municipality (Hungary) worked together. The project was funded by the European Union.

Schools involved: Avonbourne College (Bournemouth, UK), Andrassy Catholic Business Academy (Eger, Hungary) and Fignedy Primary School (Noszvaj, Hungary)

Partners: Earth Charter UK, Shadows Professional Development Ltd., Creative CliC, Bükk National Park Directorate, Városgondozás Eger Ltd.

Introduction

The aim of this project was to implement Earth Charter principles into the whole school curriculum and thereby develop students' skills to enable them to make responsible decisions to support sustainable development and find solutions to global problems. The main focus was on two of the four main Earth Charter (EC) principles: all forms of life are interconnected and everyone deserves equal opportunity.¹⁰ Avonbourne students and teachers were already familiar with the EC principles. However, for the Andrassy and Fignedy students and teachers they were completely new.

Avonbourne College was founded in 1908 and the Executive Head Teacher is Mrs. Debbie Godfrey-Phaure. It is part of the Avonbourne International Business and Enterprise Trust and became an Academy in 2012.

The Trust has almost 2,000 students in it with an age range of 11-18. In 2014, it opened its Primary school, making the age range 4-18. Avonbourne College is situated in Bournemouth on the south coast of England. Bournemouth was the first town in England to endorse the Earth Charter and has played a major role in encouraging sustainability in education. The College is renowned for its enterprise ethos and community spirit and has won awards at the National and local level for social enterprise activities. Its motto is 'Inspiring 21st Century Thinkers'.



The College holds this and its mission statement, which says that its students will grow into confident, courageous, and caring citizens, close to its heart. This is because it believes that all schools are educating for the future and as such this is a significant responsibility. The College aims to nurture the qualities of determination, curiosity, resilience, imagination, disciplined thinking, love of genuine debate, and a generosity of spirit in its students. Why? Because it knows that this is what will make students successful creators of a future world that is prosperous and happy and that embodies the principles of the Earth Charter.

10 Eva Kalman– Howard Curtis et al: CECCY booklet. Eger, 2013. p.1.

Andrassy Catholic Business Academy is located in Eger, Hungary, and its head teacher is Ms. Eva Rozman. The school's history goes back to 1921, and is rich in traditions. Keeping these traditions and watching the development of the world, the school is constantly aiming for innovations. As a community, Andrassy is open to new educational experiences. Being a Catholic school, the values are based on the values of Christianity. The school respects the students' personalities, and faculty and staff pay close attention to finding and developing their special skills. Andrassy educates its students for freedom while respecting human values. The school's aim is to teach students to take responsibility for their actions. Andrassy focuses on co-operation instead of individualism because we think this is a crucial part of character development. Andrassy hopes that its students will be decent and responsible citizens, who are capable of self-development, are confident enough to stand up for themselves, and are brave enough to live their dreams.

The school believes that adults are responsible for maintaining the quality of life on Earth and its ecosystems for their children at a standard of quality they inherited from their grandparents. By Earth, the faculty and staff at Andrassy do not only mean the natural wonders of the planet, but also products made by humans in accordance and balance with nature, and also the possibility of a harmonious coexistence of different peoples and nations. Teachers have privileged roles to educate not only their own children but the upcoming generation of a country. They set good examples with their personalities. Through the subjects, they teach and encourage young people to respect life and be conscientious citizens. 80 % of Andrassy students are from nearby villages, many of which belong to areas heavily stricken by unemployment. Motivating these students needs imagination and creativity. However, Andrassy students were ready to initiate and participate in programmes meant to raise awareness of these issues. They organized a "Green Day", a cleaning day; they collected plastic bottles and decorated classrooms to introduce the cultures of different nations. They painted human figures depicting the traditional folk costumes of various countries. On Earth Day these were used to adorn the outside walls of the school building. In the last two years, the school has started thinking more consciously about how to contribute to fulfilling the noble principles of the Earth Charter. Andrassy community members are grateful to all the committed and enthusiastic Hungarian and English colleagues and partners, who have taken part in this wonderful project.¹¹

Implementation

Among all three schools, a group of teachers formed a team and began to collaborate. First, the team structured a questionnaire to see what skills and knowledge the students already had about the issues covered by the EC principles. This revealed the first problem. The issues Hungarian students were not very familiar with differed from those of the English students. Examples of these differences included environmental problems such as how to save energy, selective waste collection, etc. So, after a section of common questions, students from both countries were asked questions on subjects that the teachers regarded as important and relevant issues in the given country.

The second task was examining the curricula to look for matches with the EC principles, so that the team could concentrate on the areas where no references were found. Thirdly, a table of skills evaluation was structured. It was a very difficult task for the Hungarian teachers, as this kind of evaluation was not in their teacher's training programme. Then, the team planned to find ways in which project partners could help to fill the skills gaps.

11 Eva Kalman– Howard Curtis et al: CECCY booklet. Eger. 2013. pp. 4-11 (Introduction of schools, and a speech by Ms Rozman)

To mention some examples (without listing all of the activities), the Bükk National Park Directorate offered lectures and forest school experience. Varosgondozas Ltd. (responsible for the maintenance of public utilities – processing waste, park maintenance, etc.) offered a competition on selective rubbish collection and the manager of the company was the jury leader, adding considerably to the students' existing experience.

Finally, students planned projects around the EC issues. Another problem was the new centralized curriculum in Hungary which allows only 10% of teaching time for what the teachers decide to teach. The Hungarian teachers had to be very careful to find spaces in the curriculum where EC principles could fit.

To complete everything the team had planned, the teachers had to meet several times. The Hungarian teachers studied the Earth Charter and learned about the principles. With the help of the English colleagues and especially with the inspiration given by Mr. Jeffrey Newman (Earth Charter UK), slowly and gradually all members of the Hungarian team understood the principles and Andrassy endorsed the EC.

For the students, an adapted version was created. All classes displayed the EC principles on the classroom walls and were given a country, which either in a positive or in a negative way an EC principle could be referred to. These references were demonstrated in the classrooms and were spoken about in class. Teachers of both countries organized demonstration lessons in which they showed their colleagues how EC principles could be used as basis of a lesson even if it is in Chemistry or Religious Education. Several out-of-class activities were initiated by the students including Green Day, Peace One Day, and EC day. On these days, the communities of all schools wore green to show awareness, formed a huge peace sign to show their concerns about war, and constructed a Rubik's cube to display how EC principles are being violated in their respective environments.

During the two years, different methods were used including: questionnaires; evaluations; lectures; visiting real companies; meeting working people; taking photos; watching films; and making lesson plans using Pictures of Success¹². As a result of this cooperation, a Creative Earth Charter Curriculum for Youth (CECCY) booklet was created to serve as a guide for teachers as to how to use EC principles in their lessons.



Lessons learned



For Avonbourne College students the project has had a major impact in that the EC is now the focus of lessons in a wide range of subjects and especially in their pastoral tutor time lessons. Each month an EC principle is chosen and students learn about it; they then prepare presentations on it for House Assemblies and they can win achievement points for demonstrating their knowledge of the particular principle. In this way the entire EC is now covered and every student in the College has detailed knowledge of the principles.

Jeffrey Newman stated, "The Earth Charter has one over-riding hope: a just, sustainable and peaceful global society. It recognizes that it is because we so often view disjointed elements that many of the most embedded issues of our times emerge. The CECCY

Project was a way to test if young people and their teachers could begin to grasp those 16 inter-related principles and 61 sub-principles and could provide an intellectually coherent way of thinking and acting that could bring fundamental changes both to them and to our two different societies, in England and Hungary.

At the root were the three themes that are of great importance both to young people and to our world at this time: that we need to find ways to live sustainably; that we must live in justice; and that increasingly we live in a global society. However, there was one other necessary consideration, that the teaching of the CECCY Project should be academically irreproachable, providing possible ways of thinking and understanding, but not as propaganda.

My role has been as an advisor and consultant, able to bring to bear on the Project knowledge of the Charter, its history, and current global developments. The success of the Project has far exceeded my expectations. Not only have the two Schools demonstrated that the Charter has value and meaning in every part of the curriculum and that it can bring about coherence in approach, but the imaginative involvement of business and other partners, in issues such as waste and recycling, tourism, and environment, has been of major importance. This has, for example, provided for young people greater understanding of their locality, of potential involvement, and of employment. The greatest joy of the Project is how much we all have to learn and that far from being finished, this may merely be one stage in the development of a long term relationship."¹³

Debbie Godfrey-Phaure offered the following, "The Project has far surpassed the initial objective of developing and producing a curriculum framework which promotes creative and innovative attitudes to sustainable development. As with most European projects the additional 'golden' benefit has been the formation of productive and generous relationships between staff and students in two different countries. The opportunity to learn from other European colleagues and explore cultural contexts is in itself the very essence of the Earth Charter in that it produces harmonious relationships. Moreover we are united in the concept of developing young minds so they take the duty of European citizenship seriously; exploring it as a means to promote a vision of a sustainable life locally, nationally, regionally, and globally. The Project has been successful in raising young people's awareness of environmental and human rights issues. The evidence has been observed in several extra-curricular initiatives inaugurated by the young people themselves.

It has also been evident in the assessment framework and the outcomes therein. Lessons observed demonstrate the development of appropriate pedagogical approaches to the Charter, content informed by the principles, and the students' ability to understand and apply their learning. We have been pleased to note that their learning experiences enhance and develop their personal knowledge and within them the skills needed to create innovative solutions to world issues. When we began the project we were also anxious that we develop entrepreneurial skills in our students so that they felt galvanized into contributing to their local and global community, thus reducing the need for services that are no longer sustainable. The Project coordination is excited by the ways in which the students have interpreted this. Examples include working with Waste Recycling Plants, introducing energy saving measures, and campaigning for the incorporation of Earth Charter principles into the Millennium Development Goals. Local businesses have been particularly struck by how committed the students are and the project has attracted the involvement of global businesses such as 'Lush' in the UK. In addition, we have been fortunate to be involved in the 'Pictures of Success' project spearheaded by CarbonSense, a company committed to sustainable solutions that is eager to be involved in the next stage of the project. The next stage will be, we hope, an application for a Multilateral Comenius project. We already have additional partners interested in joining us. One example is in Costa Rica, the home of the Earth Charter! We are hoping to develop training modules for teachers so that the initiative gains Europe-wide success and enjoys accreditation."¹⁴

13 Eva Kalman – Howard Curtis et al: CECCY Booklet. Eger. 2013. pp. 2-3 (Speech by Mr Jeffrey Newman)

14 Eva Kalman – Howard Curtis et al: CECCY Booklet. Eger. 2013. pp. 4-5 (Speech by MrsGodfrey-Phaure)

Finally, here are some of the students' and teachers' opinions:

"Nowadays, when we are facing global environmental problems and issues, it is extremely vital to teach future generations how they will be able to solve those menacing problems." Ms. Krisztina Hajdúné Molnár, Andrassy Catholic Business Academy

"I think it is important to follow the Earth Charter because it makes the world a better place for everyone." Phoebe G., Avonbourne College

"It is important to speak about pets because we have to treat them very carefully." – Nóra Csábi, Figedy Primary School, Noszvaj

"I think it is important to learn about the Earth Charter because we need a good understanding on how to keep our earth healthy and to make it a better place to live." Laura W., Avonbourne College

"I liked the lesson as we worked in teams, the atmosphere was good, and everybody enjoyed what they were doing. We made a mock-up, which had a positive and a negative side. On the negative side we showed water pollution, on the positive side we presented what the Earth would be like without water pollution." Csenge Fodor, Figedy Primary School, Noszvaj

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Links:

<http://ekszi.hu/index.php/palyazataink/ceccyfoeldcharta> - Andrassy's official website. All materials are only in Hungarian.
<http://www.avonbournetrust.org> – Official website of Avonbourne College
<https://sites.google.com/site/ceccyproject/home> - official website of the project. All photos, the poster and the CECCY Booklet can be publicly used. All materials are in English.
http://issuu.com/tka_konyvtar/docs/teljes_issuu - official information about the Award in English
<http://english.tpf.hu/> - Official website of Tempus Public Foundation in English

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The Earth Charter Project in Schools: Centro Studi per la Pace Onlus, Italy

Cristina Broseghini

Introduction

Centro Studi per la Pace Onlus (The Center for the Study of Peace, CSPACE) is a non-profit organization founded on May 3rd, 2010 in Demonte, a small mountain town in the province of Cuneo, Italy. It was set up by five friends who decided it was time to stop talking and to start taking action. After lengthy contemplation, the founding Committee resolved to embark on two important projects: a nutritional project in Africa; and a project to be implemented in Italian schools that would bring the Earth Charter to the attention of young students.

