✠✠ COLLOQUY ✠✠

an occasional periodical of the Macalester Faculty

November 2002

Contents **Page**

A Comment on an Earlier Colloquy Article 1
Daniel Kaplan, Math and Computer Science

Interdisciplinary Programs are in Vogue, But Are They "Scholarly?" 4
Aldemaro Romero (Environmental Studies Program)

Language Matters 8
Ellis Dye, German Studies and Russian

Colloquy will be published as often as circumstances allow and submissions warrant. Contributions are welcome at any time in the Associate Provost's Office. Texts can be provided on disks in Word or Word Perfect or as an e-mail attachment. Please contact Brenda Piatz x6679 for further information.

Colloquy
Nov. 2002

Interdisciplinary Programs are in Vogue, But Are They "Scholarly?"

Aldemaro Romero (Environmental Studies Program)

(What follows are some ideas I discuss in my upcoming book *How to Build an Environmental Academic Program*).

Since 1999 I have been publishing an annual report on the status of Environmental Academic Programs in the U.S. (Romero et al 2001). Believe it or not, there are about 650 of them with a great variety of names and emphases; some created decades ago, others as recent as yesterday; some large universities have a half dozen environmental academic programs, usually very specialized; most liberal arts colleges have only one and broad in nature.

Similar trends can be seen in other fields of knowledge. Whether they are called interdisciplinary, metadisciplinary, multidisciplinary, or a discipline itself, the fact of the matter is that they keep popping up everywhere and that all of them seem to have something in common: integration of knowledge and methods from different disciplines.

Despite this popularity and apparent common mission, when I meet with some of my Environmental Studies colleagues, I keep hearing horror stories about junior faculty being given a hard time by their institutions because of their participation in interdisciplinary programs which, in quarters dominated by strict-discipline oriented faculty, are not considered a "true discipline." Never mind that their work is being published in peer-reviewed journals and that students like what they teach.

It is usually assumed that a branch of knowledge acquires the rank of discipline only after it has achieved three goals: 1) being recognized at a programmatic or departmental level in colleges and universities; 2) having a number of flagship professional journals; and 3) having the activities of its scholarly community gravitate around at least one professional association that serves as umbrella to all scholars embarked in such intellectual pursuits. A quick survey shows that the above conditions are met by virtually all of the most popular interdisciplinary programs in the U.S.

So, what is the problem?

When conversing with colleagues that try to initiate such programs, they tell me that they have a hard time explaining to other faculty what an interdisciplinary program is all about. For example, faculty from natural sciences departments tell them that the program in question has "too little science" while those from the social sciences will tell them that it is "essentially a

science program." I once heard with dismay that a colleague (with a background in the natural sciences) criticized an Environmental Studies paper that analyzed the history of the exploitation of a particular resource because "it does not test any hypothesis." This shows the kind of narrow-mindedness you sometimes have to deal with.

One of the problems may be that graduate programs with strong emphasis on interdisciplinarity are few and relatively recent. Thus, most of us who are working in interdisciplinary academic programs come from graduate schools in which you have to demonstrate your ability to focus on a very specific problem within a very specific discipline. Otherwise, it looks as if you are deviating from "the norm" and, therefore, something "must be wrong" with your scholarly work.

Thus, the transition from a hyperspecialized field into one that values knowledge, methods, and insights from many different disciplines is not an easy one. Basically you are fighting two demons at the same time. One is your own instinct and background that tells you that in order to get tenure and promotion you have to occupy your own niche for which you need to specialize; the second comes from the institution you are working for and the academic establishment at large: they will evaluate you as they evaluate themselves: as a specialist.

Yet, interdisciplinarity requires a special effort and an openness of mind that are not common in academia. Even most interdisciplinary scholars were once specialists who graduated from a very narrow graduate program. That is why despite rhetoric by many, some colleges and universities do not hold interdisciplinary programs in great esteem. The strength of this sentiment varies between ignorance about the nature of interdisciplinary research to outright hostility to something that does not look conventional.

