

Undergraduate Education in the Agricultural, Food and Environmental Sciences

Gary E. Rohde

Our College of Agriculture and faculty appreciated the opportunity to host the colleges and teachers of agriculture at their 38th Annual NACTA Conference. We enjoyed "showcasing" our facilities, academic programs, and the many faculty and academic professionals that have helped establish our outstanding undergraduate program.

The theme for our conference was carefully selected with the intent of highlighting *Undergraduate Preparation for Careers in the Agricultural, Food and Environmental Sciences*. We selected this theme because of our belief that we have a quality undergraduate program that attempts to develop individual majors that emphasize each of these areas. Additionally, this theme promotes integration and provides interdisciplinary academic program area opportunities for students and faculty in a broad array of scholarly activities.

At our respective universities, we have to be very good at what we do to attract outstanding faculty and students that are truly interested in careers in the agricultural, food and environmental areas. Within our colleges we need to convince a broad constituency that, in addition to production agriculture, students can prepare themselves in the areas of business, science, communications, technology, and education. We must "connect" with a broader cross-section of students interested in these areas to remain viable and to meet employer needs.

Our College of Agriculture has embarked on a strategy of emphasizing a broadly based set of majors at the undergraduate level. Our faculty have worked hard to become dedicated teachers that involves a varied approach to classroom instruction and a wide range of applied laboratory activities that enrich the learning environment. We have broadly defined scholarly activity that encompasses faculty and academic activities that include research, extension specialist work, development of an extended degree course, setting

Rohde is the Dean of the College of Agriculture, University of Wisconsin, River Falls. He spoke during the Closing Session of the 38th annual NACTA Conference held at the University of Wisconsin--River Falls, June 20-23, 1992.

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up an internship program, participating in international programs and working with international students, and providing leadership for student organizations. Additionally, faculty have worked at being effective academic and career advisors to students.

People Make Programs

My administrative experience increasingly suggests that "people make programs". Enthusiasm and dedication to teaching and working closely with students is contagious within departments and colleges. I am very pleased with of the dedication and quality of teaching of the faculty in our College of Agriculture. Most of our faculty are truly outstanding role models as advisors, mentors, and classroom instructors.

A total of 14 of our faculty members were involved in seminar presentations at our NACTA Conference this morning. Topics presented included: effective student advising; successful student organizations; understanding personality preferences; departmental use of a teaching facilitation committee to enhance teaching performance; teaching style; techniques and philosophies; use of visual aids; biotechnology education; distance learning; and student success programs. These presentations suggest an engaged and dedicated faculty that help tell an important story about the broad range of faculty activities that contribute to a quality undergraduate education.

Our College of Agriculture has recently completed a comprehensive self study on its resource base and academic program offerings. This has been part of a UW System Colleges of Agriculture and Natural Resources comprehensive review of these programs on a statewide basis. These studies along with an external review found little or no obsolescence or duplication among agriculture and resource management programs in our state institutions.

One of the outgrowths of the study suggests that our continued viability and opportunity for growth will be by collaboration on an interdisciplinary basis within our universities. We are mindful of that at UW-River Falls and have pursued and will continue to pursue program initiatives that combine multi-disciplinary academic offerings. Current examples include:

1. A new biotechnology major jointly offered by Colleges of Agriculture and Arts & Sciences.
2. Biology and agriculture teacher education summer workshops on biotechnology utilizing faculty from Biology, Chemistry, Plant Science, Animal Science, and Food Science.
3. Offering an agricultural business major in closer coop-

- eration with a department of business administration.
4. Joint Resource Management and Geography faculty offering of courses in environmental education, remote sensing, and geographical information systems applicable to each of these majors.
 5. Collaborative international student and faculty exchange programs that emphasize language, business development, economics, marketing, and management.

Aggressive Pursuit of Funds

Faculty and staff in our respective colleges need to be aggressive in securing grants and additional funding for the wide variety of academic programs. Strengthening grants from USDA are available and targeted specifically to undergraduate programs in agriculture.

We need to make the case for additional funding for undergraduate applied research, greater support for internship programs, and capstone learning experiences that utilize a systems approach in the food, agriculture and resource management fields. Additional funding for our programs is needed to further develop multi-disciplinary natural resource and environmental literacy learning experiences for students across the university. Our faculty also need funding for additional applied research projects that are useful for

agricultural businesses and rural development. Community development and rural development initiatives through outreach programs need to be pursued by faculty with expertise in this area among our colleges of agriculture.

External Advisory Councils

Reaching out to business and industry through advisory councils, student recruitment programs, and internships will continue to be vitally important as we approach the year 2000 and beyond. Our College of Agriculture utilizes a 25 member external advisory council that meets twice a year, a faculty group of 14 internship coordinators, and the development of an annual student recruitment and retention plan with the Admissions Office on our campus. Each of these activities are vital to maintaining our programs and reaching out to inform a broad cross-section of people and groups about what we are doing. Additionally, these groups and individuals provide important feedback and information for academic program initiatives and changes.

The success of our programs in the future will depend on a dynamic curriculum, a dedicated faculty, modern facilities with up-to-date equipment, employers who like our graduates, and graduates who find careers in agriculture, food and the environmental science areas rewarding and challenging.



Stan Schraufnagel, left, program chairman of the 38th Annual NACTA Conference and Dean Gary Rohde, right, both from the University of Wisconsin at River Falls, during a busy conference session.

