Education through 'Tourism as a Culture of Peace'

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Abstract

The scientists from the Global Issues Project of Canadian Pugwash and Science for Peace in Toronto Canada have, for 20 years, followed climate-change statistics. Climate change is now a fact, as discussed at the Roundtable on Climate Change and Energy in the Wasan Action Framework (see Appendix I). The Intergovernmental Panel on Climate Change also supported this. Tourism around the globe must pay attention, as the many resources that are used for visitors may be needed for local cities. Educators have been part of the problem. Educators must now be part of the solution – at every level. Curricula must teach how to protect basic resources, not how to abuse them for economic gain. It is a major responsibility to teach students how to reverse the negative global concerns into positives. This paper presents possible solutions for local actions.

International Holistic Tourism Education Centre IHTEC

INTERNATIONAL SCHOOL PEACE GARDENS

Nurturing Global Peace Through Education

Introduction

If global societies are to survive climate change, they must support the web of life because it serves human purposes (Burkhardt, H.). Education is seen as part of the paradigm shift for climate change and energy (see Appendix II). It would be helpful to implement climate-change curricula that can be delivered to all schools around the world at the same time, stimulating awareness and action. The International Holistic Tourism Education Centre's (IHTEC) suggestion is to introduce the International School Peace Gardens curriculum globally. This is a place of annual dedication for solving climate-change issues. See Figure 1.

Figure 1. Peace-garden concept.

Global Education is Dimming

The global educational IQ may be dimming as a result of our carbon-based energy use and the current climatic changes. Earth's citizens are currently in a "war-based economy." It is hoped that a "peace-based economy," using alternative energies, such as solar, wind and geothermal, will change the paradigm of a war-industrial society to a peaceful-sustainable society, especially through the tourism industry (as a culture of peace).

IHTEC has been working on solutions that have been developed to give existing curricula some support. IHTEC supports the Ontario Ministry of Education in their initiatives for positive action in communities, such as eco-schools and the Education Alliance for a Sustainable Ontario.

IHTEC's modules in "Global Sustainability Education" teach how to clean up and try to never create the same crisis on earth again. Young people need a message of hope and something positive to help them make the transition from the "entitlement generation" to a "peaceful generation."

Technology

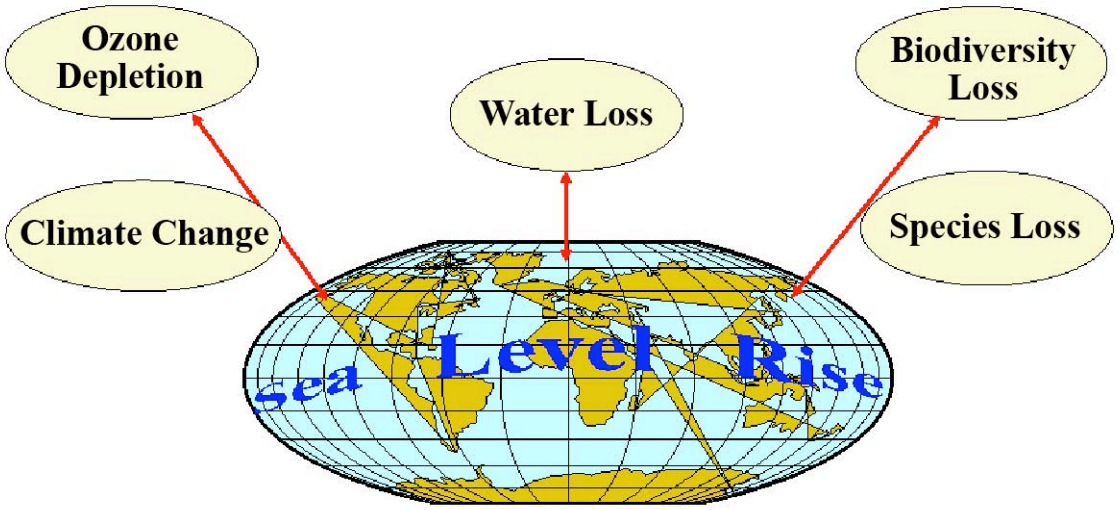
Everything we focus on for the future needs to cool the planet. Technology is one of those positive things schools can do. Schools need to teach how to use web-based communication technology internationally to reduce CO2 emissions. Most schools have computers and there is a push in poorer countries to use cell technology with access to the web. Transnational online education is now possible (Hogan, R.). Web conferencing

technologies, such as www.TalkingCommunities.com and www.iVisit.com, will enhance solving environmental concerns and sharing societal achievements. IHTEC is using these technologies globally.