In general, colleges and universities that have created a stimulating atmosphere for interdisciplinary approaches are those that have a strong leadership at the top steering such changes; people providing vision and courage that give a sense of direction. Take, for example, Middlebury College in Maine: they have developed a few interdisciplinary programs that are so strong that departments' curriculum, student recruitment, and faculty hirings gravitate around those interdisciplinary programs, not the departments themselves.

It is sad to see academic institutions come up with interdisciplinary programs prompted by students' demands while failing to provide a friendly intellectual atmosphere for those kinds of programs, and nobody pays a higher price in those situations than untenured faculty. If a junior faculty happens to be affiliated with a natural science program, the college structure will expect that person to develop a narrowly focused research program based on articles cited in the ISI databases; if that faculty happens to be affiliated with a social science department, the scientific portion of his/her work may never be fully appreciated. I must say, however, that people from the social sciences tend to be much less rigid in expectations than those in the natural

sciences because they are more accustomed to drawing information from other disciplines than natural scientists are.

From my own experience I fully understand the situation. I remember once submitting a paper on the history of exploitation of marine mammals in Grenada, W.I., to *Biological Conservation*, a British, peer-reviewed journal. When I received the comments back, one of the reviewers had crossed-out the entire historical section (about 75% of the article) because it was "not scientific;" never mind that it was the historical account that explained the reasons why those animals had disappeared from Grenadian waters. I decided to submit the paper to a different peer-reviewed journal where it was eventually published in its entirety, but it is just an example of a cultural clash between interdisciplinary work and narrow-minded scholars.

Fortunately, there are more calls from scholars to faculty to get engaged in matters that transcend disciplinary boundaries (e.g., Rhodes 2001). For example, John Cairns Jr. (cited by Lemons 1995) points out that environmental problems go well beyond any single discipline. Yet, the most common structure of our educational system promotes boundaries and barriers between the disciplines, precluding appropriate understanding and resolution of these problems. He also describes the conflicts between many science programs that emphasize reductionist science and those that provide integrative approaches more amenable for solving environmental problems. As Lemons says "Educators who typically argue that only analytical and reductionist (so-called "hard") science has merit would benefit from reading the thoughts of such an eminent scientist as Cairns."

Fortunately, a large body of scholarly literature substantiate Lemons's claims. Interdisciplinary approaches to education are being tried even at high schools and some academic libraries have had to come up with new approaches in dealing with the issue of how to provide reference material to interdisciplinary scholars because a lot of the material is part of what is called "fugitive" literature (not very popular among natural scientists, see Romero 2002 for references for all of the above).

Another hurdle for interdisciplinary programs is the suspicion among faculty that what you are proposing responds more to some sort of "political correctness" scheme than a true academic endeavor. Those who have dealt with the development of African-American Studies or Gay and Lesbian Studies know that very well, and Environmental Studies is not immune to such criticism. Those criticisms are at times not publicly voiced out of fear of being labeled as anti-environmentalist, a racist, or a bigot. The problem is that despite the fact that those criticisms are not voiced at your face, they underlie many of the discussions at faculty committee level. But make no mistake about it; yes: interdisciplinary work is being published in peer-reviewed journals; yes, they are widely accepted as regular programs/departments in many prestigious colleges and universities; yes, the students are interested in them; and, yes, they are essential in understanding today's problems in a more and more complex and interdependent world. The fact

that they do not fit certain prejudiced views in academia does not make them less "scholarly."

Literature Cited

Lemons, J. 1995. Environmental Literacy. *Bioscience* 45: 216-217.

Rhodes, F.H. 2001. *The Creation of the Future. The Role of the American University*. Ithaca: Cornell University Press.

Romero, A. 2002. *How to Build an Environmental Academic Program*. Lanham: Rowman & Littlefield Publishers Inc.

Romero, A.; A. Stern & K. Benz. 2001. Not All Are Created Equal: An Analysis of the Environmental Programs/Departments in U.S. Academic Institutions Until March 2001. *Macalester Environmental Review* (www.macalester.edu/~envirost/MacEnvReview/equalarticle2001.htm)