The two projects are essentially closely linked, because the right for all to a healthy future is stated clearly in the Earth Charter. The foundation document of CSPACE includes the Earth Charter principles, and, all of the sixteen principles in the Earth Charter were already on the list of possible activities for the organization.

CSPACE identified education as a key method to foster cultural growth among future citizens of the world, and, accordingly, the project for the schools entailed internalizing the principles of the Earth Charter so that each individual can take responsibility for the future of the planet and be motivated to create change. CSPACE aims to take concrete action through the idea of “humanitarian competition” expressed by the Japanese educator Tsunesaburo Makiguchi: “What is important is to set aside egotistical motives, striving to protect and improve not only one’s own life, but also the lives of others. One should do things for the sake of others, because by benefitting others, we benefit ourselves.”



Implementation

The project in Italian schools had two main goals: the first was for the schools and the local authorities to endorse the Earth Charter; the second was educational, and entailed endorsing, acknowledging, internalizing, and adopting the Earth Charter principles. The project was presented to the teachers in person, and the presentation revealed that there was a lack of knowledge of the Earth Charter and, as a consequence, a deficiency from an educational standpoint of how it was related to school curricula. The starting conditions weren't all that easy either: there was some concern on the teachers' part as to whether or not they would be able to include this project in the school programmes; a couple of classes were considered “difficult to manage”; in other classes, the relationship between the teacher and the students wasn't optimal; and there was also a trust issue in organizations that propose projects of this kind, due to some negative experiences in the past.

An important aspect to be taken into consideration is that many people in these small mountain areas, fortunately not all, nourish feelings of mistrust and narrow-mindedness when faced with novelty and change. This attitude was apparent first and foremost among the local educational authorities, who were minimally receptive and not at all proactive. But, in spite of these challenges, through heart-to-heart dialogue, confrontation, and reassurance about the total support of CSPACE, the project finally took off.

The teachers of four local secondary schools were contacted, out of which seven classes, for a total of 180 students, took part in the project. The students were asked to develop activities, musical, literary, graphic, artistic, or digital, anything that would elicit the creativity, imagination, innovation, and potential from each single student.

Regarding sustainability topics and information, CSPACE published all the necessary educational materials on its website for teachers and students to download, thus limiting the use of paper.

Throughout the process, members of CSPACE took great care in monitoring the progress of the projects, and offered their complete availability to support the classes.

This project aroused the interest of a number of other people in the community, so much so that they wanted to collaborate in some way and share CSPACE's mission, offering their personal skills and talents. These people included several educators, a talented amateur photographer and video producer, an information technology specialist, and a native English-speaking translator and interpreter who volunteered to translate the CSPACE website and other documents related to the Earth Charter. These people are now official members of the organization and have offered to volunteer their expertise for future CSPACE projects, both in Italy and in Africa. This has been another success of this Earth Charter project, making it visible and attracting more people to work towards its goals.



A panel of six people was selected to judge the students' creations and choose the winners of cash prizes (amounting to a total of 1,500 Euros that came from donations and fund-raising activities carried out by CSPACE). The judges were all from the artistic field: an editor/writer; two painters; a director of short films; an actress/director; and a musician. All of the judges were honored to be able to contribute to such a meaningful and inspiring initiative.

To add prestige and excitement to the project, Stefania Belmondo, Olympic Nordic Skiing Champion, who lives in Demonte, took part in the award ceremony and announced the winning classes. The students worked intensely in a serious and conscious manner from October 2013 to March 2014, inventing different creations in different styles, like:



- a calendar rich in food for thought in the form of poetry and ideas on the future of our planet;
- a video newscast giving detailed insights into the Earth Charter;
- a scale model representing a city, one part healthy and the other unhealthy, accompanied by a fast-paced video;
- an e-book on hunting and fishing;
- a video on the hydro-geological risks to the area;
- drawings and reflections.

The works, together with photographs of the scale model, were shared via the internet. The comments made by the judges were highly encouraging:

"Absolutely admirable, your youth is pure dynamism. You convey optimism for the future... You will be magnificent citizens of the world... You have transmitted information on how to improve our daily lives..."

The collaboration among the students enabled them to achieve lofty goals: the two winning classes had beforehand been described as being "out of control, difficult to manage, disrespectful" towards the school as an institution as well as to the teachers. A certain amount of conflict and misunderstanding arose at first due to the presence of students from different cultures, thanks to misconceptions and lack of knowledge, considering that multiculturalism in Italy is quite recent, especially in our area. Nonetheless, addressing the

issues related to the project leveled the differences superbly, creating windows instead of walls, highlighting features that different cultures have in common.

To the great surprise of the teachers, the children managed to overcome cultural and ideological barriers with their impressive artistic creations. In one school, the students themselves realized they had formed a group bond, even before their creation was completed, and the work is what represented the group. In another, it was the teachers who found unity of purpose, thanks to the multidisciplinary approach that made it possible to carry out the project. In some cases, the Earth Charter was read before

getting down to planning the project, although in one class the students first expressed their thoughts and considerations on the problems concerning the planet and only then went on to read the Earth Charter, noting that they had foreseen the issues addressed in the Charter. In any case, the teachers were given free rein to work on the projects as they preferred.

No sooner was the award ceremony over, the teachers and students asked us if there would be another project. "Of course", we replied immediately. They wanted to know which issue would be addressed next, and by wondering were already looking to the future.

Lessons Learned

Having such an enthusiastic response and reactions after the activities that we have organized with the Earth Charter, and knowing that teachers and students were genuinely interested in doing more projects with us is an indication that we have accomplished our goals successfully.

These students' comments show the impact of the Earth Charter and the projects that we have undertaken in schools, and are for us inspiration to continue with our work in schools and high schools:

"This Earth Charter experience has taught us to respect the environment and to give value to everything nature gives us; it has brought the class together. We were really excited about taking part in this initiative right from the start, even if at the time we didn't know if and how many obstacles might hinder our work. But we stood by each other and worked together tackling every difficulty." (Alice)

"The Earth Charter principles will help us to safeguard the environment and to live in a fairer and more peaceful world. This project has made us understand how precious nature is and that if we destroy it, we won't be able to recreate it!" (Giacomo)

"Thanks to the Earth Charter, I've understood the importance of biodiversity. I've learned to save energy and to recycle. Most important of all, I've understood that I have to do my part in order to have a better and more peaceful world." (Laura)

"After having read the Earth Charter, and after having done class work on biodiversity and biological farming, now I'm more careful about what I buy at the supermarket and about what I eat. I've started growing fruits and vegetables in our garden so that I don't risk catching diseases caused by pesticides, herbicides, and other dangerous substances." (Alessandro)

"This experience has meant a lot to me; we've reflected on the environment, on biodiversity, in an enjoyable and engaging way. I've never done anything like this before! The project has taught us to respect the environment, not only for our children but also for the generations after them." (Jin Bei)

And a teacher said: "Thank you so much for this meaningful experience, which I hope will leave a deep mark in the hearts of my "little rascals". I wish you all the best for your important work." (Valeria)



As Nelson Mandela pointed out:

"Education is the most powerful weapon you can use to change the world".

We have decided to invite primary, secondary, and high schools to participate in our next project which will focus on Principle 16 of the Earth Charter: "Promote a culture of tolerance, nonviolence and peace."

a. Encourage and support mutual understanding, solidarity, and cooperation among all peoples and within and among nations.

b. Implement comprehensive strategies to prevent violent conflict and use collaborative problem solving to manage and resolve environmental conflicts and other disputes.

- c. Demilitarize national security systems to the level of a non-provocative defense posture, and convert military resources to peaceful purposes, including ecological restoration.
- d. Eliminate nuclear, biological, and toxic weapons and other weapons of mass destruction.
- e. Ensure that the use of orbital and outer space supports environmental protection and peace.
- f. Recognize that peace is the wholeness created by right relationships with oneself, other persons, other cultures, other life, Earth, and the larger whole of which all are a part.

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Implementing the Whole School Approach Using the Earth Charter: A story from the Heart of Borneo Island

Stien Johanna Matakupan

Introduction

Over the last four years, there has been a significant change in Mekartani, a small village in the Katingan District, Central Kalimantan province, Indonesia. The behavior of the children has improved. Very rarely do villagers find them fighting and the children also show that they really care for their environment.

One of the residents of the village said, "As a leader in this village, I noticed that the child delinquency rate in my village decreased over the last four years. I rarely find them fighting. In the playground, they tend to play only safe games. I am also impressed with the change in their attitudes. Mekartani produces lots of local fruits, pineapple, jackfruits, and rambutans are some of them. When those fruits are in season, the kids make rujak (Indonesian fruit salads) together. I witnessed that they always wash their hands before eating. They also have the good habit to collect the garbage and clean up their play ground before they leave the area. This didn't happen in the past."

Another parent added that, "After school hours, my son loves to swim and play in the river with his classmates. I observed that the kids know exactly the time to stop swimming and go to mosque to study the Koran. They have good time management."

Those are comments from Mekartani villagers that describe the attitude of students of the Mekartani Elementary School. The villagers believe that this attitude has come about because of the improvement in the school programme and they feel very positive towards the school programme and are committed to supporting all school activities. Mulyono, the Mekartani Elementary school principal said that he did it because he wants to make a difference. "We have to take care of the Kalimantan environment. We can do something. We live in a very remote area, but we are not left behind," he said.

On the eastern side of Kalimantan, far away from the city buzz, Jambuk Makmur 10 Elementary School in the West Kutai District, made a significant change in their school system. They changed the way they were teaching, using the school garden and composting area as learning resources and developing a school entrepreneurship programme. Over the last four years, they succeeded in forming partnerships with various stakeholders and they established a community learning center called "Rumah Belajar" or "House of Learning" for all farmers who live in Jambuk Makmur village.

To get to Kalimantan villages, one could fly from Jakarta to Palangkaraya, drive about eight hours from Palangkaraya to Mendawai, then continue to Mekartani by boat for about five hour. To reach Jambuk Makmur, the option is driving 465 kilometers (about 7-8 hours) from the nearest airport in Balikpapan city. The road is damaged in some areas but safe. The alternate ways are by water taxi for about 15 hours or by small airplane which is expensive. Both villages are located deep within Kalimantan, in the heart of Borneo.



Students in East Kalimantan

The questions are what factors drive the behavioral change in children of Mekartani village? What factors influenced Mekartani and Jambuk Makmur elementary schools to reorient their school system based on ethical principles for human beings as well as educating their students to respect life? Using data collected through focus group discussion, interview and observation, this story is intended to answer those questions.

The Context

With a landmass of about 748,168 square kilometers, Borneo is widely recognized as the third-largest island in the world after Greenland and New Guinea (Largest islands of the world, 2014). The island is in the equatorial region of the Pacific Ocean. Mario Rautner, in his report on the status of the forest, wildlife, and related threats on the island of Borneo, named Borneo as a land of plenty. The flora and fauna on Borneo are extremely varied.

The island is famous as a habitat for the orangutan (*Pongo Pygmaeus*), sun bear (*Helarctos malayanos*), and Proboscis monkey (Mario Rautner, 2005). Borneo is home to three nations: Brunei Darussalam in the north-west; Malaysia on the northwest coast and north-eastern tip of Borneo; and the largest part of Borneo belongs to Indonesia and is called Kalimantan. Indonesia divides its part into four provinces, which are Central Kalimantan, West Kalimantan, East Kalimantan, and South Kalimantan.

