THE IMPORTANCE OF CONTEXT: ENVIRONMENTAL EDUCATION IN THE U.S.A.

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Although the comments and analysis that follow are specific to education in the United States, the supposition is that some of the ideas and issues expressed herein will be relevant to the educational reforms in other countries. Nevertheless, it is important to keep in mind at least one major factor which separates the American educational system from others. Unlike most countries where public schools are administered by the central government and where curricula and procedures are highly uniform, public schools in the United States are under the legal jurisdiction of the 50 state governments, while policy decisions and administration are ordinarily delegated to local school boards of which there are roughly 16,000. Thus, on the elementary and secondary school levels, even if one were to devise an exemplary environmental education programöof which, in fact, there are several in existenceöthere is no reason to believe that such a program would be anything more than a local phenomenon.

Report objectives

The attempt to incorporate significant environmental education in American public schools has thus far been a dismal failure, and the prognosis for dramatic improvement is not very optimistic. This is so despite what would seem to be the most rational imperative for its incorporation. This report will first present a brief historical overview of environmental education in the past twenty years and then attempt to identify the factors, operating both within American school systems and American society in general, which are responsible for its largely failed record. Of special import is the apparent paradox of a society whose citizens have unprecedented access to news and information about environmental degradation and yet do not possess the will, vision, or perhaps the means, to effect significant changes in their educational institutions. Next, I will posit two separate conceptual frameworks of environmental education. Since the term means various things to various people, it is necessary to understand how these differing conceptions might require either modest or radical educational reforms. Lastly, with this context in mind, this report will briefly identify a few exemplary educational programs which might suggest proper approaches to environmental education.

Historical overview

The passage of the Federal Environmental Quality Education Act of 1970 is considered the impetus for environmental education in the United States. "Its purpose was to protect the environment and/or enhance environmental quality...Education was seen as a tool to accomplish a societal mission, not as an end in itself." However, failure to provide adequate funding prevented environmental education from becoming widely adopted. Whatever small federal support remained throughout the 1970s virtually disappeared in the 1980s. "State education agencies generally followed the federal lead by substantially de-emphasizing environmental education...."

The 1990s are being ushered in with the National Environmental Education Act (NEEA), which calls for the Federal EPA to work with "local educational institutions, state education agencies, not-for-profit educational and environmental organizations, and private sector interests." It should be noted that the 1990 legislation is similar to the 1970 Act, which ultimately amounted to very little in terms of lasting reform.

Reason for Failure of Environmental Education: Societal Factors

Conflicting notions about the future of technological society. While 75% of Americans identify themselves as "environmentalists", there is a broad spectrum of opinion about the meaning of this term (see Differing Conceptual Frameworks below). On one end there are New Age futurists such as John Naisbitt, who see possibilities of unlimited growth and perpetual affluence as soon as the old, polluting-what Alvin Toffler calls "Second Wave"-industrial system gives way to the new, non-polluting "Third Wave", high-technology, information-centered future. It should come as no surprise that the corporate world prefers this vision. On the other end of the spectrum are doom-saying alarmists who predict ecological catastrophe if technological solutions are not subsumed under a recognition that we need to return to a simpler, less anthropocentric way of life. Between the euphoric propositions of one camp and the apocalyptic fears of the other stands the bulk of the American peopleöa largely well-intentioned but bewildered mass.

The narcotic effects of mass media. Vine DeLoria, Jr., a Standing Rock Sioux, acclaimed author and former director of the National Congress of American Indians, provides the following apt metaphor:

> "Modern American life is comparable to a large and bountiful Christmas tree. It promises only joy and fun, and never suggests a period of doubt when ultimate realities are experienced and understood. Indians are wandering in this plush fantasy desert in the same way as sensitive non-Indians. It will require considerably more thought and significantly less recreation and entertainment before Indians will be able to discern in their own traditions the substance and energy which lie dormant."

DeLorias's comments echo many of those who have criticized the socially fragmenting, psychologically benumbing aspects of modern electronic media (Donnelly, Meyrowitz, Postman). In a society which touts consumption as synonymous to the individual pursuit of happiness, media bombardment amounts to a permanent backdrop of noise that tends to drown out individual messages, especially those that call for serious reflection.

