

# Earth Charter, Education and the Sustainable Development Goal 4.7

Research, Experiences and Reflections

---

Edited by Mirian Vilela  
and Alicia Jiménez



# Earth Charter, Education and the Sustainable Development Goal 4.7

Research, Experiences and Reflections

---

Edited by Mirian Vilela and Alicia Jiménez

Foreword by Francisco Rojas Aravena

2020



Earth  
Charter.  
INTERNATIONAL



United Nations  
Educational, Scientific and  
Cultural Organization



UNESCO Chair on Education  
for Sustainable Development  
and the Earth Charter



University  
for Peace



# **Earth Charter, Education and the Sustainable Development Goal 4.7**

Research, Experiences and Reflections

Editors: Mirian Vilela and Alicia Jiménez

Copy Editing: Amanda Bennett and Ileana Seda

Translation: Amanda Bennett and Ana Paola Con Goldoni

Layout and Cover Design: Alejandro Arturo

Cover and back cover Illustrations: Earth Charter International

First Edition

San Jose, Costa Rica

1. Earth Charter.
2. Education.
3. Education for Sustainable Development.
4. Sustainable Development Goal 4.7.

This publication has been possible thanks to the collaboration between Earth Charter International and the University for Peace.

The authors of each chapter are responsible for the choice and presentation of the facts contained in their chapter and for the opinions expressed therein, which are not necessarily those of the University for Peace, UNESCO, nor Earth Charter International, and do not commit the Organizations.

All rights reserved. No part of this publication may be reproduced in any form or by any means, electronic or mechanical without prior permission.

ISBN 978-9930-542-21-7

Published by

©UPEACE Press in collaboration with Earth Charter International

December 2020

# Content

Foreword	<i>Francisco Rojas Aravena</i>	i
Introduction	<i>Mirian Vilela y Alicia Jiménez</i>	1
<b>Part I. Research on the Earth Charter in Education</b>		
<b>1.</b>	Sustainability and Global Citizenship Values Education with the Earth Charter: Reflections, Experiences and Pedagogical Elements <i>Mirian Vilela</i>	8
<b>2.</b>	A Holistic Perspective of Earth Charter Pedagogy <i>Sam Crowell</i>	20
<b>3.</b>	A Categorical System Based on Pedagogy and its Practice <i>María de los Angeles Vilches Norat</i>	28
<b>4.</b>	The Earth Charter, Ethics, and Essential Questions About Education <i>Bob Jickling</i>	40
<b>5.</b>	Value-creating Global Citizenship Education and the Earth Charter: Integrating Diverse Perspectives within the UNESCO-led Practice of GCE <i>Namrata Sharma</i>	55
<b>6.</b>	The Earth Stories Collection: A Planetary Mythology grounded in the Earth Charter <i>Grian A. Cutanda</i>	66
<b>7.</b>	Building the Foundations of the Earth Charter Schools Seal <i>Alicia Jiménez-Elizondo</i>	75
<b>8.</b>	Teaching 'Troubling Sustainability Topics' in a UNESCO MGEIP Education for Sustainable Development - embedding Project <i>Lorna Down</i>	87
<b>9.</b>	Gross National Happiness, Ubuntu, and Buen Vivir versus the SDGs: How Traditions of the Global South Can Reinforce One Another <i>Dorine Eva van Norren</i>	96
<b>Part II. Experiences in Primary Education, Higher Education and Non-Formal Education</b>		
<b>10.</b>	Political Actions in Education for Sustainable Development taken by the Ministry of Public Education, Costa Rica <i>Henry Arias Guido</i>	107
<b>11.</b>	The Learning of Sustainability from the Earth Charter: A Look from the Experience in Mexico <i>Mateo Alfredo Castillo Ceja</i>	117
<b>12.</b>	The Earth Charter as the Theoretical Framework for the Eco-Schools Programme in Puerto Rico <i>Marisol M. Quiñones</i>	126