Despite the richness of biodiversity on Borneo, it is widely known that the island is slowly losing its biodiversity year by year. For example, the World Wide Fund for Nature (WWF) reported that 56%, or approximately 29,000 square kilometers, of protected rainforest in Kalimantan were cut down between 1985 and 2001 for oil palm plantations and land conversion (Mario Rautner, 2005). In 2007, the government of Indonesia, Brunei Darussalam, and Malaysia committed to working together to protect biodiversity loss, ensure the effective management of forest resources, implement conservation of a network of protected areas and productive forests, and foster other sustainable land-uses within an area that the three respective countries designate as the "Heart of Borneo (HoB)". The programme is implemented in partnership with governments and all local key stakeholders.



Heart of Borneo area. Ref. http://assets.panda.org/img/original/borneo_administrative_map_wiki.png

Implementation

As part of its commitment and vision for a sustainable future, WWF has been directly working on the HoB since 2005. One of the programme is Education for Sustainable Development (ESD) in formal education, particularly in elementary schools. The ESD programme ran from 2009-2014, and there were 10 districts in the four Kalimantan provinces involved. Within those provinces, the ten districts included were Katingan, Murung Raya, Gunung Mas, Kutai Barat, Sintang, Melawi, Barito Utara, Kapuas Hulu, and Nunukan dan Malinau. 32 schools participated in the programme. The programme was implemented in partnership with local government and stakeholders in the four provinces. The objective was to reorient schools and turn them towards education for sustainable development, to develop knowledge, skills, values, and attitudes for a sustainable future. WWF believes that ESD should be regarded as an overall perspective and an ongoing process in a changing world. The long-term goal is that we can live as good a life as possible without harming other people, nature, or society in both time and space (Germund Sellgren, 2010).

Six important cornerstones have been used as creative bases for the programme. They are: (1) lifelong learning; (2) learners in focus; (3) a holistic approach; (4) democratic work methods; (5) reflection; and (6) different perspectives (Germund Sellgren, 2010). With the principles of togetherness and active participation, these schools were guided to integrate ESD in their development plans and work methods. The programme provided workshops and mentorship to the schools.

For programme sustainability, in each district, WWF also selected one school and worked with them to develop them into a model school for ESD implementation in the area. It is hoped that this school will later disseminate all knowledge and skills they have to other schools in their particular area. Mekartani and Jambuk Makmur 10 Elementary schools are examples of these model schools. Mekartani Elementary school is a model for the Katingan District in Central Kalimantan, while Jambuk Makmur 10 Elementary School is a model for Kutai Barat District in East Kalimantan.

Teacher Training

The quality of education is closely related to the quality of teachers. In Indonesia, the quality of teachers has been a great concern for decades. Statistics from the National Ministry of Education indicate that academic qualifications of Indonesian teachers are relatively low compared to teachers from neighboring countries. Most Indonesian teachers have a D2 (two year diploma), and more than 60 percent of the total 2.78 million teachers have not completed a bachelor degree. By early 2006, more than 80 percent of the primary school teachers did not have a college education. At present, the Ministry of Education and Culture is working with many stakeholders to improve teacher capacity. A teacher certification has also been established (Fasli Jallal et al, 2006). ESD in the HoB directly supports the efforts made by the government to improve teacher quality. Data from the field proved that the quality of teachers who participated in the programme has improved over the past four years. Here are some good examples:

a. Holistic approach

Besides environmental issues, there have been inter-ethnic conflicts in Kalimantan. During the programme, teachers learned how to infuse social, economic, and environmental issues into their subjects. This brought positive impacts to the students as 67% students in West Kalimantan, for instance, said that they learn tolerance and respect for other cultures from their teacher. "Inter-ethnic conflict should not happen in Kalimantan anymore," said a fifth-grade student. "There are differences everywhere, and we should respect each other" added a sixth-grade student. Various local issues have been introduced to the classroom like deforestation, local culture in changing agriculture, indigenous cultures, and endangered species like the orangutan. Teachers also spent time discussing their teaching methodologies with their colleagues. One fourth-grade teacher from Mekartani Elementary school said that, "Maybe we haven't managed to produce good quality lesson plans because in the past we rarely revised our lesson plans. But now we often sit together and discuss our lessons in terms of economy, society, and the environment. We even had a heated discussion and debate on it". They eventually wrote and published their learning experiences on the Pustaka Borneo website: <http://www.pustakaborneo.com>

b. Learners in focus and democratic work methods

60% of students in Central Kalimantan, and 58% of students in East Kalimantan said that they always had a group discussion and did various group work in their lessons. 58% of students in West Kalimantan shared that they frequently got the chance to work in groups. From the interview, one teacher said that group work gave them the chance to teach students about democracy and for the students to learn about rights and responsibilities. It also helps students to give their opinions, respect others, and make conclusions. The places of learning also varied as classes went to rivers, lakes, or other ecosystems for study, practice gardening, composting, and enjoying the yields. In school, students also learned about global issues and linked them to the issues in their local area.

c. School Culture and partnership

All teachers who participated in the programme claimed that the programme shifted their paradigm on school systems and learning processes. Teachers in Mekartani and Jambuk Makmur 10 Elementary schools now spend time to reflect and brainstorm when designing the annual school plan. It had never happened in the past. Since the programme is planned together, it built a sense of ownership among the faculty and gave them the impetus to monitor the programme and gradually improve its quality. The schools also partnered with many stakeholders in their local area. Jambuk Makmur Elementary school even became a hub for various stakeholders to collaborate.

When the school was setting up their gardening programme, parents and other villagers came and taught children how to prepare planting beds, as well as how to plant the garden. The school celebrated its harvests and learning experience by cooking together and inviting all the people who helped build the garden. The school library also serves as a community learning center. There are 10 community learning centers established in 10 districts. Rumah Belajar (Learning Center) Lentera Hayati located in the Jambuk Makmur 10 Elementary school is one of them. Here, farmers in Jambuk Makmur regularly gathered to learn about eco-farming. Moreover, the community learning center drives villagers in Mekartani to make their village an eco-village.

Since 2013, most teachers from the model schools have been chosen by their local district level education offices to teach teachers from other schools or become school supervisors. It's a golden opportunity for teachers' professional development. "In 2006, I couldn't imagine that my school would transform into a good school like this" said one teacher.



Students presentation

It can be said that Earth Charter Principle 1 - Respect earth and life in all its diversity, Principle 2 - Care for the community of life with understanding, compassion and love, and Principle 4 - Secure Earth's bounty and beauty for present and future generations, were focused on heavily during the programme. The school entrepreneurship programme also lead school communities to eradicate poverty and promote human development in an equitable and sustainable manner, and these are related to Principles 9 and 10 of the Earth Charter.

The Earth Charter principle number 3, which is "Build democratic societies that are just, participatory, sustainable, and peaceful" has already clearly been shown in Mekartani and Jambuk Makmur villages as well. The culture of democracy they have built has helped to motivate the community to protect and restore the integrity of Earth's ecological systems, to live their lives respecting the environment, and to make their village into an eco-village. The culture of tolerance, non- violence and peace in principle 16 has also been promoted. The rate of youth delinquency over the last four years, which was mentioned by the head of Mekartani village above, proved that the school succeeded in making a difference.

Lessons Learned

After four years of implementing the whole school approach in the HoB, it can be concluded that Earth Charter values were internalized during the course of the programme. The impact was not only felt within the school itself, but also in the wider community. The change in students' attitude, the atmosphere of democracy, the concern to local and global issues, the effort to take local action, and the commitment for future development are improvements that are important to highlight. After the programme, school communities are better equipped to create new opportunities to build a democratic and humane world. However, for the next steps, it will be crucial to maintain these achievements and improve key teachers' capacities, as well as empower village leaders with the strategies and methods to disseminate the programme and assist other schools.

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References:

Jalal, Fasri et al. 2010. Teacher Certification in Indonesia: A Strategy for Teacher Quality Improvement. Jakarta: Ministry of National Education

Largest islands of the world. (n.d.). Largest islands of the world. Retrieved July 31, 2014, from <http://www.worldatlas.com/aatlas/infopage/islands.htm>

Rautner, Mario. 2005. Borneo: Treasure Island at Risk. Status of Forest, Wildlife and Related Threats on the Island of Borneo. Frankfurt: WWF Germany

Sellgren, Germund. 2010. Learning Sustainable Way. WWF Sweden.

Note: World Wide Fund for Nature (WWF) started working in Indonesia as a Programme Office of WWF International in the early 1960's, under the auspices of the Ministry of Forestry. In April 1998, the Indonesian Programme office of WWF-International in Indonesia was transformed into WWF-Indonesia and legalized as an Indonesian organization with foundation status. With this change, WWF-Indonesia became a National Organization within the [WWF Global Network](#). Today, WWF-Indonesia works in 25 sites, spread throughout 17 provinces in Indonesia.

Promoting sustainable schools through the Earth Charter: The Experience with Eco-schools in Venezuela

Rosa Maria Chacon, Nila Pellegrini, Juana Pujiaco

We must be the change that we want to see in the world. For this, it is necessary to teach how to take care of our planet, because what is not loved is not cared for and what is not known is not loved.
(VUA, 2014)

Introduction

Planet Earth's future lies in the hands of today's youth. Principles such as care and respect for the Earth must be taught from an early age inside and outside of the classroom. Communication and training are the basic requirements for achieving coexistence between human beings and nature. Sustainable development entails the construction of more eco-friendly human settlements with respect for all life forms throughout the community with attentiveness to their cultural characteristics. That is the premise for the project: "Model for Eco-Schools, Educating for Sustainable Development". This project takes into consideration the Venezuelan's educational framework, where the Earth Charter has been incorporated as an ethical foundation for educating youth about sustainable development.

This article presents the experience of a project implemented by the Urban Life and Environment Research Group of the Dean of Investigation and Development of the University of Simon Bolivar (VUA-USB) in Caracas, Venezuela. This research group

developed educational programmes that respond to UNESCO's call to promote values and attitudes on sustainability. As a result, the Earth Charter's principles were incorporated as a component of the schools' current curriculum.

In 2011, VUA-USB created the Eco-Schools Model for Venezuela with the aim of promoting values and principles for sustainability by expanding knowledge and developing abilities and activities in a comprehensive manner within a participatory process (VUA, 2011).

The initial framework was developed in response to a group member's concern for maintaining values and guiding youth on a positive path; an abundance of youth are becoming disoriented and developing negative behaviors at an early age, which leads to delinquency. Thus, the model that is currently implemented in two schools in the State of Miranda in Caracas, Venezuela was developed with the intention of educating youth and keeping children out of trouble. Support of various multilateral organizations, such as NGOs, small donation programmes of the UN (PPD-PNUD), and the Development Bank of Latin America (Corporacion Andina de Foment, CAF) contributed to the funding and theoretical framework for the project.

One of the participating schools was the Educational Unit of the University Simon Bolivar (UEUSB). UEUSB is a private school located in Sartenejas Valley in the Municipality of Baruta, which is a transitional area composed of urban and rural development with medium-low socio-economic levels. The University of Simon Bolivar receives an average of four hundred students a year that ranges from pre-school through twelfth grade. Currently, there are forty-three permanent teachers and six full-time employees in the school. Roughly two hundred and eighty families send their children to UEUSB. The other participatory school is the State Educational Unit Abillio Reyes Ochoa (UEEARO). UEEARO is a public school located in La Mata sector of the Municipality of El Hatillo. Currently, the area is inhabited by agricultural land that belongs to families on a low socio-economic level. Five hundred and fifty students ranging from preschool to high school currently attend UEEARO. It is composed of thirty-one teachers, four full time employees, and students from two hundred and seventy families.



Implementation

Five documents were utilized for the initial development phases of the school model:

1. Chapter 36 of Agenda 21 aims to improve socio-environmental conditions in the schools and their surrounding environment.
2. The Eco-School's programme led by the Foundation for Environmental Education (FEE), which promotes environmental awareness and education around the world.
3. The Earth Charter as the ethical framework, it contains 16 principles and 61 sub-principles that stem from four central pillars: respect and care for the community of life, ecological integrity, social/economic justice and democracy, non-violence and peace.
4. The UN's Decade on Education for Sustainable Development (2005-2014), whose objective is to build a just society, a better world and a more viable future thanks to the access of education and its benefits.
5. Legal framework, national guidelines and Venezuelan history were brought forward to provide direction and guidelines in the local context.

