

# Environmental Education: The Whole Man Revisited

By EDWARD J. KORMONDY

It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us. . . . It was the year of Our Lord one thousand seven hundred and seventy-five . . .

Is it not the timeliness of timeless words that makes of words a literary classic? Dickens' *A Tale of Two Cities*, a masterpiece of his maturity, has this classic quality—not alone in the pertinence of these quoted words to the paradoxes of our own times, but also in the parallel of the character of times two hundred years apart: an era then as now of vast social upheaval; of the shadow then of the guillotine of political extermination and now of human extinction threatening the guilty as well as the innocent; of poverty and oppression breeding revolution; of the violence and oppression begat by revolution; of the awful corrosion of human hate and the glorious balm of heightened humaneness.

For the affluent of our day, this is the best of times; for those in abject poverty it is the worst. In a time of vast opportunity for public education and a grasp of wisdom, at least in our country, foolishness is expressed in our insufficient and inefficient use, even waste, of human and physical resources.

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In a time of sophisticated intellectual and technologic achievements, a time of belief in the capacity of man, there is a continuing and even strengthened sophistry and incredulity, as witnessed in the zodiac of astrology, the lines of palmistry, the contours of phrenology. A Season of Light, a Season of Darkness.

Ours, indeed, could be a spring of hope; increasingly it is a winter of despair, of troubled times—perhaps more troubled, perhaps less, than those of Dickens' *Tale*. We are too much a part of the fabric of history's drama to see the whole of it, and so we cannot tell. We can tell, however, that we are troubled; that two-thirds of our brother men subsist on starvation rations; that the nonwhite two-thirds of the world's population is severely challenging the status quo; that our cities decay as rapidly as the landscape is raped; that our natural resources diminish as rapidly as the economy consumes. These strains, and the many others one might mention, test the capacity and strength of life's threads. Had we the perspective of time we could see what resilience and adaptability of persons and societies there is to respond and survive these stresses.

## Enter Minutiae—Exit Man

To attempt to isolate single causes of the complex difficulties that confront man would be to chart a fool's course in heavy seas. We are in waters made turbulent by not entirely predictable winds, and we are not even sure of the capacity of our hull and sails to ride out the storm. And here is the core of our plight: we do not really know the capacity of man and his society to buffet the waves, nor do we really understand the full nature of the waves themselves. We know many pieces and parts—the minutiae and minisculae. These are the concomitants of our analy-

ses, of our taking apart, of reducing to least common denominators. Now, this has been good—unimaginably productive, revelatory, and even revolutionary. In our own field, for example, we understand now that it is the machinations of these particulars that give form and substance to inheritance, to physiology, to behavior. But it has been in the race toward analytic particularization that man in the totality of his being has been eclipsed, that the whole man has been so compartmented that as an entity he has fallen between the chairs.

The biologist, in fact, explicitly expunged man in the last decade or so: college as well as high school courses, in their effort to elevate biology to the level of a true science on a par with physics and chemistry, quite carefully avoided a man-centered approach, electing instead a rather unfocused and generalized organism, if any at all.

But the biologist is not solely at fault; each of those fields of endeavor that have to do directly with man went much the same way. The sociologist analyzed, the economist scrutinized, the psychologist particularized. Even the theologian took man apart.

The compartmentalization of man increased, perhaps to completion; time will tell. At least the fragmentation is blindingly evident, horrifyingly strident. Behold man in the nakedness of his parts, man in the nudity of his particulars! The protective exuvium has been molted before its time, exposing to nature a stage as yet unorganized, as yet unready to cope with the exigencies that nature provides.

This is not entirely to be deprecated. It is not necessarily a wrong turn in intellectual exploration. One must delve to the root of things in order to rise to the heights of understanding and appreciation. But one must keep a oneness in view while searching the intricacies. It is here I believe we educators have failed; it is here I believe our young people have challenged us with their cry for “relevance”—a word used loosely and fashionably, but whose real meaning lies not in the word’s connotation of timeliness but rather in its holistic implications, in its meaning for self and for society. Reductionist analysis has left a vacuum, a void of comprehensive synthesis: the parts are parts, not seen as being of a whole.

### “Instruction . . . in the Laws of Nature”

But enough of hortatory, of finger-pointing, of self-flagellation. We are aware, or at least increasingly cognizant, of the failings of modern education to educate if not to inculcate, to ameliorate if not to resolve. We are aware that the lovely phrasings of liberal-arts catalogs are pious platitudes, “full of sound and fury, signifying nothing.” It is common knowledge that if quality-control and product-evaluation techniques were to be applied to the American educational enterprise it would be out of business.

Like it or not, it falls to us to rechart education’s course, redefine its purpose and mission. Perhaps as a starting point we might accept, if not agree with,

the view of liberal education expressed by Thomas Henry Huxley in 1868:

Education is the instruction of the intellect in the laws of Nature, under which name I include not merely things and their forces, but men and their ways; and the fashioning of the affections and of the will into an earnest and loving desire to move in harmony with those laws. (*A Liberal Education*)

It is to this end that I see the bandwagon that has been termed “environmental education” going. Largely driverless at the moment, the movement is strong. I see it as a resurgence of true liberal arts, in the Huxleian sense—a rebirth of the whole man with a concern for his being and that of the society of which he is a part. This is an ecology of man, viewed in his totality, in all his dimensions. This holistic synthesis must not replace the analysis of reductionism; rather, it must capitalize on its unearthings and opportunely put its findings to use. But this new direction must not merely contribute to the solution of present problems: that would be short-sighted. It has the mission not only of saving man but of improving the quality of his future.

