



Earth Ethics

Evolving Values for an Earth Community

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What is Education for Sustainable Development?

by Joanna D. Underwood and Mia MacDonald

Education for sustainable development is formal and non-formal instruction and learning that instills in people the desire to live in harmony with other human communities, other species and the environment within which all species,

human and non-human, live. Such education seeks to integrate the concept and consciousness of sustainability into all aspects of life, including production, consumption, reproduction and the creation and maintenance of livelihoods. Education for sustainable development embraces the concept of lifelong learning, and works to instill knowledge, to create care and most critically, to catalyze action. This education, comprising knowledge, skills, wisdom, ethics, responsibilities, creativity, analytic abilities and critical thinking capacity, is at the heart of human values and goals and the means to pursue them....

Sustainable development presents two different sets of challenges, one for those living in the industrialized world (the "developed" countries of the Northern hemisphere) and another for the countries in the Southern hemisphere (in the "developing" nations). In the North, the challenge of sustainability is to stabilize and ultimately reduce current high consumption and waste levels that have adverse and long-term environmental impacts. In the South, the challenge is to meet current human needs for food, shelter, health care, education and employment, as well as achieve higher quality of life, without depleting resources and ecosystems to such a degree that they no longer function. In both North and South, "development" – as change, enhancement and forward motion – is continual; all nations are "developing" nations, and the chal-

lenge of sustainability a continuous and increasingly conscious reality. As economist and Nobel laureate Amartya Sen (1999) writes:

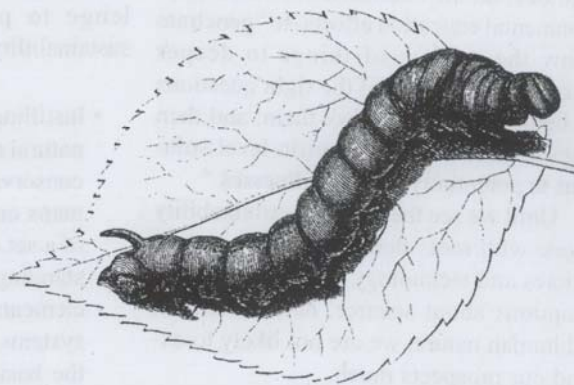
We live in a world of unprecedented opulence of a kind that would have

been hard even to imagine a century or two ago... And yet we also live in a world with remarkable deprivation, destitution and oppression. There are many new problems as well as old ones, including persistence of poverty and unfulfilled elementary needs, occurrence of famines and widespread hunger, violation of elementary political freedoms as well as of basic liberties, extensive neglect of the interests and agency of women and worsening threats to our environment and to the sustainability of our economic and social lives. Many of these deprivations can be observed, in one form or another, in rich countries as well as poor ones.... Overcoming these problems is a central part of the exercise of development. [And] individual agency is, ultimately, central to addressing these deprivations.

Embracing All, Redefining the Terms

...Education for sustainable development also requires that terms in common use throughout the world at all levels of society, like "progress," "growth," "development," "quality of life," "value" and even "knowledge," be re-examined and redefined within the context of sustainability. Economist Herman Daly has said: "We have to distinguish between growth and development. We have to shift from pursuing growth, which is quantitative, to pursuing development, which is qualitative."

Within this revision of concepts, "a sense of the earth and its meaning is particularly urgent right now," writes historian and theologian Thomas Berry (1990) "for the different sciences have developed an immense volume of information about the natural world in its physical aspects, and a cor-



responding power to control it. Yet earth is still seen as so much quantified matter."

...Eco-psychologist Theodore Roszak (1972) describes the impact of centuries of humanity viewing itself as separate from ecological systems as effecting a vast and irrational alienation from nature and living systems. "We press our technological imperialism forward against the natural environment until we reach the point," he writes, "at which it becomes startling and not entirely credible news to our urban masses to be told by anxious ecologists that their survival has anything whatever to do with air, water, soil, plant, or animal." He continues:

"Should progress be defined as accumulation and expansion?"

Our meat comes to us from factory farms... The beasts we eat are all but a fabricated counterfeit; we do not even grant them the dignity of setting foot in the open air once in a lifetime. For after all, what difference does *their* dignity make to *us*? Meat is meat, isn't it? Not only does the artificial environment blind us to the paramount facts of our ecology, but we become convinced that there are humane substitutes for everything we exhaust or contaminate... surely, if need be, they [scientists] can conjure sunshine, fresh air, clean water, nutritious foods out of their magic test tubes....