The methodological process adopts a participatory approach regarding the interaction of schools, the environment and society through discourse and action. A summary of the methodological process steps is as follows:

1. The establishment of an Environmental Sustainability Committee (III phase).
2. A situation analysis to learn about the strengths and weaknesses of the schools. Consecutively, a vision of the desired future was established under the various perspectives of students, professors and the directive body. In this exercise, participants envisioned their schools as models that considered respect for the environment, societal and cultural aspects (step 4).
3. Initial behavioral codes were established to orient differing forms of action throughout the community to achieve sustainable community attitudes (steps 4 & 5).
4. Development of environmental educational seminars on topics such as climate change, education for sustainable development, risk factors, solid waste management, energy use, water management and the introduction of the Earth Charter.

Through an analytical and reflective process, we concluded that the "Earth Charter" offers a unique and transformative approach for education for sustainability. The Earth Charter is a framework grounded on principles and values that serve as modifiers of the traditional approach to environmental issues and education. Furthermore, the Earth Charter stresses the importance of a fully participatory holistic approach, which has allowed VUA-USB to promote the change of values and attitudes of the youth despite the hostile environment that they are compelled to live in.



Reference documents and education materials

The VUA-USB group implements the following activities utilizing the Earth Charter's principles to help clarify the education's role on building more sustainable societies:

Activity 1: Introducing the Earth Charter (45 minutes): Lecture on the Earth Charter for school faculty members and high school students. It presents the origins and content of the Charter.

Activity 2: The Earth Charter as ethical framework for education (60 minutes):

Target groups are fifth and sixth grade students, high school students and teachers. The session aims at raising awareness on the importance of having a sustainable life based on the values and principles of the Earth Charter. An icebreaker activity during the session involved choosing words such as justice, peace, democracy, education, environment, solidarity, Earth, ecology, citizenry, consciousness, equity, respect and ethics. Participants were then asked to choose a word that spoke to them. As a result, a conversation was initiated regarding the words' meaning, connotations and their role in their lives. Students and professors then discussed their relation to the Earth Charter, the importance of teamwork, the basic knowledge of values that facilitate positive change in society, ecological integrity for the sustainability of social life, economic justice, and the search for building a sustainable, non-violent and peaceful society.

Activity 3: The Earth Charter for kids (45 minutes). A session for preschool through second grade. A short video and an audio-visual presentation on "Why an Earth Charter?" were introduced. Materials for painting and motivating messages were provided to encourage individual thought and expression.

Activity 4: Values cartoons (40 minutes). The target group were students of grades three through six. Two videos were presented that explained the Earth Charter's principles, which were later expanded upon by the VUA group. The cartoons aim at achieving full participation of the students in the identification of characters awash with messages and symbolism. A hands-on activity was then carried out that asks the participants to make drawings that represent the Earth Charter's principles, and the way in which the principles can be applied in daily life.

The project in these schools concluded with the creation of posters that represented what participants learned.

Results

Overall, students expressed a deep interest in learning, particularly those in grades pre-k through five. These students demonstrated their own knowledge of current environmental issues, affirming their duty and engagement in protecting Earth. Children under six years of age expressed a necessity for working with images and videos that presented environmental issues to conclude, "what should be" in the face of environmental and societal issues. Participants over six years of age, given their abilities to read and write, were able to interpret directives and rules more clearly, which allowed space for analysis and reflection on the motivating principles of the Earth Charter. With the oldest students and faculty members it was important to make extra efforts to motivate them so they could learn and unlearn some environmental practices. Nonetheless, positive behavioral changes were observed regarding water conservation, energy consumption, respect for colleagues, and interest in the participation of community activities.



Students' posters

Lessons learned

We recognized that learning occurs while actively participating in the creation of viable solutions that were formulated in accordance with age. Students were initially lacking the necessary background to engage in environmental discourse. However, a deep interest was encountered while addressing environmental issues amongst students throughout the various seminar groups. On the contrary, we perceived a lack of interest in addressing and discussing environmental issues amongst professors and the oldest students; this affected their interest in proposing ideas and participating in bringing about solutions. In this sense, we think that the implementation of training programmes for environmental educators and instructors using the Earth Charter is crucial to carry out successful environmental education programmes.

From the activities carried out in both schools, we conclude that in order to incorporate sustainability values in education it is important to link students' everyday actions with what is taught in class. When we tried to promote the Earth Charter's principles without linking them with the participants' local context we failed to convince students and teachers to bring about changes in their behavior.

Undoubtedly, is it not sufficient to promote the Earth Charter's sustainability values and principles solely with argumentation; it is essential to find the right way to transfer these values and principles in the classroom, which is by far the largest challenge (VUA, 2011).

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References

Earth Charter International Secretariat. ¿Qué es la Carta de la Tierra? Downloaded in 2008 from: <http://www.iepe.org/cartadelatierra/queeslacarta.htm>

SEMARNAT, Federal Government of Mexican United States. 2008. Experiencias Educativas con la Carta de la Tierra. Vivir Mejor. México.

VUA. Urban and Environmental Investigation Group. 2011. Modelo de Ecoescuela para Venezuela en el Marco de la Educación para el Desarrollo Sostenible. University Simón Bolívar, Caracas, Venezuela. www.vua.grupos.usb.ve

National Programme on Marine Education: Love and Gratitude for the Sea, Costa Rica

Ana Lorena Orozco Alvarado and Marianella Valverde Solís

Introduction

This initiative was started in 2008 by the Environmental Education Department of the Ministry of Public Education (MEP). We were assigned the task of bringing educational material to coastal marine areas that would help move people from words to deeds and actions to protect our marine richness.

We assigned ourselves the task of consulting with educators in coastal marine areas on what was necessary for realizing a programme which would address the feeling, the duties, and the essence of the daily life of students, parents of students, and neighbors of the educational institution, that is, the overall community. As a result of this consultation, it was easy to confirm that there was no material that could concretely reinforce, in the classrooms, the value of nature.

This is how we put the idea into action of creating the National Programme on Marine Education entitled "Love and Gratitude for the Sea". What is this idea based on?

Clearly, Costa Rica is privileged to possess 589,000 km² of sea territory, due to the fact that it borders the Pacific Ocean on the West and the Caribbean Sea on the East, without underestimating the 51,100 km² of firm continental soil. Added up, this makes a total territory of 640,100 km². This allows Costa Rica access to an immense richness economically, socially, and in terms of biodiversity.

Nowadays, it is known that the sea holds solutions to food and natural resources scarcity problems, which are needed for the development of Costa Rica as well as the rest of the world. However, there is little knowledge about the characteristics, possibilities, and importance of marine ecosystems, something that has influenced the impacts human beings have on the sea.

For this reason, it seemed essential to start actions that would allow the spread of knowledge about the sea and its benefits for our country. Consequently, a proposal was made for creating teaching mechanisms, starting within the educational system, which would promote the protection and conservation of this natural environment.

This programme encourages respect and care and the understanding that life deserves to exist in a pristine state within the community of life as it is mentioned in Principle I of the Earth Charter (Respect and care for the community of life). Life, as we know it, is unique to our planet and this is why we must act responsibly towards the environment, with the awareness, kindness, compassion, and engagement, recognizing the interdependence of all forms of life.

Taking advantage of the Theoretical, Conceptual, and Operative Standard of the Health and Environmental Education Department, which is the leading entity concerning education on these topics, this Department assumes leadership at the national level in everything that concerns the promotion and development of educational activities for influencing the process of curriculum suitability and development, as it is the case for this National Programme on Marine Education.

The Earth Charter is reflected in this programme, especially Principle I (mentioned earlier) and Principle II on Ecological Integrity, and specifically those principles that promote the management of renewable resources such as water, soil, forestry products, and marine life, in a way that will not exceed the possibilities of regeneration and so that the ecosystem's life will be protected.



Students from Puerto Viejo School in a field trip at Cahuita National Park, 2008

This National Programme on Marine Education also builds on the 'National Commitment for the Decade on Education for Sustainable Development' that the Costa-Rican Government assumed in 2006¹⁵, and in which it is emphasized that education is a fundamental element for generating a change in culture.

Training process for teachers – From the mountain to the sea

With these foundations of love, solidarity, and respect, among others, we started in 2009 the gratifying experience of sharing this Programme with educators and students in different educational regions in the country (called Regional Offices), which included the coastal zone in the Caribbean (Limón), the South Pacific (Pérez Zeledón), the Central Pacific (Aguirre and Puntarenas), and Central Valley (Valle Central). The latter one is not a coastal zone but it hosts the majority of the country's population (Heredia).

In all these educational regions we felt people's warmth, we listened to their experiences in relation to environmental topics, especially those concerning the resources that the sea provides.

Table 1. Number of Schools and Educators participating in the training for each Regional Office

	Schools	Educators
Limón's Regional Office	21	27
Pérez Zeledón's Regional Office	4	13
Aguirre. Manuel Antonio's Regional Office	14	31
Aguirre's Regional Office (Herradura, circuit 05)	11	20
Coto's Regional Office	12	25
Grande de Térraba's Regional Office	13	18
Santa Cruz y Liberia's Regional Office	9	21
Desamparados' Regional Office	16	20
Heredia's Regional Office	23	27
TOTAL	102	175

This National Programme undertakes a marine and coastal education campaign through the development of educational modules and their implementation in workshops taught by the Ministry of Education's staff. Educators apply it in their lessons according to the context in which the students are evolving and the level they are in.

Sustainable development is promoted through the implementation of these modules, thus contributing to the conservation of marine and coastal species, flora as well as fauna. Actions in coordination with other organizations that also realize activities related to environmental education are fostered. The programme provides environmental educational alternatives on marine and coastal resources that are related to the study programmes, which correspond to the different courses and educational levels. It bolsters an environmental institutional culture that extends an invitation to knowing about life's vulnerability in these coastal areas.

15 National Commitment for the Decade on Education for Sustainable Development
<http://www.earthcharterinaction.org/invent/images/uploads/Costa%20Rican%20National%20Commitment%20DESD.pdf>

These training modules promote the integration of values inherent to sustainable development in all aspects of teaching, in order to encourage behavioral changes that will facilitate the attainment of a more sustainable and fairer society for all. The aim is for students to get to know and understand that the solution to community problems does not depend exclusively on governmental action, but that as citizens, we have the responsibility and the right to influence decisions that are taken.

The workshops allowed working with educators from different fields of specialization, in order to develop basic knowledge, understanding, abilities, values, critical judgment, and attitudes that would favor an active participation, ethical and efficient, in the treatment, mitigation, or solution of situations related to the marine and coastal environment, in favor of sustainable development of the country.

Educators had to carry out, following study programmes, mediation activities that would stimulate citizen, social, and engaged attitudes directed at the protection and conservation of marine ecosystems, and implement them with their students.

Implementation

The following activities are among the ones that were developed by educators in Pre-School, Primary and Secondary school who participated in the Marine Education Programme's training sessions, and are presented here as an example of the practical implementation of this Programme.

Experience in Pre-School

Educator Ana Saborío Sáenz started work in 2007 on a plan for Marine education at the pre-school level in the Escuela de Puerto Viejo. Her school is located in a Caribbean coastal area, making her approach very pertinent since it relates to her students' daily life. According to what she expressed in the plan she presented to the Ministry of Public Education, educators must instill among boys and girls the importance of appreciating the environment and fighting against the predominant culture in the zone, which has become materialist and promotes the destruction of flora and fauna for developing lucrative projects.

Among the activities she developed with her students are:

- Parading with costumes of marine animals, as a form of conservation and respect for the sea world
- Organize a talk on the importance of maintaining clean beaches and collecting trash
- Excursion to the National Park of Cahuita, which is a protected area in the Caribbean, managed by the government and the community.
- Participation in a project on the raising and then liberation of marine turtles.
- Compilation of tales, poems, songs and riddles on the topic of the sea. Utilization of the book HOPE.
- Making of puppets and illustrations on marine topics.

