It is generally believed that great strides are being made toward increasing the level of ecological awareness among the American public. This paper points to the fact that not only is public education failing to achieve an adequate level of ecological awareness among today's youth, but that public schools may actually be contributing to the level of anthropocentric and dualistic thinking that has brought humanity to its current point. The current curriculum is an economic/industrial, consumption-driven model of human interaction with the earth. A warning is given that continuation of the use of this model for teaching purposes is self-destructive. A suggestion is made for a new holism in public education that goes far beyond the usual integration of environmental awareness programs into public school curriculum. This paper makes a call for total integration of all other subject areas into an environmentally-based educational system rather than incorporating environmental studies into the already existing curriculum. Lastly, teachers should practice the environmental principles they teach. Contains 12 references. (PVD)
Environmental Education:
Creating a New Holism

AESA 1996

Timothy N. Callicutt
University of North Carolina at Greensboro

P.O. Box 131
Trinity, NC 27370
ths@highpoint.net
Environmental Education: 
Creating a New Holism

Environmental education in public schools has been and is continuing to change rapidly. The general belief is that great strides are being made toward increasing the level of ecological awareness among the American public. This paper points to the fact that not only is public education failing to achieve an adequate level of ecological awareness among the youth of today but that public schools may actually be contributing to the level of anthropocentric and dualistic thinking that brought humanity to this point. Additionally, I will make a suggestion for a new holism in public education that goes far beyond the usual "integration" of environmental awareness programs into public school curriculum.

Across America today public school curriculum, university courses, individual workshops, programs and institutes explore the environmental crisis in a variety of ways. The wide range of perspectives connect different aspects of our environmental dilemmas in turn to government policies, class struggle, individuation run amok, minority issues and tragedies of third world social injustices. Some attempt, primarily at the university level, is being made to deconstruct the historical sociological, economic and political origins and causes of the same crises. Other more practically oriented attempts have been made to teach citizens how to live responsibly day-to-day, treating the Earth and all living beings honorably. Perhaps the most popular recent trend (which is actually a revival of a quite old American practice) is to allow the participant/student to travel great distances to a wilderness area where they will experience nature, the foremost hope is that lives will be transformed. Quite often those efforts are attempts to resolve spiritual crises in the Earth-human relationship and take the form of quests, rites-of-passage, or other ceremonial bonding. Unfortunately, little instruction or insight is offered to explain
how this transformation can manifest itself in the daily lives of computer programmers, housewives, ministers, executives or teachers once they return to the "real world".

What role has the public school taken in this multi-faceted American experience with environmental awareness? The "greening" of public school curriculum varies greatly from state to state but has generally been an attempt to *bring environmental education into the already existing curriculum*. The operative word for this attempt is integration. The concept of integration loosely translates to the teacher that, "You will teach a segment each year or semester on the environment." Some schools are fortunate enough to have more individually motivated teachers who truly demonstrate their subject area is indeed an integral part of the larger system of life. There are some schools in America with exceptional curricula that do integrate environmental education into every portion of each day's experiences in or out of the classroom. Unfortunately, many of them are private schools and there are far too few of them in America whether public or private. With the environmental clock ticking -- and almost everyone from Carl Sagen and forums of leading scientists to our Hopi elders believes it is -- we can gain little comfort in knowing a few exceptional programs do exist.

The fundamental criticism I have is that environmental education has been isolated and identified as a specific area of study which now must be integrated into our existing curriculum. Questions arise at teachers' workshops such as, "How do I teach about the environment in an art class other than having the students do scenes in nature?", or "Should I do the environmental segment in social studies with economics or with government?". Environmental issues are being seen as additional material to be presented as time permits. Yes, a student may pursue environmental issues or studies if so individually inclined and are usually encouraged to do so, yet even in these situations the environmental perspective is viewed as only one avenue by which study of a discipline may be approached; as though it is possible to ignore it altogether.
Additionally, even in those school systems where environmental education does take on a more holistic being, almost no scrutiny is being given to the *language* we use in the classroom to convey concepts, images or authentically felt passions to the students. C.A. Bowers (1996,1993) has written extensively about the metaphorical and culturally transfixed language from the past (and present) eras of environmental exploitation that is being used daily in classrooms in honest attempts to bring about understandings of ecosystem relationships and problems. Teachers are not being trained to recognize and deconstruct the language we use which is so very laden with assumptions, anthropocentrism and consumer-oriented thinking. The very words we use, as we struggle to convey notions of environmental interdependencies, contribute to the students' misconception of self as center of the universe and nature as resource for consumption. We cannot continue to use the language of the Industrial Revolution to define, study and "solve" the current ecological crises. The scientific, reductive language used when studying the Earth does little to reveal to the student our place in the larger scheme of things ---- what Joanna Macy (1991) has referred to as the "non-summative whole". In this synergistic model the focus is not the worth or material of individual parts but the total relationship of the whole. Berry (1996) believes the critical flaw of Western civilization can be found here; the universe is a communion of subjects and not a collection of objects. Aside from the frequently damning metaphorical language in use there is little (if any) serious and sustained critique of the current consumer oriented focus of our society in general.

