Environmental Studies: The Santa Barbara Experience

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The environmental Studies Program at the University of California, Santa Barbara accepted its first students in the fall of 1970. At the present time there are twenty-one Environmental Studies courses with approximately 1000 students enrolled per quarter, fifty-eight related courses in the other departments, 250 undergraduate majors, and a faculty advisory group of twenty-two members.

As practiced at the University of California, Santa Barbara, Environmental Studies is a multidisciplinary, program oriented major designed to give students a knowledge of the characteristics of the environment and the working approaches to the solution of environmental problems. Diagrammatically, our philosophy of the environmental studies might be expressed as shown in Figure 1.

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FIGURE 1

SANTA BARBARA PHILOSOPHY OF ENVIRONMENTAL STUDIES



The central assumption expressed in this diagram is that the environmental studies should be understood as a multidisciplinary process rather than a discipline such as chemistry or economics. Environmental Studies does not compete with or purport to substitute for a single discipline like biology. It is, rather, a way of bringing biology and other appropriate disciplines to bear on environmental problems. We have deliberately downplayed the interdisciplinary dream prevalent in our early thinking, substituting instead a pattern of multidisciplinary input at appropriate places in the solution-finding process. This is not to imply, however, that integration of the various disciplines is impossible or dispensable. On the contrary, it is the role of the teacher-scholar of environmental studies to orchestrate the entire process. He is the catalytic arrow in the diagram. Insofar as his professional competence permits, he may well contribute from the perspective of several disciplines. But given the breadth of environmental problems he will invariably have to fall back occasionally on specialized expertise. The important point is that the environmental educator can see the forest as well as the individual tree. Obviously he does not know all the answers, but he knows what questions to ask and to whom to direct them. His capacity for understanding the products and significances of disciplinary research is also broad. His real specialty is synthesis. Concerned, as he is with a complex, indivisible environment, the environment educator deals constantly with disciplinary interrelationships. He functions, so to speak, as an ecologist of the academic community.

A problem orientation is clearly implicit in the diagrammed definition of environmental studies. We believe that it is not only possible but more effective to teach basic facts and principles in the context of a real life environmental problem. Confirming the findings of experienced teachers for decades, we have noted how economic theory makes more resource allocation. Similarly, chemistry takes on new life and meaning when air or water pollution is the teaching vehicle.

Another central point in the University of California, Santa Barbara's philosophy of environmental studies is the idea of general education. Tired as it is after three mediocre decades, "general education", or its equivalent by another name, seems to us to be worth salvaging on the undergraduate level. What is needed for this operation is a framework for integrating a broad range of letters and science. Previously these had been studies for their own sake, and understandably students came away with unrelated bits and pieces-meaningless smorgasbord that was quickly forgotten. But, we reason, what if environmental problems are utilized as the glue to hold a wide-ranging course of study together? In fact, couldn,t environmental studies become the new general education? We believe that there is no better concept than that of man-environment relations for synthesizing the sciences, social sciences, and humanities. And we like to think that students who take our six lower division courses come away with the same exciting sampling of disciplines that inspired the old general education concept. Going beyond general education, however, the Environmental Studies student understands the uses and interrelationships of the major divisions of academic attention.

In dealing Santa Barbara's experience with Environmental Studies we have developed the following list of recommendations. They reflect both our successes and our failures. We offer them in the hope that they will assist other institutions desirous of building a new educational structure responsive to the concern of both students and society with advancing responsible man-environment relations.

- 1. Establish a continuity of tenured faculty leadership for environmental studies; cochairmanship, reflecting the multidisciplinary nature of the program, can be an advantage.
- 2. Avoid volunteerism; environmental studies should pay its own way from the beginning.
- 3. Create new courses in environmental studies rather than amalgams of existing departmental courses.
- 4. Take a careful inventory of faculty resources for environmental studies and establish the broadest practical base for environmental studies committees.
- 5. Recognize student demand as a potent source of leverage with the university administration, but adhere to responsible applications of this power.

- 6. Take special pains to involve the humanities and social science in every aspect of environmental studies; avoid transforming "environmental studies" into "environmental science."
- 7. Make some full-time faculty appointments in environmental studies to "anchor" the program but guard against the growth of an empire syndrome; maintain part-time involvements of other faculty and utilize appropriate courses in other departments.
- 8. Utilize an executive officer to help with the greater load of program coordination environmental studies demands.
- 9. Accept the facts that team- taught environmental studies courses will be more expensive to the institution in terms of faculty time.
- 10. Orient most of the teaching program in environmental studies around actual problems, stressing those of special importance to the locality of the campus.
- 11. Develop an explicit definition of the philosophy and methodology of environmental studies which includes a defense of the need for and rigor of integrative, multidisciplinary work; new standards of faculty competence must also be evolved and defended.
- 12. Regard and publicize environmental studies as a synthesizing multidisciplinary process rather tan a competitor with the disciplines; the label "interdisciplinary" tends to produce unnecessary confusion and criticism.
- 13. Treat environmental problems and controversies as learning devises rather than invitations for partisan involvement of faculty and students.
- 14. Work toward bringing all environmentally oriented curricula at a college or university under one administrative roof; be particularly aware of the possibility of combining forces with Geography departments. Work for early development of a critical mass of faculty, student, and budgetary support.
- 15. Assume that overcoming disciplinary isolation and suspicion will be the biggest obstacle facing environmental studies; attack it with frequent intellectual and social interaction and an emphasis on a team approach to environmental program-solving.
- 16. Promote faculty collaboration in multidisciplinary research and teaching by establishing a regular faculty seminar and "compensating" participants by one-course reduction in teaching load.
- 17. Pressure the administration to reallocate faculty resources and overstaffed and moribund departments to vigorous new programs like environmental studies.
- 18. Establish a dean or other campus wide administrators as to support and operation details; your bargaining position will never be as strong again. Make the administration prove it wants a first rate environmental studies program as a prerequisite for launching one.

- 19. Before starting an environmental studies program, establish clear understandings with administrative as to support and operation details; your barraging position will never be as strong again. Make the administration prove it wants a first rate environmental studies program as a prerequisite for launching one.
- 20. Think carefully about the liabilities of applying the environmental studies approach on the graduate level; consider the option of a professional degree in environmental analysis and management keyed around environmental impact assessment.