According to Mrs. Saborío, the project managed to motivate parents, boys and girls, and the community, to continue with the purpose of taking care of the marine flora and fauna. Children displayed a positive attitude that could be observed during the activities, and showed interest, love, and respect for the marine world. The project as a whole enables children to share different graphic techniques, crafts, and walks, among others.

Also in the Escuela Puerto Viejo, an educator developed an activity called 'Memory on endangered animals'. To be carried out, an album or memory with attractive images and pictures of endangered marine species such as manatees, hammerhead sharks or other species, humpback whales, mangrove cockles, cambutes, jaribus, Leatherback sea turtles, among others, is made. These illustrations are used to introduce the concept of 'endangered species', which is discussed with the students.



She called the other activity 'Similarities and Differences'. Children are asked to bring to class clippings, transparent sheets, pictures or other representations of animals that:

- | | |
|---------------------------|----------------------|
| 1. Have fins | 6. Have tentacles |
| 2. Have a carapace | 7. Live in the water |
| 3. Swim and have feathers | 8. Eat fish |
| 4. Have scales | 9. Eat algae |
| 5. Have a shell | 10. Have spines |

In class, discussion on these animals is encouraged, their characteristics, their differences, their behavior, movement, nutrition, habitat, and others.

In the Education Center Río Banano, in the Limón province (Caribbean area), educator Griselda Lorena Sequeira Aguilar, who teaches the second grade, designed activities for identifying the causes and effects of contamination with trash and sewage caused by human groups in the social and natural environment, to understand the consequences of their behavior in the environment.

This educator proposed the following activities:

- Conversation, based on previous knowledge, related to the concept of 'Pollution'
- Presentation of a dolphin made in plastic in a bottle with clean water, and another plastic fish in a glass bottle with a bit of coffee coloring, confetti, and toothpicks.
- Discussion on Who breathes better? The dolphin or the fish. Why?
- Excursion to the community river banks. Make notes on everything that was observed.
- In groups, exchange ideas and draw what was observed.
- Make a presentation on the effects of environmental pollution.

With these activities, the educator aimed at promoting values of 'Sensitivity and respect for a clean and healthy environment'.

Experience in secondary school:

With secondary school educators, the Marine Education National Programme implemented the methodology 'Citizen Project and Public Policies' that encourages the development of skills favoring learning spaces for solidarity, responsibility, and opportunities for students to impact the local and global community in a positive way.

The objective was to develop a series of professional skills to enable the educators to be able to use the Citizen Project and Marine Education programme, starting from the analysis and implementation of different methodological strategies for encouraging students to acquire eco-citizen competencies.

This initiative wanted the students to get to know and understand that the solution to community problems does not depend exclusively on governmental action, but that citizens themselves have the responsibility and the right to influence the decisions that are taken to build sustainably developed societies.



Ocean's World Day celebration in Río Banano Education

There were competitions organized such as:

- 'Let's draw for our seas'

Through this competition the students, aged from 10 to 16 years old, will be able to learn how to conserve nature through artistic expression, since they will have to display their talent and originality in the creation of a poster related to the conservation of the marine and coastal environment.

Thanks to different materials, brush strokes, colors, and shapes, they can give life to marine landscapes that they can design as they please.

At the national level, two winners will be selected, one aged between 10 and 13 and the other one between 13 and 17 years old. Their two works will represent Costa Rica at the international competition in Miami.

The top three winners will also receive monetary prizes.

This initiative is being carried out in collaboration with the Costa-Rican Tourism Institute (ICT) and is supported by Florida – Caribbean Cruise Association.

- Painting the importance of Cadiz's wetlands

This activity was realized jointly with the INBioparque (thematic environmental park in the Central Valley in Costa Rica) and with Cadiz's city hall in Spain.

The students had to make a drawing related to environmental conservation and sustainable development and explain it to the jury. The award was a visit to the city of Cadiz, Spain.

Lessons learned

From these experiences and stories it is clear that the Costa-Rican student population deserves the right to an integral education, in which boys and girls can enjoy a healthy and ecologically balanced environment, and where the different education spaces encourage nurturing knowledge aimed at obtaining sustainable models of life.

Education centers are magical places, in which students live their everyday reality and their life experiences, and this is why it is necessary that these institutions promote a vision of management and conservation centered on the respect and care for the community of life, ecological integrity, universal human rights, respect for diversity, economic justice, democracy, and a culture of peace, in order to build sustainable ways of life.

These ethical values disseminated by the Earth Charter represent the basis for teaching in the different educational contexts, with the objective of preparing students, children or adults, to live sustainably in these different ways.

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HIGHER EDUCATION



Beyond Cognitive Learning: Facilitating a Reconnection between the Community and Nature, The University of Granada, Spain

Alfonso Fernández Herrería

"I paused to take in the breathtaking landscape surrounding me, and encountered a divine creation of Mother Nature: a mesmerizing tree that enchanted me to stay. When I reached out to touch the tree's dazzling wood, I felt something profound jolt through my entire body. I closed my eyes while caressing the majestic wood and immediately felt at ease. A combination of the fresh mountain air, natural floral aromas and recognizing the simplistic connection between humans and nature brought me into a state of harmony. This tree has the capacity to provide so much for the forest; shelter, companionship and beauty" (student from the science department, University of Granada during his first experience with the Earth Charter).



Introduction

The Earth Charter (EC) has as its central premise that we are not only one human family, but part of a community of life on Earth, our home, with a common destiny, which is to live in interdependence, interconnection, and universal responsibility. This can be fulfilled through the ethics of care: caring for ourselves, each other, and the planet. But by only understanding this, we have not truly entered the educational field because the mere knowledge itself is ambiguous. Knowing something does not necessarily lead me to a practice consistent with that knowledge. Thus, why do most institutions utilize curricula based primarily on cognitive approaches? True education cannot exist without engaging students emotionally and, above all, fostering action with the possibility of realizing these values. This is where the ambiguity ends.

Therefore, the key question at the foundation of the educational experiences that are outlined below is, "What can we do to feel part of the community of life and act accordingly?"

"How can we get to have the experience of interconnectedness, feeling that we are another fiber (the ethical fiber, which is care) in the complex fabric of the community of life?" Knowing this is not enough; we need to go to the root; we need to make the leap to a global empathic consciousness in less than a generation. We need people to experientially learn that biophilic connection to respond to serious global problems.

The education system possesses two serious problems among various smaller issues, one being the absence of an integral educational perspective. Thus, Hargreaves (2003) elaborates on the necessity of "deepening" educational change; education has focused on a cognitive learning approach, neglecting the other "intelligences" (social, ecological, and emotional intelligence from Goleman; the "multiple intelligences" of Gardner, such as visuospatial, musical, bodily kinesthetic, and naturalistic). The other shortcoming of the education system is the need to open schools to the community, bringing this approach to the schools so they will join the struggle if significant changes are truly the intention. Schools cannot remain isolated from their community and their environment.

As a result, we have chosen to present specific examples from a group of faculty members of the education department of the University of Granada that have utilized the Earth Charter as a guiding framework. A common goal between the Earth Charter and the University of Granada is to carry out the development of these additional intelligences, such as emotional, social, ecological, proposed by Goleman, as well as spiritual components. We have also used the eco-education practices established by the Center for Eco-literacy, co-founded by F. Capra.

Additionally, we have raised spiritual intelligence in the classroom, and instead of speaking of eco-education, we speak of eco-pedagogy and the pedagogy of care with its triple dimension of care for oneself, others, and

nature (Fernández and López, 2010). We conceive spiritual intelligence as L. Boff describes the concept as “the attitude by which human beings feel linked to everything” (Boff, 2001, 90). This is to say that it is the experience of connection, interdependence, rootedness with life, with nature, with others, and with our deepest identity. This communion with the community of life is what we consider to be the central experience of the ethics of care and the pedagogy of care, and it is the concern that is at the heart of all the experiences to be presented. Spirituality understood as such is not then explicit in specific Earth Charter texts, but it is implicitly found throughout the Charter.

The pedagogy of care should have as its primary objective the learning of this essential experience: our reconnection and interdependence with the community of life. Today we live disconnected from ourselves, others, and nature. We have lost our points of reference and so we live broken inside and distraught. This spiritual crisis has evolved into an ecological crisis, a multifaceted crisis at the civilization level that is also an ethical crisis. Because of this, we have become ill in many ways, individually and socially. These illnesses stem from the lack of a sense of life. Many people feel lost and they fall into states of relativism, cynicism, apathy, and individualism.

Context

The Faculty of Education of the University of Granada offers four undergraduate programmes: Childhood Education; Primary Education; Pedagogy; and Social Education. It also offers several Masters and participates in others. Further, it has several doctoral programmes, with more than a dozen subsidized research groups. With a staff of over 320 teachers organized in 10 departments and more than 5,000 students, open all day from 8 to 21:30, with more than 60 academic activities including meetings, workshops, and conferences, it has an organizational, spatial, and temporal complexity that prevents it from undertaking a project that could bring major changes to the dynamics of the Faculty. However, this context encompasses a great depth and enormous quantity of topics and areas of research.

Implementation

The two examples set forth below have in common that they attempt to produce an experiential learning experience of connection to nature with an impact on emotional and spiritual dimensions. This is the goal. Although these have been published (see reference below), every year we repeat these exercises, which has allowed us to complement not only the theoretical framework but the activities we do as well, but in essence, they remain the same.

1. Development of the Sensory Awareness of Nature (Fernández and López, 2007).

After explaining the Earth Charter, the educational objective is established: a change in perspective, in seeing, that leads us to reconnect with nature. Then, the characteristics of the practice are discussed and clarified. Students are asked to spend a weekend outside of the city and spend time in nature observing. But do we really see?

An individual's outlook is conditioned by an entire conceptual world, by language, past experiences, emotional baggage, automatic and habitual behaviors, hurries, memories, and images that function as filters that interpose themselves between us and what we see, making what we see not reality but instead a filtered version of reality.

The achievement of sensory awareness implies an interior change that will allow us to truly see. Sensory awareness is not an intellectual awareness, but rather sight that is derived from the silence of the mind, speech, and memories; sensory awareness is not concentration, with the focus on one's mind on a single thing, but rather an attention that excludes nothing. It is the flow of attention to the experience that one is having, permitting it to be what it is, without assessing or judging it as these would not imply a silent mind. When a person fully employs this attention on all senses and its internal effect on us, that we are mere observers, it allows a flourishing of the senses that is sensitivity in which all the senses are completely awake. This leads to a condition of high vulnerability in which there is an extraordinary feeling of beauty, of energy and passion, of awe and reverence in the face of nature.

This perspective breaks stereotypical perceptual habits that bog our sensory awareness down and impoverish it. When one can see with a consciousness bathed in nothingness the experience can never be forgotten. It is akin to having the pure perspective of a child who sees the world for the first time. This is seeing truly and explains how these texts below can be written (the report is written after the experience).

"I feel complete, at ease and relaxed with a clear mind. I look into the sky through the tree branches. I close my eyes and listen and smell the sound and aroma of nature; it is fantastic."

"When I opened my eyes I felt internally at peace, and I even felt a bit ashamed that I had not experienced such a state of tranquility before. Then I observed everything that surrounded me in a different manner. I was amazed by the beauty."

"...I felt so comfortable in there that I did not want to leave; I could have stayed there forever, feeling free and as one with nature. I felt as if the tree was my best friend...how happy I felt."

"I have walked on numerous beaches and I felt as if this was the first..."

"I couldn't absorb the abundance of beauty surrounding me and I began to cry, but my tears were tears of joy. I wish I could be so simple-hearted, like I am in this instant, and fill myself with the harmony surrounding me at this very moment... it is then when I realize that I am Earth that walks and that I am part of everything that surrounds me, that I must join with every part of nature because it is what I am made of. I have learned a valuable lesson, but do I have the capacity to maintain it?"

"We should be more considerate of our planet and change our actions; the experience was worthwhile. Now I see the world in a different way. It makes us feel, if only for a few moments, that we are brothers and sisters of everything that surrounds us."