Curriculum

There is an urgent need for curricula change to support humans and the planet's web of life. Current species loss is between 30,000 and 50,000 annually. IHTEC's suggestion is to plant food for species along migrating flyways, mindful of local biodiversity. Figure 2 shows issues.

Figure 2. Hot Planet Pod for climate-change curriculum.



Curriculum changes and implementation is vital to society's health. UNESCO has traveled the world during the "UN Decade of Education for Sustainable Development 2005-2014," stimulating change within faculties of education. This means that the existing curriculum has begun to be modified to include environmental education. More attention is needed on peace and sustainability education. Additionally, all teachers will need to be re-trained in peace and sustainability education. Public education is vital. University and college students will require at least one subject within their degree. Young women, who are not included in decision making in some places around the world, are to be fully included and know their role within sustainability.

Forests

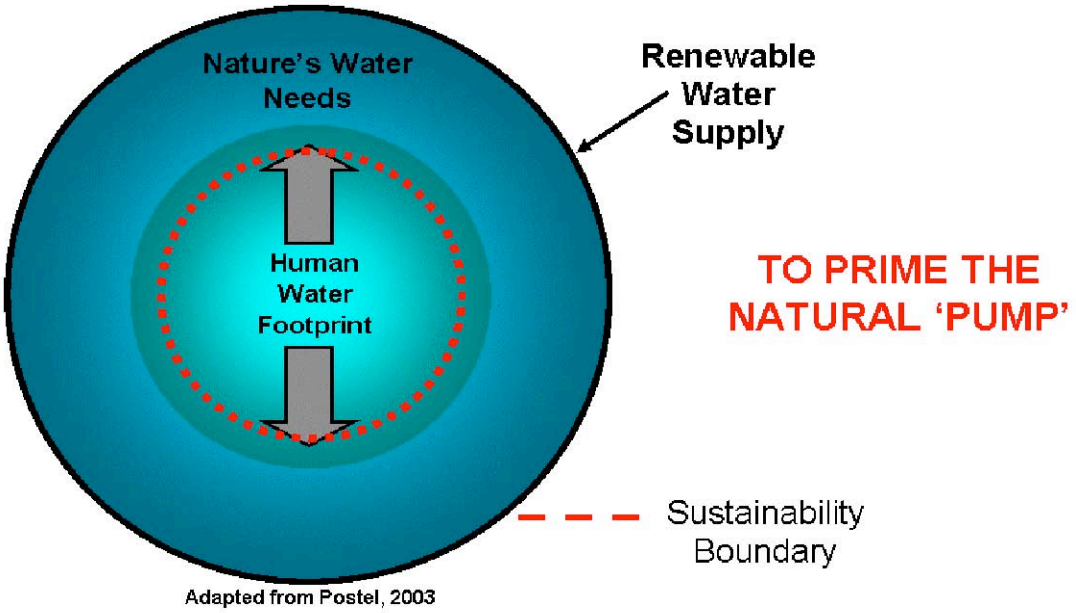
Forests are the lungs of the earth and they are still being burnt for agriculture. Creation of permanent forest estates may help to conserve them. It is felt that there will be more unintended consequences if forests are not replanted. At the Science for Peace Roundtable on Forests held at the University of Toronto, in September 2006, John McRuer, Canadian Association of the Club of Rome, identified that there is a major loss of quality and quantity in global forests. When the last forest is gone, humans will be gone. This means that biomass is not an option for energy farming. At the present usage, forests will not be able to meet the demands of our great grandchildren as the population

increases. Roads into forests should be prevented. Check traditional knowledge and management before continuing any tourism development. The roundtable advises that we need to strengthen national laws, as 90 percent of all logging is illegal. Soils globally need humus to restore them. This includes bio-carbon sequestration to make soils fertile again.