To achieve these ends, environmental education must have as a fundamental aim an alteration of attitudes based on an understanding and appreciation of man’s place in the nature of things; it is obligated to provide the data in support of this understanding and on which sound decisions affecting man’s survival can be made. There is here an almost spiritual insertion into the educational process. If the lack of it has brought us to our present environmental plight, then let this *animus* come forth, phoenix-like and strong.

### The New Ethos and Its Practitioners

Two major dimensions of this educational endeavor demand brief note. The thrust of my comments is interpretable as the recognition of an ethos of the educational process rather than as advocacy of a specific scheme of implementation. This needs to be underscored. I see the environmental movement as one that can give meaning and perspective to the educational process—a sense of purpose and a rationale to fill the emptiness of the education scene. “For God and country” and similar epithets are meaningless to today’s youth (and to some of today’s non-youth). Optimistically, and with a bit of Pollyanna tossed in, I envisage a unification of ideas and idealism developing around a greater sensitiveness to man’s understanding of himself and his place in the scheme of natural things. The declining influence of the organized church to weld and mold this ethos demands that the educational system do so. Certainly one cannot escape into the shadow of the courts to say such value-teaching is not permissible in our schools and colleges: both explicitly and implicitly the system has taught values and continues to do so.

The other dimension of environmental education is its formal, pragmatic aspect: the “training” of

those environmentalists who can contribute to the resolving of environmental problems. There is, as you know, a great hue and cry for interdisciplinary courses and curricula. These are to the good insofar as they produce the "well-rounded" man and the specialist who sees the broad spectrum. But the kinds of difficult problems we face cannot be resolved by environmental dilettantes, by individuals who have had a bit of this and that. These problems can be solved or compromised only at the hands of exquisitely attuned specialists who bring to bear the discipline of their discipline, the expertise of their restricted sphere of knowledge. These are not inter-disciplinarians—I'm increasingly unsure what that means; these are disciplinarians. But note that these specialists are to be trained without blinders, educated with broad perspectives and horizons: engineers sensitized to artful aesthetics, biologists cognizant of systems design, and so on. Neither dilettantes nor narrow specialists, they are to be disciplinarians-and-humanists.

### The Multidisciplinary Approach

I have purposefully avoided the particulars of what one should do in elementary and secondary school, in the college and university. I do so in part because I have no magic formula, no ready answer; besides, it is too early to judge the various efforts now under way. This is a time for the system to be disturbed, unsettled, as it seeks answers. I am aware of a number of new directions being taken by various colleges and universities—some departmental, some encompassing the entire institution. I am much less aware of responses being made in the precollege domain, but those few I know about seem exciting indeed. Time will have judged some of these attempts abysmal failures, others successful sleepers. Ten years from now we may be ready to pass judgment.

I find especially intriguing those university approaches that are defining multifunctional programs. In these instances the traditional university functions—education and research—continue to occupy the central focus; and indeed this transmitting of the heritage of the past and the dynamics of the present, of investigating the nature of things present and past, are proper functions of the university. It is most imprudent for each man to rediscover the wheel; better that he profit from its discovery by finding out how to make a better one.

What differs in an environmental program is its perspective on teaching and research, its propulsion into the arena of values, its perception of the future, and its practical proposition of service to the community. Teaching, research, and service are addressed to particular problems, typically local or regional—problems that students and faculty can see, smell, taste, hear, and touch; not remote, intangible problems. This is education focused on the real and the immediate, on the practical and the imminent; but, significantly, the learning is directed toward an end,

and it charts the probable routes to resolution of the problem under consideration in the context of biologic, sociologic, economic, and political realities. It is in this sense that such education is multi- or interdisciplinary: in the face of a real problem the different disciplines bring to bear their particular competencies so that the whole of the phenomenon is seen as a summation of the contributions of the individual parts. The student's experience is enriched, the research program is expanded, and the community is serviced; all components benefit.

### Biology's New Position

Many teachers of biology see their discipline as central to environmental education. As my preceding remarks suggest, I am not convinced that it is, nor am I prepared to argue for the centrality of any other discipline. Rather I see man as central. I see all disciplines as radii with cross-stranded links to other disciplines, each contributing alone as well as synergistically interacting—mutually independent but blending and interdigitating. Together they create a new context, in which each discipline becomes aware of relationships. Perceived in this most profound yet elemental context—man in his totality—the environmental relationships in which man shares will not only be appreciated; more important, they will not be violated, for violation of one part will be seen as affecting the whole. The consequence of successful environmental education of this sort is of high import: the survival of man himself.

Perhaps my quick dispatch of biology to a peripheral position is overreaction to the biology of the mid-20th century—the biology of fragments, dichotomies, particularizations. Perhaps I would not react so if biologists retained, while viewing their particulars, the qualities of the naturalists of an earlier day. "Naturalist" is almost a dirty word in modern biology. I use the term advisedly and purposefully—not to conjure up the image of the unsystematic, anecdote-prone amateur scientist but in the sense captured by a developmental biologist, Edwin Grant Conklin:

The biologist is thrilled by the beauty, the fitness, the mystery of organisms, and no scientific explanations of this beauty, fitness and mystery can destroy the esthetic appreciation which they cultivate. . . . With this esthetic appreciation of nature there is mixed a broad sympathy with all living things. . . . The biologist has his eye open to the beauties, the joys, the sufferings of living things.

(1915: "The Value of Zoology to Humanity: the Cultural Value of Zoology," *Science* 41: 333-337)

Holding such a view of nature and having at his disposal the whole of modern biologic knowledge, the biologist could rightfully occupy a crucial, even a central role in achieving the ends of environmental education. But if this is not his perspective, he should at least have the integrity to stand aside.