2. An Encounter With the Archetype (K. Jung) of Mother Nature: A Guided Meditation through relaxation and imagination directed as a form of meditation

After the study of the Earth Charter's principles and values and the justification of the necessity to enrich intellectual learning with emotional and experiential components, the following practice is executed in the following sequence:

1. Profound Relaxation: A guided relaxation accompanied by appropriate background music (duration: twenty minutes).

2. Guided Imagination:

a) The ideal resting place once found

b) Encounter the archetype (Jung) of Mother Earth.

In this state of deep relaxation, the guided imagination begins with the "creation of an ideal place of rest" with the following instructions:

"Imagine yourself in a beautiful natural environment ... It can be anywhere that appeals to you: a forest, a meadow, a beach, a mountain ... but where you should feel well and be at peace ... Explore this environment, awakening your senses fully (visual details, sounds, smells, temperature, landscape, animal life ...) ."

To continue, an instructor reads the following text to facilitate an encounter with the Mother Earth archetype:

"Now a woman appears from a nearby path. Take in her appearance and observe her characteristics: how she is dressed, her face and her gaze. She is at your side now. She represents Mother Nature and is the incarnation of planet Earth. Observe her, listen to what she says to you, ask her how she feels. Now you can now feel what she feels. You can put yourself in her place... you intensely experience how Mother Earth feels... you are her. How do you find

yourself...how do you feel... Now return to being yourself...now tell this woman what you desire...and then bid her farewell." (Own text)

After a few minutes, release them from the relaxation by counting from one to ten. The total time for this activity is approximately 25 minutes. Afterwards, ask them to, in silence, write a personal reflection of the experience. Below are several responses from various students:

"I enjoyed Mother Nature's presence; she made me feel peaceful but the moment she left I sensed a feeling of sadness wash over my entire body, something I had never felt before with anyone who I had known for such a short period of time. It was a strange situation."

"(...)

From the top of the large dune a brunette, tall, dressed in white and wrapped in a bright light appears. Upon touching my shoulder a strange thing happened, suddenly I could feel everything that this woman could feel; and the truth is I could feel pain and sadness; terrible images began to appear in my mind, every natural landscape that I could remember began to disappear (...). After coming back, one message remained clear to me, that I have to take care of my environment if I want it to endure."

"(...) When I saw the woman arrive (...) I asked her how she was and she told me that she was doing very badly, almost dead, that we humans were to blame and she told me that I had to help her to survive. When she hugged me I could feel and see everything that she was experiencing and suffering; I couldn't imagine such despair. I wanted to scream and I started to cry. When we stopped hugging I told her she could count on me and that I would help to make everything better. The Earth is in danger and we live on her; if we don't help her to survive, all humanity will disappear with her. When I was again alone I was aware that my whole body was shivering and my eyes were in tears (...)"

Lessons learned

The following reflects the level of impact of the educational experiences that occurred with students at the University of Granada:

The days following the experience there is a special window for this type of learning, as students find themselves with a special sensitivity and ease of learning, with high motivation and true surprise that they have had an experience of this type, especially in a formal education setting. It is very important to take advantage of this opening, because if you do not, it is quickly lost.

Taking into account the importance of this opening of consciousness following the educational experience, we have collected the experiences with a standard of continuity and complementarity. The two previous experiences refer to the relationship of the person with nature. The internal dimension of the students' relationship to nature comes into play. We complete the experience with an additional one that helps to develop the social dimension, the care of others. This consists in journaling for several months of the school year, writing about activities that are carried out in consonance with the principles and values of the Earth Charter, and writing final reflections (Fernández y Conde, 2010). After all of these activities the results are very positive and we notice a significant change in a large number of students.

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References

Boff, L. 2001. *Ética planetaria desde el Gran Sur*. Madrid, Trotta.

Fernández, A. y Conde, J. 2010. La Ecopedagogía en la formación inicial de maestros. En *Investigación en la Escuela*, 71, 39-49.

Fernández, A. y López, M^aC. 2007. La inclusión del componente emocional en la formación inicial de maestros. Una experiencia para el desarrollo de la conciencia sensorial. En *Revista Iberoamericana de Educación*, 43 (3), 25 de junio, (versión electrónica), 1-12.

Fernández, A. y López, M^aC. 2010. La educación en valores desde la Carta de la Tierra. Por una pedagogía del cuidado. En *Revista Iberoamericana de Educación*, 53/4, 1-19.

Fernández, A. y Carmona, G. 2010. Trabajando la Carta de la Tierra: una experiencia de aprendizaje vivencial. En *Revista de Ciencias de la Educación*, 221, enero-marzo, 107-118.

Goleman, D., Bennett, L y Barlow, Z. 2013. *Ecoeducación. Educadores implicados en el desarrollo de la inteligencia emocional, social y ecológica*. Barcelona: Juventud.

Hargreaves, A. (comp) 2003. *Replantear el cambio educativo. Un enfoque renovador*. Madrid: Amorrortu.

Toro, J. M. (2005). *Educación con "co-razón"*. Bilbao: Desclée De Brouwer.

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.

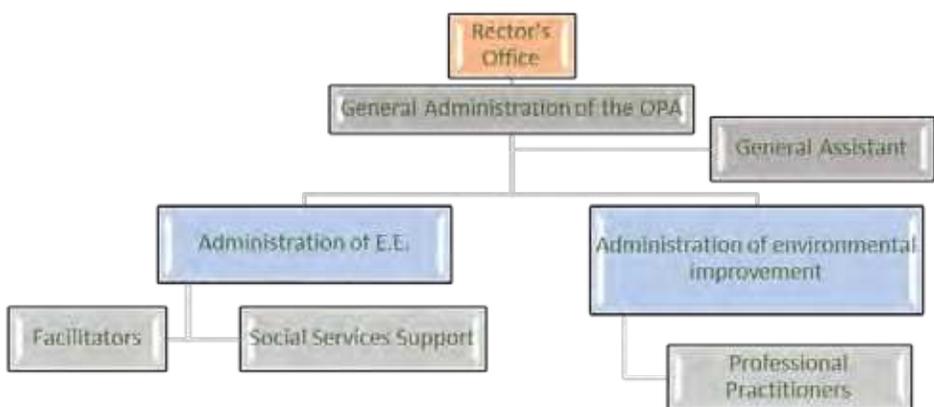
¹⁶ We are using the record of 4,144 individual endorsements at national level through the means of the Mexican Earth Charter's official website http://www.cartadelatierra.org.mx/avales_ind_estado.php

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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References

- Aguilar G. 1995. México ante cambio climático. Segundo Taller de Estudio de País, Mexico. In SEMARNAT-UNAM-US Country Studies.
- Amigos de la Tierra. 2008. Manual de Compostaje. [Versión electrónica] Madrid, Spain.
- Calvillo, J. 2006. Ecohábitat Experiencias rumbo a la Sustentabilidad. SEMARNAT. Mexico. 54-55 pp.
- Arias Chávez J. 1999. El Agua recurso vital. Universidad Tecnológica de la Mixteca. Mexico. 5-11 pp.
- Barbosa, S. A. 2008. Hacia una cultura ambiental con equidad de género. En: Reyes, E. F. y Bravo, M. MT. Educación Ambiental para la sustentabilidad en México Aproximaciones conceptuales, metodológicas y prácticas. Universidad de Ciencias y Artes de Chiapas. Mexico.
- CNA. 2001. Compendio Básico del Agua. Mexico.
- Comité Nacional GEO Juvenil México. 2004. Manuel GEO Juvenil México: Propuestas frescas para el medio ambiente. Mexico.
- CONABIO. 1998. La diversidad biológica de México: Estudio de país. México: Comisión Nacional para el Conocimiento y Uso de la Biodiversidad.
- CONABIO. 2000. Estrategia Nacional sobre Biodiversidad de México. México: Comisión Nacional para el Conocimiento y Uso de la Biodiversidad.
- CONABIO. 2008. La Biodiversidad en Aguascalientes: Estudio de Estado. Aguascalientes, México: Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO), Instituto del Medio Ambiente del Estado de Aguascalientes (IMAE), Universidad Autónoma de Aguascalientes (UAA).
- CONAGUA. 2010. El agua. [Date of search: June 2nd 2010]. <http://www.agua.org.mx/>
- Consejos Consultivos para el Desarrollo Sustentable de la SEMARNAT. [Date of search: June 7th 2010]. <http://ccds.semarnat.gob.mx/>
- Consumo Responsable. 2009. Consumo y generación de residuos. Date of search: July 16th 2010, de <http://www.consumoresponsable.org>
- Curtis H., N.S. Barnes, A. Schnek, A. Massarini. 2008. Biología, Buenos Aires: Médica Panamericana.
- Diario Oficial de la Federación. 1988. Ley General del Equilibrio Ecológico y la Protección al Ambiente. January 28th 1988. Mexico. 97p.
- FAO. (2008). El cambio climático y la biodiversidad para los alimentos y la agricultura. 1-2.
- Francois Mansotte M. 1999. Agua y Salud. OPS. Oficina regional para Europa de la OMS. 7-9pp.
- GEO Juvenil México. [Date of search: June 7th 2010]. <http://geo-juvenil.blogspot.com/> y http://www.pnuma.org/geojuvenil/t_n_m.htm
- Guía básica sobre cambio climático y cooperación y desarrollo. "Responsabilidades compartidas pero diferenciadas. Genia. Madrid, España. [Date of search: May 21st 2010] <http://www.greenpeace.org/espana/reports/gu-a-basica-sobre-cambio-clima>
- Instituto Nacional de Ecología. "Amenazas climáticas, vulnerabilidad y proyecciones de riesgo climático." [Date of search: May 21st 2010] http://www2.ine.gob.mx/cclimatico/edo_sector/cambio_climatico.html

Instituto Nacional de Estadística Geografía e Informática. 2001. Anuario Estadístico del Estado de Aguascalientes, Mexico.

Instituto Nacional de las Mujeres. 2003. Equidad de género y medio ambiente. [Date of search: June 5th 2010] http://www.conama.cl/ciudadaniaambiental/1312/articles-43976_recurso_1.pdf.

Jaramillo Juárez F., Rincón Sánchez A. R. y R. M. Roberto. 2009. Toxicología Ambiental. Universidad Autónoma de Aguascalientes. Mexico. 89, 190-196pp.

Koh, L. P. y G. Gazul. 2008. Biofuels, biodiversity, and people: understanding the conflicts and finding opportunities. *Biological Conservation*, 141, 2450-2460.

López Hernández, E. S., M. T. Bravo Mercado y E. J. González Gaudiano. 2005. La profesionalización de los educadores ambientales hacia el desarrollo humano sustentable. Mexico.

Margules, C. R. y S. Sarkar. 2009. Planeación sistemática de la conservación. Mexico: UNAM-CONABIO.

Mascareñas P. y Marañón I 2004. Greenpeace: ACTUA, consejos para una vida sostenible. [Electronic version]. Masera D. (2001). Hacia un consumo sostenible en Latinoamérica y el Caribe. PNUMA. Mexico D.F.

Méndez Novelo, Roger Iván et al. 2009. Comparación de cuatro tratamientos físicoquímicos de lixiviados. [Versión electrónica]. *Rev. Int. Contam. Ambient.* 25, 133-145.

México. Leyes y decretos. 2007. Ley General de Prevención y Gestión Integral de Residuos. Distrito Federal: Cámara de Diputados del H. Congreso de la Unión.

Navarrete-Heredia, J. L. 2009. Biodiversidad. Importancia y Amenazas. CONABIO, CUCBA-UdG. Mexico.

Organización Mundial de la Salud. 2010. Agua, Saneamiento y Salud. [Date of search: June 4th 2010] http://www.who.int/water_sanitation_health/hygiene/es/

Organización Mundial de la Salud. 2010. Cambio climático y salud humana. [Date of search: June 4th 2010] <http://www.who.int/globalchange/es/index.html>

PNUMA. 2000. Perspectivas del Medio Ambiente Mundial. Mundi-Prensa. Vivendi Environment. Annual Report.

