

Using Outcomes Assessment to Improve the Agronomy Undergraduate Curriculum

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Problem Addressed:

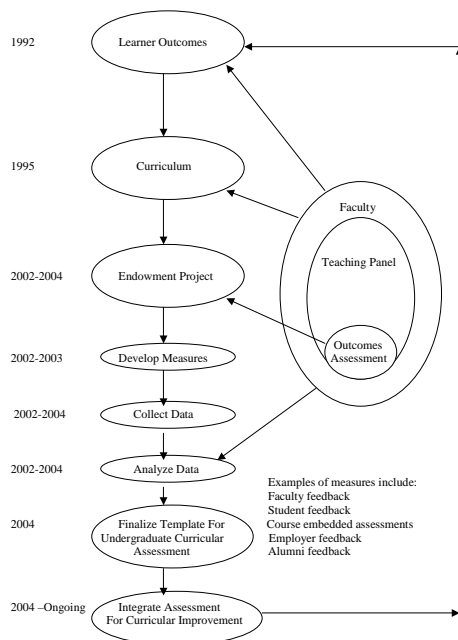
Before this project, there was not a systematic and continuous assessment program to evaluate the relevancy of and success in achieving the learner outcomes. The end results of this project will be to finalize a template for undergraduate curricular improvement and integrate assessment for continuous curricular improvement.

Background:

"This agronomy curriculum will provide graduates with the education and training necessary for them to become effective professionals and leaders in agriculture, their communities, and their country." (Curriculum 2005)

This project, funded by the Agronomy Endowment, provides resources to assess the relevancy of and the success in achieving learner outcomes by developing measures to collect data from various stakeholder groups such as students, faculty, alumni, and employers. This project will contribute to *The Path to the Future* vision of being "recognized as the nation's premier institution for agronomic education" through a stronger and more relevant curriculum, faculty who are current in their areas of responsibility, and improved accountability.

Our Outcomes Assessment Plan For Curricular Improvement



Project Accomplishments and Future Activities

Fall 2002 Project Accomplishments:

- Structured Faculty interviews
 - Conducted structured interviews with all Agronomy teaching faculty about their courses. Faculty reported a mid- to high emphasis placed on technical knowledge, professional skills, and holistic agricultural perspective; little emphasis on ethics/values; and a negligible emphasis on diversity.
- Pilot course evaluations
 - Designed and administered course evaluations focused on Agronomy outcomes and student learning
- Pilot Senior Interviews
 - Conducted structured interviews with random sample of December graduating seniors (n=4). Compared to faculty, students reported similar emphases being placed on each of the learner outcomes in required courses. However, they reported a greater emphasis on diversity than did faculty.



Spring/Summer 2003 Activities:

- Senior, Alumni, and Employer Surveys
 - Gather feedback on the importance of the learner outcomes, preparation in these areas, quality of experiences at Iowa State, and employment status.
 - Employers will also be asked to assess the performance of Iowa State Department of Agronomy alumni.
- Curriculum Map
 - Identify where and how specific learner outcomes are being addressed within the curriculum and identify potential gaps.
- Course Embedded Assessments
 - Collect data on the course embedded assignments that teachers use to assess the departmental outcomes.
- Course evaluations
 - Revise and administer to a larger sample of courses.
- Outcomes assessment website
 - Develop website to communicate outcomes assessment results to various audiences such as students, faculty, administrators, parents, and accreditors.

Fall 2003/Spring 2004 Activities:

- Develop measures to assess the leadership and internship programs.
- Develop workshops and training in assessment for Agronomy faculty.
- Share results and insights at American Society of Agronomy (ASA) annual meeting and with other campus and national audiences.
- Identify ways to involve undergraduate students in outcomes assessment.
- Finalize template for undergraduate curricular assessment.
- Integrate assessment into curricular improvement.



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This project will create a sustainable outcomes assessment program for continuous curricular improvement and will make the Iowa State Agronomy Department a leader in outcomes assessment both at Iowa State University and nationally.