Developing a Plant Sustainability Major for the Department of Horticulture and Crop Science

Bill Randle

Issue:

Number of students in the 4 majors within the Department of Horticulture and Crop Science at Ohio State University has been declining since 2001. Competing state institutions as well as increasing admission standards at OSU are among main factors causing the decline. Three years ago, I charged the Academic Affairs Committee to evaluate the declining enrollment trends, assess student interest in sustainability issues, and come up with a revised curriculum to meet those needs. After a year of work, the committee came back with a plan that was no different than what existed at the time. It was apparent that the faculty did not want to change from their traditional approach. As the first attempt was underway, we initiated a "Student Run Farm" on our campus facility and supported the effort with an "Organic Farming Course". Starting with low numbers, the class after three years has increased to over 30 students. Most of the students come from non-farm/non College of Agriculture backgrounds, but have found interest learning more about the food system. This has demonstrated that we have the opportunity to recruit students into our majors if we modify how and what we teach, and promote our programs in a "greener" way. Subsequently, Ohio State made the decision to convert from quarters to semesters to meet the mandate that all Ohio public institutions standardize their academic years. We were encouraged to step back and evaluate our majors and curriculum and adjust, if necessary, to meet changing demands of students and the job market. HCS did exactly that from October 2010 to June of 2011, coming up with a new "Sustainable Plant Systems" major with four areas of emphasis.

What has been done:

Because of the reluctance of the faculty to address change, I became involved in set meetings with the Academic Affairs committee to explore a "Sustainability" major, getting buy-in from most of the committee. We then brought the concept to the faculty at a monthly meeting and shared the idea, which had majority approval for the concept. In December of 2010, we held a daylong departmental retreat to explore what the major would look like and to come up with measurable outcomes for the major. In the process, we set up a social media web site (NING) to share ideas and develop the outcomes and future coursework. An ad hoc committee was formed to lead the new major effort and I attended most meetings to help the conversation go forward. Concurrently, I met with faculty in other departments with interests in sustainability issues to determine a possible coursework to broaden the understanding of our major. Over the next 6 months we met regularly to discuss curriculum issues and developed the major. The milestones set by the University for quarter-to-semester conversion provided a good framework to keep the discussion moving forward. The course work has been developed for the major's curriculum; minors for each area of emphasis have also been developed. The major was submitted to the College for approval, which it received. The University's office of Academic Affairs has approved the major and minors. We are now in process of developing assessment outcomes for the major and minors. We are also developing a new marketing/promotional campaign to attract on-campus students with interest in science, have little understanding of the US food system, but haven't yet decided on a major or a direction.

Impacts/New Partnerships: Enrollment in our 'Crop Science " major has seen a dramatic increase. In 2009 we had only 25 majors. In 2011 that major increased to 82. Part of the increase is do to the student run farm, some of it is do to increasing farm economies, and part of it is do to and increased awareness of the 18-22 year old group learning more about US food production. We have developed partnerships with Agriculture and Biological Engineering and with Applied Agricultural Economics to develop courses for students in our sustainability major. Discussions are also now ongoing among the Chairs in FAES to develop a College-wide major in sustainable agriculture. If students would like to emphasize plant science, they would also have the option of choosing our major. Number of students in a particular major does not drive the teaching budget at OSU. Rather it is student contact hours in courses and the associated fees that are generated which are important. We fully expect enrollments to increase as the sustainability major is implemented.

Outcome of Project (societal impact/ measure of increased quality of life)
An increased in demand for those understanding the impact of farming practices on the environments and regulations related to farming practices is need. Providing well trained students not only in the basic plant sciences, but also in environmental stewardship will be valued in the farm community, food supply chair, and in the urban landscape.

How has your project been aided by your FSLI experience?
Improved communication skills. Better understanding of organizational communication dynamics. FSLI has provided me with a better understanding of my strengths and weaknesses as a person and leader. FSLI has also highlighted the diversity that exists in the workplace and have given me the tools to recognize individual preferences to maximize a person's productivity.

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