PNUMA. 2002. Manual de educación para un consumo sostenible. UNESCO-UNEP

Programa Hidráulico Regional. 2003. Región VIII Península de Baja California. Comisión Nacional del Agua, Mexico.

Purvis A. y A. Hector. 2000. Getting the measure of biodiversity. *Nature*, 405, 212-219.

Red verde de la Universidad de Colima. [Date of search: June 7th 2010]. <http://www.ucol.mx/ceugea/redverde>.

Reyes, E. F. y Bravo, M. MT. 2008. Educación Ambiental para la sustentabilidad en Mexico Aproximaciones conceptuales, metodológicas y prácticas. Universidad de Ciencias y Artes de Chiapas. Mexico.

SAGARPA. 2007. Programa Especial para la Seguridad Alimentaria. Mexico.

SEMARNAT. 2000. ¡Encaucemos el Agua! Currículum y guía de actividades para maestros. The Watercourse. Instituto Mexicano de Tecnología del agua. 238-244pp.

SEMARNAT 2005. Manejo adecuado de los residuos sólidos una alternativa de solución. Morelos, Mexico. Recovered on June 25th 2010[<http://www.semarnat.gob.mx/estados/morelos/Documents/Manejo%20de%20Residuos%20Solidos.pdf>]

SEMARNAT. 2007. Capítulo 3: Biodiversidad. En: ¿Y el medio ambiente? Problemas en Mexico y el mundo.(pp. 43-80). Mexico: SEMARNAT.

SEMARNAT. 2008. Experiencias educativas con la Carta de la Tierra. Bulevar Adolfo Ruiz Cortinas 4209, Col. Jardines de la Montaña, Tlalpan Mexico DF.

SEMARNAT. 2008. Más de 100 consejos para cuidar el ambiente desde mi hogar. Talles Gráficos de México. Av. Canal de Norte 80, Col Felipe Pescador #6280, Mexico, DF.

SEMARNAT 2009. Residuos Peligrosos. Recuperado el 10 de julio de 2010 de <http://www.semarnat.gob.mx/GESTIONAMBIENTAL/MATERIALESYACTIVIDADESRIESGOSAS/Pages/residuospeligrosos.aspx>

Shultz, S. M., A. E. Dunham, K. V. Root, s. L. Soucy, S. D. Carroll y L. R. Ginzburg. 1999. Conservation Biology. E.U.A.: Sinauers Associates Inc.

Torres Cedillo L. 2001. Elaboración de Composta. SAGARPA. [Electronic version] Chapingo, Estado de Mexico, 2-4.

Velázquez, F. 2010. La composta. [Electronic Version]. PlanoInformativo.com. San Luis Potosí, Mexico

Velázquez de Castro Federico. 2008. 25 Preguntas sobre el cambio climático. Capital intelectual. Buenos Aires, Argentina.

The Use of the Earth Charter at the Primary Teachers Education Department, University of Crete, Greece

Nelly Kostoulas-Makrakis

Introduction

Humanity is facing a sustainability crisis manifested through widespread poverty, violation of human rights, environmental degradation and climate change. Within such a reality, there is an urgent need for ways to nurture and empower people of all ages with values that will help to transform unsustainable practices and help people learn to live together sustainably. Education at all levels, especially higher education, bears its own share of the sustainability crisis. Much of the political discourse about higher education was instrumental in creating and served a development model that caused the current sustainability crisis. Acquiring, or rather clarifying, values and a meaningful philosophy of life became outmoded, as most of the curricula driven by a positivistic philosophy favored “value-free,” “nondirective,” and “nonjudgmental” approaches to teaching and learning.

As a university Professor teaching methodology and education for sustainability, I was searching for ways to overcome current tendencies toward compartmentalization of knowledge and neglect of ethics and values education that are inherent in the concept of sustainable development (SD). Through my search, I identified the Earth Charter as a potential framework that could fulfil my critical pedagogy needs. The Earth Charter sets forth ethical principles and general guidelines for sustainable ways of living. As it challenges people to think about ethical values and to expand their ethical consciousness, it was thought that it could serve the needs of my courses.

The History and Context

As a staff member involved in the UNESCO Chair ICT in Education for Sustainable Development and RCE Crete (Regional Centre of Expertise) on Education for Sustainable Development, I started initiatives with Earth Charter International to explore the promotion of the Earth Charter in the Greek-speaking world, targeting educators, students, NGOs, and a wider audience. The outcome of this initiative was the formation the Earth Charter Hellas website (<http://earthcharterhellas.edc.uoc.gr/>) in 2012.

The Earth Charter provides a very broad perspective on learning to live together sustainably and thus is helpful for educators who wish to develop a comprehensive approach to education for sustainability. A methodology was developed to integrate the Earth Charter in various courses at the Department of Primary Education at the University of Crete, and efforts have been made to find ways to expand it to the local community, primarily through student practicum placements.

A critical decision concerning our attempt to integrate the Earth Charter was the merging of vertical and horizontal modes of course curriculum design. The vertical integration design ensures continuity and structures the content in sequence from core to more complex and specified streams. This provides a clear picture for learning, as students are able to understand how the content is developed and organized in a course. The vertical integration also assumes that discrete courses may combine content from two or more subject domains.



University of Crete



Earth Charter website in Greek

The horizontal integration includes broader curricular content from different disciplinary areas and knowledge domains, especially through an interdisciplinary approach within the course areas. Our pedagogy derives from a transformative learning paradigm and the Earth Charter, directed to the following four educational objectives: (a) helping students deal with the world's complexity of sustainability issues; (b) overcoming the dominant compartmentalization of knowledge into discrete entities that prevents interdisciplinary curricula; (c) helping students deconstruct their unsustainable perceptions, beliefs, and actions, applying values clarification and critical reflection; and (d) promoting experiential and constructivist learning. Such educational objectives appear particularly relevant for education geared towards sustainable development.

Inherent in this approach is the key learning process of "learning to clarify one's own values" together with merging the 3Hs: the Head, the Heart, and the Hand. Learning to clarify one's own values necessitates the process of introspection and learning to critically reflect upon one's inner values and knowledge constructions, which in turn are reflected in one's outer practices and behaviors. Through this process it is possible to deconstruct unsustainable constructions and their underpinning values that lead to unsustainable practices and create new constructions that are more appropriate to sustainability. Introspection gives people the chance to identify and evaluate their inner thoughts, feelings and desires through critical self-reflection. Merging the Head, the Heart and the Hand responds to the need for adopting a holistic approach to teaching and learning to live together sustainably. The head is about cognitive function and being logical, while the heart is about affective functions, ethics, values, emotions, and feelings, and the hands are about human agency, that is the disposition and ability to act as agents of change. The Earth Charter provides a framework that enhances the interaction of the 3Hs (Figure 1).



Figure 1

Implementation

Since 2012, sustainability issues identified through the Earth Charter were horizontally integrated into the following undergraduate courses at the Dept. of Primary Education, University of Crete:

1. Didactics and Education for Sustainable Development
2. Theory of Teaching and Learning
3. Cross-disciplinary Approaches to Values
4. Global Education
5. Alternative Models of Teaching and Learning
6. Curriculum and Hypermedia
7. ICTs and Education for Sustainable Development

It is worth pointing out that the total number of students participating in these courses surpasses 1,200 over the last two academic years. Vertically, the Earth Charter was presented as a seminar to students in the 2012-13 academic year.

Some examples

In one of the courses I teach entitled, "Cross-disciplinary Approaches to Values", the students are encouraged to think about the concept of learning to live together sustainably through the Earth Charter lenses, starting from their personal experiences. In a way, it turns students into active participants in the development of knowledge and understanding towards sustainable development issues. Through this course, students develop a basic understanding of the Earth Charter and its use as a pedagogical tool in learning to: clarify one's own values; understand the influence that various sustainability themes, such as bio-cultural diversity and climate change, are having globally and locally (more specifically on the island of Crete); connect Section I of the Earth Charter (Respect and Care for the Community of Life) to the situation currently experienced by the people living on the island of Crete; and use transformative learning, problem-based learning, and service learning strategies to identify possible solutions to local sustainability problems and act appropriately.

Students receive a digital pack of Earth Charter materials, largely downloaded from the Earth Charter International resources, and are given instructions for their reading. In general, students are introduced to the following units: origin, history and development of the Earth Charter; the Earth Charter and eco-pedagogy; the four principles of the Earth Charter, their ethics and values; the EC as an ethical framework for learning to live sustainably and using the EC as a teaching and learning tool. Special attention is given to the meaning of the four principles and sub-principles included in Section I "Respect and Care for the Community of Life". In small groups of two to three, students are encouraged to reflect on how the principles listed in Section I of the Earth Charter apply to the situation experienced by people on the island of Crete in relation to sustainability challenges. Students are also asked to further explore the question, "How can you use the Earth Charter to raise critical consciousness and empower affected people to change the current situation?" Particular emphasis in this course is given to sustainability issues that local communities and people experience, such as climate change.

An adequate recognition and analysis of the ethical meaning of the key issues surrounding climate change is necessary in order to generate encompassing and adequate analyses and solutions of such an issue. In this context, culture has always played a role in informing human practices connected with sustainability challenges in general. The anthropogenic cause of sustainability challenges implies that learning to clarify one's own values is a critical learning process. To do this, the concepts of critical consciousness and critical reflective pedagogy, prevalent in Earth Charter, are adopted and the themes of the course are generated from the students' own languages and experiences. Thus, when examining climate change issues through a 'cultural lens' enabled by the Earth Charter principles and critical pedagogy, a number of specific questions are posed to students, in the beginning of the course, such as:

- What would you like society to look like in the future? Thinking about the idea that you have no control over who, where, or what you may become. Imagine the type of world in which you would like to live.
- How this imagined world differs from the current world you experience, locally and globally? Now, take some time and think "Who is responsible for building this world you are living in? Reflect also on your personal contribution to it.
- What actions, personal and collective are needed to make that preferred future a reality?

After this exercise and the follow-up discussion, more specific questions addressing climate change are posed to students, such as:

- How do values, including non-material values, affect decisions and actions about climate change?
- What role does culture play in strategies for adapting to climate change and in overcoming barriers to change?
- What do the irreversible losses of cultural and natural heritage caused by climate change mean to societies?
- How can art and technology contribute to the search for creative solutions to the negative impacts of climate change?

This exercise prompts students not only to imagine the world as they wished it could be, but also to compare it with the current reality and contemplate its causes. Students begin to imagine how life would be if people could think and act differently, reflecting on the values and practices that prevent people from reaching the world they imagine. The Earth Charter readings and principles have a significant appeal to students as the following poem written, originally in Greek, by a student who attended this course, reveals.

The students who have attended this course are implementing the principles and the philosophy of the Earth Charter in their school practica in local primary schools. The spirit of service learning is expressed by students in organizing solidarity interventions in the community and helping pupils who have learning difficulties by providing individual tutoring at their homes. Students keep a journal, complete a 10-15 page paper describing and analyzing their personal experiences and the changes they bring to themselves and to society at large. Experience shows that through service learning, students doing their practice realize that they belong to a broader community with common problems and difficulties, and that they must show responsibility and become agents of change.

The course on "Cross-disciplinary Approaches to Values" is connected with the course "ICTs and Education for Sustainable Development" that is taught by Professor Vassilios Makrakis. Our philosophy is that horizontal integration should not only be confined inside courses but also between courses. In this particular case, students attending the first course, transfer the knowledge and skills of the Earth Charter and sustainability theory to the second course, which focuses on developing video-clips and digital storytelling dealing with community-based sustainability problems integrated with service learning. More

than 100 video-clips and digital storytelling products dealing with a wide range of sustainability issues have been created by students, which are uploaded through the RCE Crete Youtube channel, largely guided by sustainable development and Earth Charter principles.

A Poem about the Earth Charter

Everybody likes to be loved

Everyone needs respect

You wish for democracy

A life without violence

Peace is being dreamt by all the children

Nobody wants to hear about wars

You despise racism

Do you care about the environment?

You should, because it's important.