The Mandate of Education for Sustainable Development

David Orr (1991) describes the challenge of education for sustainable development: to go beyond the boundaries of current environmental education efforts—to "penetrate below the surface of things to deeper causes;" to determine if the right questions are being asked and to ask them; and then to go beyond offering "aspirin-level solutions to potentially terminal illnesses."

Until we see the crisis of sustainability as one with roots that extend from public policies and technology down into our assumptions about science, nature, culture, and human nature, we are not likely to expand our prospects much.

...Many thinkers and practitioners in the field of sustainable development, as well as activists, theologians and educators, conclude that the fundamental shifts needed for sustainability will not take place unless there are broad and fundamental changes in basic ethical orientations. Such a change would facilitate a re-examination of terms, the meaning of which is taken largely for granted.

For example: should terms like "progress" and "profit" be used for activities that spend environmental capital, not create or enhance it? Should progress be defined as accumulation and expansion? How

is "quality of life" measured, by quantity of goods or the quality of relationships, culture or knowledge? Should the basis for legal frameworks continue to be that rights relate only to human beings? Shouldn't children be brought up to understand and marvel at the geological, hydrological, and biological systems that make up the world of which they are a part, rather than to see them as items to be used? Is technology an end in itself, or a means to an end? What are its beneficial and potentially harmful uses?

Directions for the Future

...The key to sustainable development and education to bring it about is for the

vast capacities of human beings to focus on innovations that can provide rich and creative lives, but that do not undermine the environmental or natural capital of the living systems on which all life depends. Priorities for action toward sustainability must be set based on both knowledge and values. As such, programs and policies of education for sustainable development should seek to disseminate essential knowledge at all levels, and instill or encourage the values that will foster essential changes among individuals, communities, institutions and the private sector. Key future actions needed, all of which form a mandate and challenge to programs of education for sustainability, are:

- Instilling knowledge about the value of natural resources and the need for their conservation as well as the place of humans on the world stage—as one part of a set of living systems. Such understanding recognizes the essential and elemental interrelatedness of life: if ecosystems and resources are destroyed, the basis of sound economic activity and the quality of human life are both undermined. As Thomas Berry writes in *Dream of the Earth* (ibid.): "The natural world is subject as well as object... The natural world is the larger sacred community to which we belong. To be alienated from this community is to become destitute in all that makes us human. To damage this community is to diminish our own existence."

- Reseeding an ethic of equity between and among all peoples and species, based on reality that if the world's people are denied the resources they need most to live, the results will be increased environmental degradation, poverty and conflict.

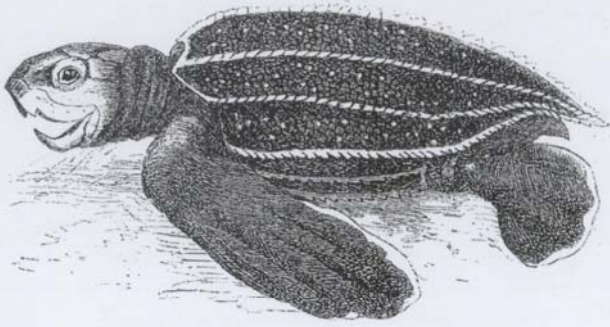


- Focusing human creativity, technological and scientific knowledge, economic skills, energies and vision on meeting the needs of a human community of six billion, while supporting a clean and

healthy environment and flourishing eco-systems, and living in harmony with other species.

The Earth Charter, drafted over the past decade through dialogues among a group of world leaders and citizens in both the North and the South, provides an important guide to education for sustainable development. The Charter presents a concise set of principles, values and directions for action to frame human relations with the earth and ensure the sustainability and longevity of humans and other species. As the Charter states:

We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise... we are one human family and one earth community with a common destiny... We have the knowledge and technology to provide for all and to reduce our impacts on the environment... Our environmental, economic, political, social, and spiritual challenges are interconnected, and together we can forge inclusive solutions... everyone shares responsibility for the present and future well-being of the human family and the larger living world.... ■



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Joanna Underwood founded INFORM in 1974 to document the environmental impact of business practices and identifying practical options for change. Under her guidance, the organization has become a prime force in educating decision-makers from both the public and private sectors about the need for preventive approaches to some of this country's most complex environmental problems. In 1994 and 1995, she was a member of the Eco-efficiency Task Force of the U.S. President's Council on Sustainable Development. Ms. Underwood is on the board of directors of the New York State Energy Research and Development Authority, the Rocky Mountain Institute, and the Keystone Center.

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