Psychological reactions to depressing environmental information. There are several common reactions to the often alarming news about ozone depletion, greenhouse warming, population explosion, and so forth. Certainly, the most frequent is that of denial-the inability to entertain ideas which may produce various fears. The easier response is to put these fear-producing ideas aside and absorb oneself in habitual daily activities. Another reaction, perhaps equally ineffectual, has been noted by psychologists who have worked with individuals suffering from apocalyptic fear: ..."it [the fear] creates a strong desire for total transformation; it creates very strong actionöa sweep of hysteria where everybody begins to actöwhich is often very short-lived and is followed by a period of numbing."

Cognitive dissonance with one's culture and personal worldview. Closely related to the psychological reaction just alluded to is the realization that accepting some of the radical perspectives of environmentalists means to directly challenge some of the most hallowed beliefs of one's culture, e.g. that the pursuit of economic wealth is necessarily a societal good, that technologcal development necessarily means progress, that modern science is ipso facto superior to all forms of depicting the world. To entertain such contrary beliefs is to risk alienation from one's community and one's past.

Reasons for the failure of environmental education: factors within schools

Beyond the lack of a unitary vision and purpose within society, there are several specifically school-related factors which have prevented the adoption of significant environmental education:

Competing curricular reforms. The rapidity of societal changes has exerted increasing pressures for curricula reforms. The beleaguered teaching profession, already burdened with issues related to different learning styles, educational tracking, plummeting test scores, and reduced budgets, is now being asked to incorporate into the curriculum global education, multi-cultural education, moral education, computer education, and science/technology/culture education, in addition to environmental education. Even if long-time teachers could muster the enthusiasm to incorporate further reforms, there is still the problem of teacher (re-)education and the issue of whether there is enough school time to adequately address these curricular additions and/or content reconceptualizations.

The need for teacher education/re-education. Graduate Schools of Education have thus far failed to provide education/training in environmental education.

Unfocused educational programs. Professor Steve Van Matre of the Institute for Earth Education, has opted for "Earth Education" as an alternative to failed programs of Environmental Education, and contends that the broad-based infusion approaches of the past were unfocused, not adequately distinguished from outdoor education programs, and failed to consider the necessary long-term lifestyle decisions of their learners.

Differing conceptual frameworks for environmental education

From among the various conceptualizations of environmental education I would like to posit that there are basically two fundamental approaches: One approach sees environmental degradation as requiring students to learn more about basic principles of ecology-the relationships between and among all living things-the various earth processes and cycles which create our earth environment, and the scientifically stated causes of and possible technological remedies for our damaged environment. This approach could, and to some small degree already has fit neatly into public educational systems simply by having teachers at varying grade levels incorporate such material into their present science and social studies content areas. Be it through such curricular infusion or by treating environmental education as a separate subject, this approach operates under what can be termed the existing Western, scientific, rationalist paradigm. Students are taught how to improve upon presently harmful ways of doing things through recycling and conservation without explicitly being confronted with the systemic nature of environmental abuse and the degree to which it may be embedded in our economic, political, social, and religious charecter.

A second approach sees environmental degradation as requiring a much more radical educational response. Rather than supposing that our

society simply needs to provide more information about ecology and cleaner technologies, and assuming everything else about our societal underpinnings to be relatively benign, this approach calls into question the very nature of our modern, technological society. From this perspective, modern technological society's economic structure is seen as based primarily upon the ever-expanding exploitation of limited earth resources and the inevitable creation and dissemination of harmful byproducts. This critical perspective on Western, scientific rationalism sees as the root cause of environmental problems Western humanity's misshapen and alienating belief that humans are separate from the natural world and thus free to exploit it as they see fit without consequences for the spiritual essence of nature. In order to counteract this sense of separateness and re-unify humankind with the natural world, the educational function here becomes nothing less than the radical re-directing of the perceptual, spiritual, ethical, and cognitive world of its citizenry. This task would be equivalent to a cultural revolution and would require radical changes in present economic frameworks at the very least.