You dream of a brighter future

So you dream of a sustainable future

Earth is our home and we should take care of it

We live together, animals, planet, and people

If one goes extinct, life will not be able to continue

I still haven't introduced myself

I am a friend who is against the bad and fight for the good

I am the Earth Charter.

Lessons learned

Challenging students to learn to clarify their own values and think more sustainably fosters their abilities to critically analyze current sustainability challenges. The courses in which we have integrated the Earth Charter give students the opportunity to explore issues through research and dialogue, to identify problems, to collaborate with peers in order to develop possible solutions, and to articulate the solutions in an attempt to affect a positive future for themselves, their community, and the world. These skills are essential to the students' future successes in education, career, and lifelong learning.

The implication is that education processes that draw upon the Earth Charter through critical reflection can help discern ways in which human potential can be realized. This is a 'caring' lifestyle orientation that education processes can help to clarify using the Earth Charter as a tool for critical reflection and for responsible action (learning to do). Many other principles have specific educational implications. For example, Principle 8 calls for the need to "advance the study of ecological sustainability and promote the open exchange and wide application of the knowledge acquired" (learning to know and learning to do).

In the long run, we hope to have more faculty members integrating the Earth Charter principles in their courses and make it more visible to the community. The experience we've had with the Earth Charter has been recently acknowledged by the Faculty of Education of the University of Crete. This was expressed by the Dean of the School of Education, Professor Antonis Hourdakos, who is planning to endorse the Earth Charter so that more faculty members will commit to adopting the principles and values of this document. This will be done in a public ceremony in the beginning of the Fall Semester 2014-2015, which coincides with the end of the DESD.

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References

Burford, G. et al. 2013. Bringing the “Missing Pillar” into Sustainable Development Goals: Towards Intersubjective Values-Based Indicators. *Sustainability* 2013, 5, 3035-3059; doi:10.3390/su5073035. Available at: <http://www.earthcharterinaction.org/invent/images/uploads/sustainability-05-03035.pdf>

The Earth Charter Initiative (ECI). 2005. An Earth Charter Guidebook for Teachers. Earth Charter International Secretariat. Available at: <http://www.earthcharterinaction.org/invent/images/uploads/ECTG%20ENG.pdf>

Vilela, M. & Corcoran, P.B. 2005. Building Consensus on Shared Values. In Corcoran, P. B. (ed.), *The Earth Charter in Action: Toward a Sustainable World* (17-22). Amsterdam: KIT Publishers.

Vilela, M, Ramirez, E., Hernandez Rojas, L. & Briceño Lobo, C. 2005. Teaching a Sustainable Lifestyle with the Earth Charter. Guideline for Second Cycle Teachers of Basic General Education. Costa Rica: Editorama, S.A.

Experiences of the University of Coahuila with the Earth Charter

Norma Yolanda Mota Palomino and Martha Elena Sosa Bocardo

“War is a defeat for humanity because, in addition to questioning the goodness and intelligence of people, it manifests the failure of human beings: their inability to understand each other, to put themselves in the other’s shoes.”
Ryszard Kapuscinsk

Introduction

We would like to start this article by giving thanks to two individuals who made this story possible: Mateo Castillo and Enrique Pert. They introduced the Earth Charter to the University of Coahuila and helped the University’s administration commit to the values and principles of the Charter and to sustainability, and to consider them as cornerstones of the University’s education and social responsibility activities.



In 2002, we represented, on behalf of the University, the academic sector of Coahuila at the Consultation Councils for Sustainable Development organized by SEMARNAT (Ministry of Environment of Mexico). It was at this Council’s meetings that we heard about the Earth Charter for the first time. Thereafter, we continued the efforts to disseminate this document nationally and even internationally, and we also decided to internalize it both as individuals and at the University, our workplace.

Enrique Pert, who was the Planning Director of the University until 2006, saw the possibility in the Earth Charter’s principles and values to transcend the utilitarian objectives that have influenced many public higher education institutions, especially now in the present globalized era. He said, “This is what we need. The Earth Charter can make us distinct from other institutions. It should be our hallmark.”

He argued that, alongside the technological projects that the University had, it was important for this institution to develop its own identity as a way to strengthen the institution internally. However, he also stressed the importance of externally sharing these principles with the surrounding community.

The next step was to pave the way for the University’s endorsement of the Earth Charter, and it was Enrique Pert (RIP) who made this possible.

Who We Are

Coahuila is the third largest State of the Federal Republic of Mexico in terms of area. It has 2.75 million inhabitants (2.4% of the total national population), approximately half of who are in the workforce. Due to its geographic and climactic conditions, Coahuila has important biological richness in terms of endemic species representative of Chihuahua’s desert.

The demographic dynamics and economic expansion of recent years are putting a lot of pressure on natural resources like water, which is very scarce. There has also been an increase in the amount of wastewater, gas emissions, and waste that are polluting the air and affecting the soils. In this scenario, it’s important to prevent degradation of natural resources and use them wisely in order to promote sustainability. Caring for the soils, water, and air is an obligation for all of us, and education is key to achieve this.

The University of Coahuila is a public higher education institution, with 34,685 students and three campuses: Saltillo; Torreón; and Norte. There are 57 departments and institutes, 14 of them are undergraduate and 43 graduate, along with three research centers. In the year 2000, the Rector José María Fraustro Siller decided to create the Environmental University Agenda to fulfil the institution's sustainability commitments. The Agenda had 3 specific objectives:

- a. Improve the environmental performance of the university
- b. Incorporate the environmental component in all aspects of the university activities
- c. Establish a training program for youth

Through the Environmental Agenda, which is part of the Planning Department, we've been able to include a course on sustainability in all engineering programs, and developed a social work project where we train students as environmental agents, in addition to giving support to different departments to improve their environmental performance and represent the Rector's office in different events and multi-stakeholder processes that the University is invited to.

Participating in different national networks (like CECADESU¹⁷, CCDS¹⁸ and Complexus¹⁹) that bring together different organizations that work on environmental issues has been very helpful for us, because it opens up opportunities to train ourselves and share good practices, tools, and ideas to promote sustainability. The Earth Charter endorsement is an example of our involvement with a network that is helping us to move towards achieving our commitments to the vision of sustainability.

In 2002, we started a process to train ourselves with the Earth Charter and to disseminate it to our colleagues from the Environmental Agenda with workshops and other communication campaigns. It was four years later that the Rector of our university, Eng. Jesús Ochoa Galindo, signed the Earth Charter endorsement, which was ratified in 2008. The importance of this was not the endorsement per se, but the process of sensitizing the University's authorities about generating an institutional commitment to incorporate the values of sustainability into the education process.

The following are some activities developed under the framework of our university's commitment with the Earth Charter:

- Incorporation of "Sustainable Development" and "Professional Ethics" courses in all engineering programmes. In both courses there is a session on values and the Earth Charter. (Started in 2003)
- Development of training workshops for environmental agents, which highlight the topic of sustainability values
- Signing and ratification of the institutional endorsement of the Earth Charter (2006 and 2008)
- Development of a training workshop for university staff members called "The Earth Charter and holistic higher education" (2009)
- Organization of the II National Conference of Universities working with the Earth Charter, where we started the drafting of the Earth Charter adaptation for Mexican youth (2001)
- Organization of the I Contest of Values for Sustainability Posters (September 2013)
- Participation at the International Forum "Ethics for sustainability, new approaches to leadership, decision making and education" in Costa Rica, where we presented the experience of Complexus and the University of Coahuila (2014)



Signing the Earth Charter endorsement

17 CECADESU: Center for Education and Training on Sustainable Development of the Ministry of Environment, Mexico
18 CCDS: Consultation Councils for Sustainable Development
19 Complexus: Network of Universities for Sustainability

Implementation

There are many details that we could share about our experience with the Earth Charter, but for this article we'll focus on two successful actions:

1. Workshop: "The Earth Charter and holistic higher education"

Target group: University professors

Duration: 8 hours

Facilitators: Earth Charter affiliate in Mexico

Objectives:

- Introduce the Earth Charter as a declaration of fundamental principles and an ethical framework to build a global society that is just, sustainable, and peaceful in the XXI century
- Sensitize the University's authorities and decision makers about the importance of the Earth Charter to help the University to consolidate its commitments with the least favored sectors of society through approaches that are coherent with our educational objectives
- Raise awareness about the University's commitment to adopt and disseminate the Earth Charter at the national level with the government and other higher education institutions, as well as incorporate its principles internally in the professional and daily actions of the University
- Identify focal points in each department that would create work plans to follow up the commitments generated in this workshop

This was a historic event for the university, because it allowed the University's decision makers to be more open to participating in the environmental and sustainability actions that the institution undertakes. The participation of students who are also environmental agents was very important in this workshop, since they brought a lot of good energy, spontaneity, and good humor, which facilitated a good attitude with all participants and, in the end, allowed the achievement of the workshops objectives.

It was not possible to identify focal points, nor was the systematization of the actions that have been organized with the Earth Charter achieved, mostly because people are overloaded with work and decision makers rotate every three years.

2. Values for sustainability Contest

Using the "Ethics and values for sustainability" theme proposed by the Decade of Education for Sustainable Development, the students of the School of Information Technology who were taking the course "Professional Ethics" decided to organize (without professors' help) a contest to develop posters related to values for sustainability. They developed the criteria for participation, disseminated the call to participate, found the prizes, and were also the judges.

The basis of this contest was the promotion of an ethics for the common good that tries to inspire values and promote reasoning and feelings that guide collective actions towards building sustainable societies. It aims to promote an ethical position that asks for unlimited responsibility towards all that exists and lives. In this sense, the contest's objective was to introduce and transmit the values for sustainability and their importance in today's globalized world, a world that many say is "in crisis" but in which not many people actually do something about it.



Contest call banner

The target group for this contest was university students, specifically those studying Information technology. An exhibition with all the posters was organized during a cultural week, and participants had the opportunity to explain their posters and which values they considered when creating them. Some participants used their personal experiences as inspiration for their posters and several of them became emotional when presenting their posters in public. Others used their educational experiences as inspiration. Many of the organizers were so thrilled with the contest that they decided to create their own posters outside of the contest.

The jury of this contest consisted of two students, one professor of the School of IT, one administrative staff member, and an external invitee, and they used the criteria defined by the organizers.

In total, 21 posters were created, 17 were entered in the contest and 4 were only for exhibition. As mentioned above, the idea was to exhibit the posters during the cultural week, but the Dean of the School of IT decided to permanently exhibit these posters in the administration area of the building. Now they're also considering printing these posters in a publication, including explanations for each poster.

Here is the winning poster with the theme "Values that change the world",



Winning poster: Values that change the world.

Lessons learned

The endorsement of the Earth Charter was not easy to accomplish. It required a long process of reflection and analysis about the personal and institutional implications, especially for the Rector, whose signature meant taking on an important commitment that we were all willing to accept, implying mutual responsibility, sharing tasks, and exerting effort to practice the principles of the Earth Charter in our daily actions. This endorsement was recently ratified at a ceremony within a workshop for staff members (August 2014).

The current Rector, Mr. Blas José Flores Dávila, decided to include an institutional commitment towards sustainability as a crosscutting theme in the Development Plan of the University. This is not an easy commitment, on the contrary, it could be very complex and will demand a lot from the university community, which is why we decided to organize a second workshop for staff members, called "Reflection and analysis about the implications of an institutional commitment for sustainability", using the Earth Charter as the basis for discussion.

The objective of this workshop was to identify elements that would allow us, as members of this university, to support and take on this institutional commitment. In this way, we were encouraging administrators and decision makers to reflect and realize that the achievement of this institutional commitment in the long term starts with their own introspection and personal actions.

The workshop was quite successful, around 85% of staff members, including the Rector, participated. It was possible to establish a committee that conceptually defined the values that define the *raison d'être* of the university, using the Earth Charter values as a reference.

The Earth Charter has also contributed to promoting a sense of leadership among the youth who are involved with the institutional plan development, as well as to engaging other young people that normally are not interested in getting involved with institutional matters of sustainability, like with the posters contest.

The current university administration aims to advance this work with students as part of an institutional policy, and it will be mandatory for all students to take at least one workshop on values for sustainability with the Earth Charter. This is our way forward!

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