Water

Humans are already over the planet's water footprint (see Figure 3). The planet has only "x" amount of total water. Populations need "y" amount. Nature, including all other species, needs "z." Humans are already using more than their share, which will prevent local water from keeping the hydrological cycle working, causing droughts. Greater care of all rivers and streams is needed.

Figure 3. Nature needs H2O (Adapted from Postel 2003 in Maas, T., 2008).



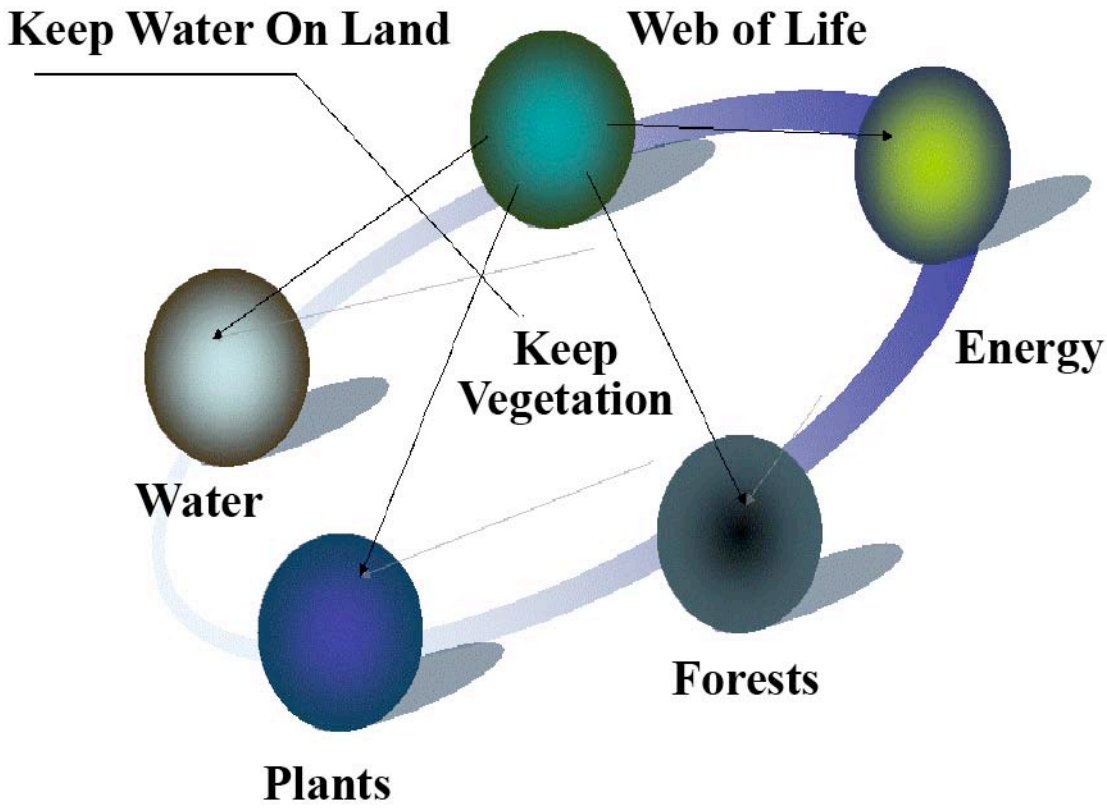
The importance of preventing pollution in underground rivers and aquifers has often been ignored. Freshwater is lost when all rivers run into oceans. IHTEC has created a water dedication for schools.