<b>13.</b>	CEUNA School: Modeling the Values of Sustainability and a Culture of Peace <i>Caroline Hooper</i>	134
<b>14.</b>	Earth Charter as a Guide for Fostering Sustainability and Ecological Worldview in Engineering Education <i>Mohammed Baaoum and Kristen Davis</i>	148
<b>15.</b>	Successful Delivery of Entry-Level Sustainable Business Education <i>Chris Beehner</i>	160
<b>16.</b>	Socio-environmental Justice, Gender and the Earth Charter <i>Donna Carole Roberts</i>	169
<b>17.</b>	Teaching Experiences with the Earth Charter: The Promotion of Eco-Citizenship in the Center for General Studies, UNA, Costa Rica <i>Heidy Vega García</i>	176
<b>18.</b>	Online Diploma on Education for Sustainable Development: Lessons Learned and Possibilities <i>Rosalyn McKeown</i>	185
<b>19.</b>	Peace Education in Latin America - Practicing Values for Coexistence through Online Teaching <i>Daniela Carvalho Piaggio</i>	194
<b>20.</b>	The Earth Charter in Action in Sao Paulo <i>Débora Pontalti Marcondes, Lia Salomão Lopes and Rose Marie Inojosa</i>	206
<b>21.</b>	Ecological Integrity, Education and the Work of the Soka Institute of the Amazon <i>Tais Tiyoko Tokusato and Monique Tiezzi den Hartog</i>	219
<b>Part III. Reflections on the Value of Earth Charter to Current Times</b>		
<b>22.</b>	Radical Hope, World-Affirming Spirituality, and Intergenerational Action: A Vision for 2030 <i>Peter Blaze Corcoran</i>	231
<b>23.</b>	Revisiting the Earth Charter: Where are We, What did we Choose, Two Decades Later? <i>Mary (Joy) Philip</i>	239
<b>24.</b>	Education as a Driver for Ecological Civilization: Earth Charter and Ecological Civilization in China <i>Song Li</i>	250
<b>25.</b>	The Way Forward: Earth Charter in Education. A World of Delightful Possibilities <i>Akpezi Ogbuigwe</i>	256

## Foreword

*Francisco Rojas Aravena*

### **Protecting the Earth Requires a Peaceful World**

**T**he COVID-19 pandemic forces us to rethink the way we are connecting, the way we look at the planet, the way states are relating, the way we produce and consume, the way we seek security – in all areas - the ways we think and design the future. To collect the great cultural heritages is to collect the knowledge accumulated by humanity. Especially those referring to the protection of the common home, of our planet. We need new paradigms. New theories that are capable of recovering those inheritances. This is achieved through education and scientific and academic research.

We live in a global community, in our only common home; in that little blue dot suspended in the universe. Each and every one of us is responsible for the stability, the harmony, of our shared home. Every one of us is responsible for protecting the planet that we have inherited and that we will pass on to future generations. This requires us to look for specific ways to protect global public goods. In particular, all those related to the protection of the environment and the planet.

We live in an interdependent world. We have a shared responsibility to achieve peace, protect the planet and achieve progress through the 2030 Agenda. In this way, we protect human rights. The world faces an unforeseen situation with COVID-19, which wreaks havoc on health, the economy, employment and a wide range of situations around the world. The effects of the pandemic are multiple, in all areas. It is affecting global, national and local leadership. One of these expressions is the retreat in multilateralism and international cooperation. The weakness in the multilateral system reduces opportunities for collective action in the face of this planetary challenge.

Humanity is putting its own existence in danger by neglecting the protection of the planet that is expressed in climate change and the loss of biodiversity. We, humans, are also co-responsible for the loss of knowledge due to disrespect for cultural diversity, which systematically erases languages, sounds, dances, customs and other heritages in various parts of the world. By destroying biodiversity and global public goods, we break

a millennia-long heritage. Intolerance occupies increasingly important places. Intolerance breaks social harmony and generates political polarization, which promotes political violence. Violence generates more violence.

In this context, it is necessary to advance and maximize cooperation and solidarity. There is no other option to face serious global problems than collaboration. The pandemic showed that the idea of health as a universal public good, like others, has been lost. With this, the sense of humanity and the vision of our common home are lost. All prevention and mitigation measures are useless without a global vision that points to collaboration.

The demands to protect the planet, in the context of the pandemic, do not appear as a priority in the various national agendas. The health of people, of humanity, will not be resolved without solving the health of the planet. Both are structurally linked, they are interdependent.

It is here that the Earth Charter highlights values and the universal and personal responsibility of our generation and of future generations. Without this global and individual co-responsibility, the life of the planet and biodiversity, as well as the lives of many living beings, including humanity, are in danger. We must stop the serious impacts on the environment, which are already strongly expressed by climate change. Humanity faces formidable challenges, which can only be overcome through cooperation and multilateralism.

The importance of the Earth Charter lies in the fact that it is a space for reflection and dialogue, capable of listening and understanding the visions of different actors, coming from different fields of thought. The Earth Charter is a place where this plurality seeks to find shared values to design timely solutions to protect the planet.