Exemplary environmental programs

The following existing programs could be helpful in providing insights for future environmental education:
Institute for Earth Education, an international, non-profit, educational organization which provides training in how to implement focused, comprehensive earth education programs at even the lowest grade levels. The emphasis is on making education an enthusiastic adventureöa discovery of the wonder and mystery of the natural world while at the same time providing the structured learning objectives which characterize sound educational programs. Most importantly, students learn the connection between their way of life and the state of environmental degradation. Forging a sustainable lifestyle becomes part of the educational agenda.
This type of program could and should be taught in University Schools of Education. Regardless of where one ultimately stands on the questions of technology and science, at the elementary school level it would certainly be difficult to quibble with this program's emphasis on perception, feelings for the natural world, love of oneself, respect for life, and understanding life's processes. Many would agree that such a program could serve as a needed antidote to our increasingly mediated experience of the world.
College of the Atlantic (COA), founded in 1969, provides a broad liberal arts education focused on the theme of human ecology. Its roots are "in the humanistic and scientific traditions of the past; such traditions not only inform the present but shape the future. By examining the multiple ways these traditions interconnect, COA students learn in creative and innovative ways, and most importantly they learn to be more comfortable with uncertainty."
Meadowcreek Project, Inc., "a non-profit environmental organization established for education and research in applied ecology, agriculture, renewable energy systems, forestry, wildlife, as well as the ethical, social, economic, and political aspects of sustainability."

Speculations/suggestions:

In addition, I would like to speculate on what might be some possible solutions to some of the dilemmas and difficulties presented here. Keep in mind that such suggestions are meant primarily to stimulate debate. They do not represent firmly held positions:

A. There must be some consolidation of the global education, moral education, science/technology/culture, and environmental education competition. I believe that the ideal program would have multi-cultural perspectives on the values which underlie the science/technology realm.
B. Perhaps now is the time for the United States to consider some national curricular priorities. However, without a consensus of opinion on these priorities, the outlook for such a reform does not look promising.
C. Whether or not significant curricular changes are made in the United States in the near future, some of the programs mentioned in this report should serve as guides for local educational responses. It may be that regional approaches are the only workable solutions at the present.
D. The International University for the Bio-environment (I.U.B.E.) could provide the international networking required by those working in environmental education.

References:

1. Ryan, K, Cooper, J.M, (1988) Those Who Can, Teach, 320 pp. Houghton Mifflin Co, Boston.
2. Disinger, J.F., (1990) "Needs and Mechanisms for Environmental Learning in Schools" in Educational Horizons 69, Fall 1990, p. 30.
3. Ibid., Disinger, p. 31.
4. Quoted in "National Environmental Education Act" Bill Synopsis, United States Environmental Protection Agency, 1990.
5. Ibid., Disinger, p. 35.
6. Van Matre, S., (1990) Earth Education... A New Beginning. Institute for Earth Education, Warrenville, IL, U.S.A., p. 97.
7. Naisbitt, J., (1990) Megatrends 2000. Morrow, New York.
8. Toffler, A. (1980) The Third Wave. Bantam Books, New York.

9. Deloria, V., Jr., (1989) "Out of Chaos" in I Become Part of It. Parabola Books, New York, p. 268.
10. Donnelly, W.J. (1986) The Confetti Generation: How the New Communications Technology is Fragmenting America. Henry Holt & Co., New York.
11. Meyrowitz, J., (1986) No Sense of Place: The Impact of Electronic Media on Social Behavior. Oxford University Press, New York.
12. Postman, N., (1985) Amusing Ourselves to Death: Public Discourse in the Age of Show Business. Penguin Books, New York.
13. Bosnak, R., (1990) "Facing Apocalypse" Conference, quoted by Melissa Everett in Center Review. Center for Psychological Studies in the Nuclear Age, Vol. 4, No. 2, Fall 1990: p. 13.
14. Ibid., Van Matre, p. 47.
15. Ibid., Van Matre, p. 47.
16. Rabineau, L., "Message from the President," in College of the Atlantic 1989-1990 School Catalogue.
17. Meadowcreek Project, Inc., untitled brochure.

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