Oceans are 75 percent damaged with many dead spots with no oxygen. The ocean absorbs carbon, but there is a limit to the oxygen-exchange process, which is very serious (Mitchell, 2009). The carbon sinks into the benthos and produces methane (greenhouse gasses) that may burp (Mitchell, 2009 lecture) back into the atmosphere. Oceans around South Australia are already increasing in acidification, which is affecting all marine life, especially shellfish. This is apart from reducing carbon emissions and sea-level rise. Additionally, plankton and marine grasses die from excessive UV light. Recent sea-level rise has been experienced in the Hawaiian Islands, with fish on low-lying inland roads. IHTEC suggests Marine Peace Parks.

Food

The world has approximately 40 to 59 days of food available for the population at a time (according to the World Food Program). This will decrease due to climate change. Hawaii has only two weeks of food at any one time. Peace here is essential for sustainability. Food holds virtual water and is transported globally. It is better for the land if we eat food grown nearby. All planting should solve a global problem. Everyone needs to know how to live in a desert as the planet heats up. IHTEC presented a written statement on Food and Population at the Climate Change Conference in Copenhagen (Benking, 2009). IHTEC suggests Food Security Gardens.

Figure 4. Cool Planet Pod.



Conclusion

Will a new energy source stop climate change, resource depletion and economic poverty and war? There is always hope, but it will take a major crisis to get everyone working together. How will we change the outcome from a "Culture of War" to a "Culture of Peace"? IHTEC hopes that we can all work together and make the changes that are needed. As in the Cool Planet Pod (see Figure 4), we must protect the web of life, keep all biodiversity and local vegetation and pay careful attention to water.

APPENDIX I

13-16 September, 2007, Wasan Island, Muskoka Lakes, Ontario, Canada
Sponsored by Science for Peace, David Suzuki Foundation and Breuninger Foundation

CLIMATE CHANGE AND ENERGY
THE WASAN ACTION FRAMEWORK

Declaration and Recommendations of the
Interdisciplinary Round Table on Climate Change and Energy Strategies

THE FIRST CLEAR WARNINGS OF DANGER FROM GREENHOUSE GAS EMISSIONS DUE TO HUMAN ACTIVITY EMERGED 25 YEARS AGO. Prudence would have called for precautionary action at that time to slow down the growth of these emissions. Since then, the scientific understanding of the impact of human activity on global warming has been overwhelmingly confirmed; key predictions based on that understanding have started to occur. Evidence has emerged that the potential impacts of global warming will be much more severe than was predicted even five years ago.

Individuals, corporations and all levels of government around the world have a duty to act as global citizens in the face of the danger posed to life on Earth and to the well-being of the human race as whole.

1 WE DECLARE that human-induced climate change and energy security, in particular peaking of the world oil supply, are crucial issues requiring immediate action.

2 WE DECLARE agreement with the statement by the Intergovernmental Panel on Climate Change (IPCC) Working Group 1 regarding the physical basis of climate change: "Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."(1)

3 WE IDENTIFY AS THE ROOT CAUSES OF THIS CRISIS:
a) the large per-capita over-consumption and waste of natural resources in the industrialized countries
b) the growth paradigm (economic growth for its own sake)
c) the large and growing human population
d) the very large dependence on fossil-fuel-based energy
e) the resistance by vested interests to necessary change in energy technology
f) the lack of appropriate political leadership
g) the lack of global governance to protect the global commons

4 WE PROPOSE A GLOBAL SOLUTION FRAMEWORK: We must begin immediately to:
a) curb over-consumption and give priority to efficiency, conservation and the avoidance of waste

b) promote lower birthrates by empowerment of women through educational, economic and social measures, including access to birth-control information and services
c) focus globally and locally on developing low-impact renewable-energy infrastructure and technologies (e.g., small-scale biomass, geothermal, hydro, ocean energy, solar, wind, etc.) to their full potential, so as to avoid large-scale bio-fuel usage and nuclear energy
d) reduce carbon emissions by creating a just and universal framework through the implementation of appropriate incentives, government regulation, legislation and taxation
e) preserve forests, especially tropical rainforests

5 WE URGE IMPLEMENTATION OF THE FOLLOWING SOLUTIONS:
a) All levels of government as well as the UN and international organizations should embrace the Wasan Action Framework.
b) Media, corporations, the educational system from kindergarten to university and all civil society should collaborate in implementing this Wasan Action Framework.

