

Universal Values and the Four Pillars of Sustainability: Foundations of Sustainability Education

A contribution to the Videoconference on the Implementation of Global Sustainability Education

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Sustainability has become an important concept for good reasons. Firstly, it is needed in support of universal human values. Secondly, its realization challenges all branches of human knowledge. I would like to contribute two topics towards a establishing a solid foundation for sustainability education.

- Universal human values
- The four pillars of sustainability

Universal Values:

Human individuals, and all living creatures place great value on their own life, and the life of their offspring. These two primary values form the base of a universal, scientific ethic. There is a logical proof for the validity of this simple, universal value system: individuals, who don't value their own life, won't live for long; creatures with the innate property of not valuing procreation are doomed for extinction too. All human values other than the two primary values are instrumental values, which serve the sustenance of life in the short or in the long term.

Examples in support of these simple, universal value systems are plentiful; when life is at stake, all other values shrink. Shakespeare, Richard III: Act V, Scene IV: "A horse! A horse! My kingdom for a horse!". Nichiren Daishonin, The Eternal Buddha: "However, life itself is the most precious of all treasures. Even the treasures of the entire universe cannot equal the value of a single human life." Stripping supernatural elements out of religious values leaves a core of universal values common to all religions, and to humanist ethics. Albert Schweitzer: Any religion or philosophy which is not based on a respect for life is not a true religion or philosophy.

The value of procreation is a match to the value of life; this was demonstrated by the action of a Japanese mother during the nuclear bomb attack on Hiroshima in 1945; she covered her bay boy with her own body and died from the exposure to the fury of the released energy. Neighbours pulled the baby alive out from under his mother's body, and today he is a Canadian citizen living in Ottawa.

The law of the jungle, as described in Charles Darwin's theory about survival of the fittest is a direct consequence of a value system based on primary values alone. However, early humans discovered the survival potential in instrumental values such as cooperation and justice. Charles Darwin's genius discovered that too. In his writings Darwin emphasizes cooperation and love based relations much more than the physical fitness. In our technological society where deadly weapons are so readily available,

cooperation, justice, and altruism are survival instruments of great value; they are not only important, but also necessary. A civilized, global society needs this 'enlightened law of the jungle' to survive.

The Four Pillars of Sustainability:

Humankind's impact on Planet Earth is approaching in magnitude the impact of natural forces. Sustaining life in this new, and complex situation requires four conditions:

1. **Ecological Integrity:**
A healthy ecosystem, which guarantees the vital resources for the process of living: clean air, clean water, and healthy food. Human population (P), consumption stimulated by affluence (A), and Technology determine the human impact on the ecosystem (I). Paul Ehrlich summarized it in an easy to remember formula: $I = P * A * T$. All three factors need careful attention if humanity is to prevent climate change and a catastrophic collapse of the vitally important ecological integrity of the global commons.
2. **Societal Integrity:**
An appropriate social system, which prevents humans from harm by guaranteeing justice, peace, education, and healthcare locally and globally. Global law and its enforcement is the essence in guaranteeing human security.
3. **Responsible individuals:**
creative, educated people, healthy in body mind and spirit are the best candidates for good world citizens who recognize their rights as well as their duties in relation to the local and global community.
4. **Cosmic continuity:**
Variation of solar activity is outside of human control, but it influences our climate. Magnetic storms caused by solar winds interfere with human technology. It is unlikely, but possible that life on Earth is disturbed by the impact of objects of cosmic origin.

Framework for Sustainability Education:

Knowledge of universal values and the four pillars of sustainability are needed for implementing a sustainable civilization. The complexity and interrelatedness of all these issues is the challenge of sustainability education; it requires systemic thinking, and input from all branches of knowledge. A well-rounded sustainability education curriculum should, adjusted to the level of education, include elements of the following subjects: philosophy and universal ethics; system science and holistic thinking; environmental science and human impact studies; social sciences including politics, law and economics; biological sciences; and physical sciences.