Protecting the planet also means developing a culture of peace and non-violence. The University for Peace promotes this culture of peace and non-violence and reaffirms the importance of UNESCO's decades-long work in this field, initiated by Federico Mayor Z.

Protecting people, humanity, will be the result of a comprehensive, holistic and global vision. This means valuing, first of all, the planet, its protection, its preservation, collecting ancestral knowledge. Collecting from different cultures the most diverse inheritances of customs, forms of communication, music, dances, paintings, to place them in a cultural heritage of humanity. This is expressed in the values that the Earth Charter transmits and that reaffirm an ethic for humanity, both in its theoretical and academic reflection, as well as in the concrete actions that seek to guide each human being.

Education is essential to cultivate these values in a comprehensive

and intergenerational way. Without education, there is no future. Without values-based education, there is no teaching for sustainability. Harmony allows the exercise of fundamental values, expressed in effective rights. Promoting peace is protecting the planet.

From the University for Peace, we thank Mirian Vilela for her leadership as Earth Charter International's Executive Director, and we congratulate her for the 20 years of existence of this important Institution, located in the heart of our university. At the same time, I want to emphasize that the University for Peace is celebrating 40 years of existence, promoting the values of peace, tolerance, dialogue, cooperation and peaceful coexistence.

This book collects fundamental visions to achieve and obtain success in the 2030 Agenda and the Sustainable Development Goals with the help of education. It contributes to the effort of the UNESCO Chair in Education for Sustainable Development with the Earth Charter, implemented by Earth Charter International. It also favours global visions on sustainable development promoted by the United Nations and various international agencies.

The University for Peace, together with the Earth Charter International, reaffirm that, if we want peace, we must work for peace; if we want development, we must work for sustainable development; if we want to protect humanity, we must protect the planet.

*Francisco Rojas Aravena  
Rector, University for Peace  
November 2020  
San José, Costa Rica.*

## Introduction

*Mirian Vilela and Alicia Jiménez*

**E**ducation faces major challenges and opportunities as we enter the third decade of the third millennium. With the revolution in communication technology over the past 20 years, in most places and contexts around the world, access to information is no longer a barrier to learning as it used to be 50 or 100 years ago. We could consider this a major opportunity as it increases the possibilities of having a well-informed and educated global society in terms of how to live together on this shared planet. On the other hand, there is growing environmental degradation, social inequality, as well as intolerance and discrimination towards those who are considered “different” from “one’s tribe.” In addition, there seems to be an ongoing lack of consciousness and sense of responsibility with the social and environmental impact of our decisions and lifestyles.

In this context, the United Nations 2030 Agenda, which is currently the major priority for governments and many institutions from around the world, presents a unique opportunity to tackle many of these world challenges. This Agenda, launched in 2015, is focused on the implementation of sustainability through 17 Sustainable Development Goals (SDGs). Its goal number 4 target 7, sets the collective commitment of the international community: “by 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.” It is clear that we must consider education as a main driver to the realization of all the SDGs, but not just any kind of education.

The current challenges humanity faces, combined with the new communication technology, and the new UN 2030 Agenda present an opportunity for a revolution in the education practice (or for a new paradigm of education to emerge). An opportunity, which education policies, processes and practices would primarily seek to cultivate a new level of ecological responsibility, as well as sustainability and global citizenship consciousness. This is a kind of education, which would seek to address the disconnect between acquiring knowledge and the commitment to contribute with the

common good and the well-being of all. For this to be realized, it is essential to forge local, national and international cooperation among various organizations across countries, as well as a common values framework with regards to sustainability and global citizenship.

At the 32nd and 40th UNESCO General Conferences held in 2003 and 2019, UNESCO adopted two resolutions, which recognize the Earth Charter as an important ethical framework for sustainable development. These resolutions encourage Member States to use the Earth Charter in Education for Sustainable Development processes, particularly in the implementation of the ESD for 2030 framework. What are the experiences that have taken place so far to address this?

The present book seeks to contribute with this moment of opportunities, challenges and decisions in the realm of United Nations and international collaboration. It compiles 25 chapters from 29 authors, representing 11 countries, which correspond to some of the presentations offered at the Earth Charter International Education Conference: Leading the Way to Sustainability 2030. The conference was organized by the Earth Charter Center for Education for Sustainable Development at the University for Peace and took place on 29 - 31 January 2019

The conference brought together more than 100 participants from 18 countries and from a wide variety of sectors including university professors, school teachers, local government officials, educators in the field of non-formal education, as well as UNESCO representatives from both the Headquarters and the Regional Office for Central America. The gathering offered an opportunity for participants to share experiences and results of research projects, as well as to exchange views on pedagogical approaches that seek to transform educational processes toward sustainable development and global citizenship.

