

The Education of a Generalist: The University California - Santa Barbara Experience

by A.H. Schuyler, Jr. in 1978

The following is an excerpt from an article published in Environmental Education in Action in 1978. Written by a former UCSB Environmental Studies Program chair, this article takes a look back at why and how the ES Program at UCSB came to be:

Some date the dawn of modern environmentalism from the odious Santa Barbara oil spill in January 1969. It was certainly a striking "media event." But some professors and students didn't have to watch the tube to get the message. The University of California, Santa Barbara was within sight and smell of the littered channel and its beaches. Reaction was rapid. Within weeks 21 broadly representative faculty formed an ad hoc committee to attack the twin problems of disciplinary "reductionism" and the "mind pollution" that lie at the root of environmental problems. By the fall of 1970 the Environmental Studies Program was in being at UCSB - one of the first of the new subspecies.

Eight years later the UCSB program remains remarkably true to its charter: a liberal arts process for generalists, not disciplinary training, administered as a multidisciplinary program, not as a department, striving for a "proper tension" between faculty borrowed from the sciences and the humanities. Environmental Studies at the University of California at Santa Barbara came into being as the result of many influences: the call for relevance by students, the obvious pressures of the environmental crisis of the late sixties, and the demand from the citizenry that the university deal with some of the problems of society.

In retrospect however, it became clear that a most powerful influence, although by no means the most obvious, was the deep seated dissatisfaction with the divisive nature of the university. Many thoughtful faculty were disturbed over the ever-increasing compartmentalization of intellectual activity at UCSB and the tendency of departments to withdraw into themselves, making little effort to communicate with other disciplines. Environmental Studies at Santa Barbara began as an attempt to create a general liberal arts education which, through pure chance of time and location, used the environment as a focus.

John Crowell, a geologist, and one of the first cochairs of the Environmental Studies Program, preserved the curious committee minutes and reports that eventually brought the program into being. These records show that it all started on February 18, 1969 when a group of twenty-one faculty calling themselves Friends of the Human Habitat met to discuss the possibility of promoting some form of environmental education at UCSB. They were old pros and young turks united by concern for the environment and a desire to improve university education. Many were geologists, but there were also geographers, engineers, biologists, an economist and a historian. Two of the group, Garrett Hardin & Preston Cloud, were already nationally known for their writing on the environment.

They met in tense and disturbed times. Platform A had blown less than a month before and spilled crude oil could be seen on the beaches and smelled in the campus air. Comments like this by a senior appeared often in the campus newspaper: "It gets pretty depressing to watch what is going on in the world and to realize that your education is not equipping you to do anything about it." Citizens, oil companies and officials were all calling on faculty, especially biologists, for opinions on what to do about the spill and its effects. The "Friends" considered these demands and ideas and questions and by the end of the academic year faced several options. Within time, The Friends of the Human Habitat

had evolved into a chancellor's ad hoc committee to plan the formation of Environmental Studies. Tribute must be paid to this committee; it resisted the temptation to throw quickly together a program that would appeal to the hysteria of the times, and when the Environmental Program started in the Fall of 1970 its administration was sound and philosophy clear.

What follows are the ground rules of Environmental Studies at UCSB. Viewed from the vantage point of eight years of operation they show great foresight-and perhaps a dash of luck:

Environmental Studies is a education for the generalist. It educates its majors to have a holistic view of the environment and to appreciate the contributions that all disciplines and professions can make to the identification and solution of environmental problems.

It is not in competition with the established disciplines. Its graduates must be able to communicate with the specialist and to know when to call on them but never to consider themselves, in a given area, equal in knowledge to the specialist. This point was emphasized over and over again to reassure the traditional disciplines that we were not a threat, we were not in competition. As Roderick Nash put it, "We are a process that brings all disciplines to bear on environmental problems."

The program encourages its students to belong to environmental groups, to campaign in local politics and to take stands on environmental issues. However, as a unit of the University of California, it has been scrupulous about not taking stands or lending support to any advocate groups. In the early years of the program, many students were strongly displeased with detached and scholarly attitude but anything else would have killed the program quickly.

We tried to strike a good balance between breadth and depth. The Environmental Studies major takes three preparatory courses that cover many disciplines-biology, chemistry, geology, meteorology, geography, hydrology, economics, history, sociology, and political science. In the last few years an increasing number of students are extending the concentration to a second major; we expect almost 30 percent of our majors to be taking a double major in the eighth year of the program.

We term ourselves interdisciplinary, but in actuality we are multidisciplinary. Emmelin (1977) defines interdisciplinary as the interaction of two or more disciplines ranging from simple communication to complete mutual interaction over a wide field. Multidisciplinary is simply the juxtaposition of various disciplines with no apparent connection between them. After eight years we are tired of belaboring this point and now, with some discussion in the senior seminar, leave it to the student to pull it all together and to discern how disciplines can or should communicate.

The basic philosophy of Environmental Studies at Santa Barbara is multidisciplinary education for the generalist. It is synthetic, not reductionist education. It implements what Bode, et al. (1949) refer to as "The education of a scientific generalist." The product would be a person of exceptional breadth of appreciation in the sciences; we extend their appreciation to the humanities and social sciences as well.

Through planning, perhaps luck, our curriculum has arrived at a proper balance of depth and breadth. Students appreciate the wide range of subjects that can apply to the major and also the coherence that comes by trying them into an environmental framework. Many have said that for the first time they saw "purpose to diversity". We believe we have found that proper "tension" between science and the humanities. Scientifically-inclined students will comment that they now realize why economics and

history are important. Similarly, many who have been turned off by science are now attracted to it by their interest in the environment - an interest that may initially have been aroused by studies in ethics or sociology.

When Environmental Studies was being founded, the National Environmental Policy Act had just been passed, the California Environmental Quality Act had not yet appeared. No one appreciated what the need would be for men and women trained to do the environmental impact statements called for by NEPA and CEQA. Environmental Studies addressed this need and provided specific courses to educate and produce graduates who could meet this need.

In closing, we are extremely proud of two accomplishments. Our 500 (total in 1977) graduates who will, in various degrees and ways, affect the environment positively as citizens, educators, politicians, parents, businessmen and officials, is one. The other is the quiet conviction that we helped pioneer an important and exciting academic undertaking, the return to an education that is synthetic in nature and that promotes the generalist view.