(1) IPCC, 2007: Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Page 10.

APPENDIX II

Global Sustainability Education

Definitions of Global Sustainability Education
Global Sustainability Education (GSE) has two main parts – first, ecological integrity and social integrity. Both of these are well defined in the Earth Charter. In 2003, UNESCO adopted this soft law. Included in these parts are the two primary values, life and procreation, that foster a bio-centric worldview. GSE also includes the two pillars of sustainability – peace and resources.

Second, we include Ehrlich's Formula:
Human Impact = Population x Consumption x Technology

"The Ehrlich Formula covers the human impact on the environment. The second pillar of sustainability is social integrity or social peace. Environmental degradation leads to resource scarcity, which in turn leads to loss of social integrity and violent conflicts, according to T. Homer-Dixon, of the University of Toronto. Injustice is another way of loosing social peace; I see injustice as the main cause of terrorism," says Prof. Helmut Burkhardt.

As a GSE Curriculum is developed, and before any action is implemented, each current issue and its impact requires curriculum discussions on:
1. The effect of a current population increase on the environment and how it impacts to the "eco-system" and all species in the "web of life."

2. The impact on the local economy of human's affluence and the consumerism involved with the earth's resources.
3. The local impact of current and future technology on the local environment and society.

The GSE Curriculum for all students would require these elements and the use of mathematical and statistical knowledge of the current problem, to enable conflicts to be solved peacefully.

Holistic Tourism Education
Holistic Education examines the inter-disciplinary relationships between various branches of knowledge.

All of IHTEC's programs contain systemic thinking through a Global Sustainability Curriculum. These include the two primary values, life and procreation, that foster a bio-centric worldview, and include the two pillars of sustainability, peace and resources. These are linked with the values of the Credo of the Peaceful Traveler to complete the GSE concept.

The core curriculum consists of concepts around a "Culture of Peace through Tourism" as a central or "pivot curriculum." The curriculum is linked through the International School Peace Gardens, which also links to GSE curriculum in the following ways:
1. Environmental Integrity = environmental studies
2. Social Integrity = conflict resolution, inter-cultural understanding
3. Earth Charter = Environmental Bill of Rights and local laws, national laws, UN conventions, agreements and international laws
4. School Curriculum = language arts, performing arts, science, math, geography, history, technology, etc.

Global Sustainability Education in the ISPG Program
International School Peace Gardens (ISPG) Curriculum began in 1993. On February 14, 1995, Eric Foster and members of the school planted the first School Peace Garden that was linked to the launch of the Environmental Bill of Rights (EBR), in Ontario. The EBR tree became the "Peace Tree" in their peace grove or Bosco Sacro, a place for conflict resolution.

The practical application of Global Sustainability Education, includes the Earth Charter and can be implemented through the ISPG Curriculum as follows:

Environmental Integrity
• Link to your local, national and world heritage parks as the knowledge base
• Conflict resolution using "Friendship Benches"
• Knowledge of what grows in each area ("Life Zone Biodiversity") is vital to the survival of all species. e.g., Carolinian Life Zone, Desert Life Zones
• Food security, i.e. planting foods that suit local soils (ISPG)

• Species support, i.e. planting food supplies for migrating species and creating water supplies (Creature Corridors)
• Water and soil protection (Watershed Peace Pathways)
• Oceans and coastal areas (Marine Peace Parks)
• Rainforests (Rainbow Rainforests Rock)

Social Integrity
• Conflict resolution, inter-cultural understanding through language arts/performing arts

Population, Affluence and Consumerism
• Substance accounting for eco-systems, i.e. accounting for the gains and losses in their ISPG and identifying what problems may arise

Technology
• Solar energy, i.e. use solar ovens, lights, rocks, on or near school buildings; build a solar car; use solar for science experiments

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UNESCO Culture of Peace http://www3.unesco.org/iycp/.

United Nations: UNEP Intergovernmental Panel on Climate Change http://www.ipcc.ch.

WFP, World Food Program, http://www.wfp.org.