This effort is part of our work as UNESCO Chair on Education for Sustainable Development with the Earth Charter, which has a particular interest in the intersection of sustainability, values and education.

### **Highlights of the publication**

In this book, readers can find a wealth of ideas on pedagogical approaches and research on the use of the Earth Charter in education from renowned educators, as well as practical experiences on the use of the Earth Charter in universities, schools, and a variety of non-formal settings. Several authors share reflective articles about the role of the Earth Charter in today's world.

In terms of **research**, Sam Crowell writes about his reflections on holistic education using the Earth Charter as an instrument, and introduces the "5E" (4E + 1) theory of cognition that re-orientes our thinking toward a holistic understanding of learning and being.

Bob Jickling, shares an heuristic, results of his research, to help us think about the possibility of evolving from a transmissive to a more socio-constructivist way in teaching and learning environments, or from an authoritative to a more participatory form, enabling socially active citizenry. He explains why he prefers to use a heuristic rather than a framework and invites us to “use the Earth Charter as a heuristic itself, and use it to deepen our understanding of both education and ethics.”

Namrata Sharma studied the legacy of Asian thinkers that can make important contributions to the discourse and practice of global citizenship education. She proposes some guiding notions to navigate a creative process of acting, thinking, and being value-creating global citizens. Moreover, she offers some recommendations for value-creating global citizenship education and the Earth Charter for the UN 2030 global citizenship agenda. She highlights the importance of a broader engagement with the human/personal dimension, as a necessary component for the success of education for global citizenship.

Lorna Down shares her experience working on a research project that resulted in the embedding of Education for Sustainable Development (ESD) in textbooks for children, a process that involved asking the questions: “How to deal with thorny sustainability questions in education settings? Are certain concepts beyond children’s comprehension?”

Mirian Vilela studied a large sample of experiences from Earth Charter workshops and courses offered since 1996. Analyzing those experiences, she identified seven pedagogical elements, used in processes of education and learning related to values of sustainability and global citizenship with the Earth Charter, which can be considered useful for future work in the field.

María Vilches’ research sought to develop an intervention programme to improve the integration of the principles of eco-pedagogy and the Earth Charter with the vision and actions of the Puerto Rico Eco-Schools Programme. Her findings are very interesting and useful for educators.

Grian Cutanda did an extensive research in which 336 myths, legends and stories from around the world were selected as educational tools to illustrate the different principles and values of the Earth Charter. In addition, this study demonstrated that these traditional stories are useful tools in spreading the vision of the world that underlies the Charter itself. This research resulted in two interconnected global projects: The Earth Stories Collection, a global bank of traditional stories connected to the Earth Charter, and The Global Storytelling Lab, a global network of activist storytellers that spread the stories of the Collection.

Alicia Jimenez' research focused on generating a quality label to be called: "The Earth Charter School Seal." In her work, she shares how she identified assessment criteria in practical implementation of the Earth Charter principles and values. Indicators and other instruments were developed around these criteria, which are the foundations for the Earth Charter quality label for schools.

Dorine van Norren's research looks at a cross-cultural comparison of the African philosophy of Ubuntu (specifically in South Africa), the Buddhist Gross National Happiness (Bhutan) and the native American idea of Buen Vivir (eg. Ecuador) in relation to the SDGs. She highlights the need to see 'development as service' and to build bridges between Happiness, Ubuntu and Buen Vivir in re-interpreting the globalization process.

There are twelve Chapters on this book related to practical experiences on the following areas: primary and secondary education, higher education, and non-formal education.

In terms of primary and secondary education, there is a chapter about the school University Center for Children and Adolescents (CEUNA for its acronym in Spanish), a primary and secondary school in Costa Rica, which has many years of experience in infusing sustainability values and principles in their education philosophy and modus-operandi. Caroline Hooper describes CEUNA as a good example of whole-institutional approach to Education for Sustainable Development.

The experience of the Eco Schools Programme of the Foundation for Environmental Education in Puerto Rico is shared by Marisol Quiñones. It is an example of how the Earth Charter has been integrated in the programmatic areas in order to promote a sustainable culture among schools.

Henry Arias, Advisor of the Ministry of Education of Costa Rica, shares the Costa Rican Government's experience in generating a policy framework for ESD, responding to Sustainable Development Goal 4, target 4.7.