What is it then that I call for in "A New Holism" for environmental education in public schools? A total integration of *all other subject areas* into an environmentally based educational system. That environmental education no longer be compartmentalized as a subject to be studied but that it in fact be the basis for the entire curriculum. The basis for our curriculum as it presently exists is an economic/industrial, consumption driven model of human interaction with the Earth ---- the Earth being viewed as resource.
To have a human economy which devastates the Earth's economy is absurd to say the least. An extractive economy is a terminal economy (Berry, 1996). For us as educators to continue to teach on this model is insanity and self-destructive. Economic-based education can address only a very narrow part of our lives, existence or purpose and cannot speak to the needs of self and spirit. On the one hand we teach our students about the environmental ills of our own culture, the destruction it brings about and that we must change —- soon. On the other hand we teach in such a fashion as to support and perpetuate the very system of dominance, competition and consumerism that creates the destruction. Our hypocrisy does not go unnoticed by our students.

Hypocrisy brings to light the second segment of this call for true holism in environmental education, that being the incorporation of environmental ethics and the practice of environmentally sound principles into the very existence of educational institutions. All too frequently we call upon students to "do as I say, not as I do" and leave classroom discussions around environmental destruction hanging on issues of blame and doomsday predictions. Educational institutions and educators must lead students by example and approach our curriculum positively and hopefully. It is not enough to criticize corporations, the government or the logging industry nor is it enough to point the way for our students ---- we must lead by example. How many schools have composting programs for their landscape maintenance? How many schools discuss pollution and yet have furnaces belching fuel oil or coal smoke into the air? How many schools have total recycling programs? How many schools limit the number of cars on campus based on justifiable need as determined by a student/faculty review board? How many schools rely on solar heat, photo-voltaic cells, wind or geo-thermal power or Earth-berming? How many schools have programs to reduce the amount of landscaped area that is dependent upon irrigation (football and soccer fields not withstanding)? How many new facilities are being constructed under the old thinking patterns? How many schools can teach their students how to live minimally on the Earth and demonstrate it each day
through practices of the institution itself? A painful example was found recently at the high school where I teach. Despite protests from the student environmental organization and a few faculty, students were allowed to purchase balloons and enclose a short message of school spirit inside the balloon. At last Friday night's football game nearly one thousand balloons were released into the cool October sky in a show of school spirit. We as educators and educational institutions "must practice what we preach", or as a friend recently put it, "We must walk the walk as well as talk the talk."

Concrete examples must be provided to demonstrate the principles we teach in order to transform intellectual knowing, arrived at through academic pursuits, into actual practice or what I refer to as "knowledge of the bones". It seems to me that we know a lot about the environment and its problems yet we seldom act on that knowledge. Real action comes from within, motivated generally by deep desire or passion, from the heart or the spirit. Goldsmith (1993) has said, "We will not save our planet through a conscious, rational, and unemotional decision, signing an ecological contract with it on the basis of a cost-benefit analysis. A moral and emotional commitment is required." We can present highly charged discussions about the destruction of the rain forest for grazing land and beef production to keep pace with the demands of industrialized nations, but of what worth are the discussions if the students go to McDonald's after school for a burger with friends? We must demonstrate alternative ways to deal with the blind pressures placed upon them by our society once those pressures are exposed. We as educators and educational institutions must move beyond environmental awareness to environmentally responsible living. To know that twenty percent of the world's population consumes seventy-five to eighty percent of all natural resources annually is simply a useless fact unless it can be transformed into action.

Environmental education has always been an area of study in public schools and a "specialization" at the university level. Curriculum and curriculum supplements were written as though ecological concerns could simply be added into existing classroom
topics of study. The worst indictment of public education is that beyond these practices, the metaphorical, value-laden language and methods of instruction used to teach environmental concerns may well be contributing to the perpetuation of the very same paradigms of destruction that have brought us to this point. My call is for the design of a public school curriculum which uses the Earth and humanity's relationships to it as well as all other beings as the basis for the study of all other subject areas. Thomas Berry (1996) believes education should encompass three types of relationships; the Divine-Human, the Inter-Human and the Earth-Human. I cannot disagree. The Earth is the source of ALL we have. Everything we obtain ultimately comes, in one form or another, from the Earth. Our very existence in every form is dependent on it. We must begin in public education, to accurately clarify the role of our human community in relationship to our participation in the larger world or universal community.
Bates, Gregory
1972 Steps to an Ecology of Mind.

Berry, Thomas
1996 Lecture, Guilford Technical Community College, Greensboro, NC. October 7th.

   1990 The Dream of the Earth.
   San Francisco: Sierra Club Books.

Bowers, C.A.
1996 Lecture, Chinook Learning Center, Clinton, WA. July 14th.


   1987 Elements of a Post-Liberal Theory of Education.
   New York: Teachers College Press.

Callicott, J. Baird

Goldsmith, Edward

Macy, Joanna
   New York: SUNY Press.

Miller, Ron, ed.

Orr, David

Rozsak, Theodore
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC/CSMEE
1929 Kenny Road
Columbus, OH 43210-1080

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2d Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
 Toll Free: 800-799-3742
 FAX: 301-953-0263
 e-mail: ericfac@inet.ed.gov
 WWW: http://ericfac.piccard.csc.com

6/96)