There are four chapters with experiences from higher education in different areas, such as engineering education, where Mohammed Baaoum and Kristen Davis share their research on a comprehensive educational model to foster sustainability and an ecological worldview in global engineering education as well as how the Earth Charter could have a role in that educational model. They argue that engineers could contribute significantly in solving humanitarian problems and stress the importance of bringing sustainability and ethics education in engineers' training programmes.

Chris Beehner (Seminole State College, Florida, USA) shares his experience in teaching sustainability to students in business schools. He

asserts that teaching sustainability in business education for entry-level supervisors, analysts, and professionals is limited. He argues the importance of expanding sustainability training not only for middle and upper level, but also for entry-level employees and supervisors in the private sector.

The chapters written by Donna Roberts (Chatham University, Pennsylvania, USA) and Heidy Vega (National University, Costa Rica) highlight experiences integrating the Earth Charter into courses for undergraduate students in their respective universities.

The chapters of experiences in non-formal education are very diverse, from national efforts as the case of Mexico, to online education experiences and local education efforts to help save the Amazon forest in Brazil.

In his chapter, Mateo Castillo summarizes his experience of 18 years in promoting the Earth Charter in Mexico, with approximately 200 courses and workshops and a large number of conferences, involving approximately 35,000 people.

In their chapters, Rosalyn McKeown and Daniela Carvalho focus on experiences and pedagogical approaches for online education. Rosalyn's chapter gives an overview of the Online Certificate on ESD and shares some findings and reflections on her experience in teaching and online learning. She argues that online education allows the education community to practice sustainability in addition to teaching about sustainability. In turn, Carvalho shares how the Earth Charter is used as an ethical model and guiding instrument for an online programme on Peace Education that seeks to cultivate values for coexistence.

There are two cases from Brazil; one of them focuses on the experience of the Open University of Environment and Culture of Peace (UMA-PAZ), established by the city government of Sao Paulo, Brazil. The authors, Débora Pontalti Marcondes, Lia Salomão Lopes and Rose Marie Inojosa, share the methodological approaches of one of their core programmes, the Earth Charter in Action, specifically in training "Socio-Environmental Urban Agents." The other case refers to the experience of the Soka Institute of the Amazon located in Manaus, Amazonas, Brazil, which manages a 52-hectare nature reserve (RPPN). Tais Tiyoko Tokusato and Monique Tiezzi den Hartog share how the institute develops environmental education programmes and projects promoting global citizenship, as well as scientific research for the preservation of the Amazon forest.

Finally, this book includes some inspirational chapters that invite readers to reflect on the role and possibilities of the Earth Charter and values based education to face our current global challenges.

Peter Blaze Corcoran reflects on what he considers is the greatest

aspect of the Earth Charter in the context of education, which is its capacity for inspiration and aspiration to action. He identifies radical hope, world-affirming spirituality, and intergenerational action as key elements to inform our evolving vision of leading the way to 2030.

Using poems and inspirational quotes, Mary (Joy) Philip takes an in-depth look into the Earth Charter principles and asks if we are really paying attention to the signs of times and places, and whether we are really taking seriously our existing perils as a planet.

Song Li reflects on the concept of Ecological Civilization and shares information on the actions China is taking to implement it. She then reflects on its relationship to the Earth Charter. She describes four components of the Ecological Civilization system as stated by the Government of China and emphasizes the role of education in moving towards this direction.

This book concludes with an inspiring call to action from Akpezi Ogbuigwe. In her chapter, she offers some reflections on the Earth Charter as an instrument to contribute to the future of education. She underscores the idea of powering the SDGs with the spirit of the EC, and argues the importance of mainstreaming overall themes of respect, human rights, justice and peace in education, as they should be considered central issues to help societies achieve the future we desire.

Overall, the chapters of this book offer a glimpse of the rich exchange generated at the January 2019 Earth Charter Education Conference. They also demonstrate the diversity of possibilities when it comes to exploring ways to infuse the values of sustainability and global citizenship into education processes.

Integrating, “into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life,” (Earth Charter, 2000) is not only possible but it is urgent if we are to change the direction of where our current civilization is heading.

We hope these chapters will assist in communicating the diverse possibilities that are currently happening in this field, and that they will spark the interest and creativity of many to contribute in forging the way to reorient education practices to a new paradigm. Through these efforts, we can see that education with the Earth Charter can truly become an instrument of social transformation and drive the implementation of the SDG 4.7.