

Annual Report on Assessment in the College of Agricultural and Life Sciences 2003-04

1. Has your school/college assessment plan been updated in the past year?

In response to the University Assessment Council's request, the College of Agricultural and Life Sciences reviewed and revised its College Assessment Plan. A committee of faculty and academic staff revised the plan and it will be presented for approval at a College Curriculum Committee meeting early in this Fall semester. A copy of the proposed revised plan is attached as an Appendix to this document. A final copy of the approved plan will be forwarded once the College formally adopts the changes.

2. Describe any assessment activities conducted this in school/college for college-wide programmatic or curricular review (for example, college-wide degree requirements, interdependent course sequences, advising issues). If such activities were conducted, provide a general description of the methods used, an overview of the findings, and ways that the findings of your assessment activities have been used to motivate or support changes in curricula or programs.

Early in the 03-04 academic year, the Office of Academic Student Affairs sought advice from all departments about what if anything should be changed in the degree requirements for students. In general, there were very few changes identified and all degree requirements stayed the same. Within some majors, minor changes to course sequences and content were made in response to observations by faculty and staff in those programs who responded to documented problems with student performance in selected areas.

3. Describe the assessment activity in your academic programs and departments.
Do all of your academic programs have active assessment plans? What progress has been made in implementing assessment plans at the undergraduate and graduate level during the past year? Provide a general description of the methods used, an overview of the findings, and ways that the findings of your assessment activities have been used to motivate or support changes in curricula or programs. Highlight any experiences that your departments or programs have found either particularly useful or unproductive.

In the last year, each department and program in the college was asked to review existing assessment plans for their program and makes changes based on their experiences in implementing them. Some programs are relatively new and were asked to create an assessment plan in keeping with the college guidelines.

The CALS Assessment Plan calls for each department to: (1) identify the knowledge and skills its students should acquire; (2) develop a mechanism to measure the extent to which this knowledge and skill has been acquired; and (3) use the information to make appropriate changes to improve student learning. This assessment process is identical for both undergraduate and graduate education.

The College faculty deliberately adopted a "bottom-up" strategy for the planning and implementing of assessment. First, department plans are developed exclusively by department

faculty members. The great advantages of this strategy are: (1) the plans are very well adapted to the goals of the department's academic program; (2) the plans tend to be highly thoughtful and reflective of the department's philosophy; (3) once a plan is developed there is a very high probability that the plan will be implemented. The disadvantages of this "bottom-up" approach are largely due to the individualistic nature of departmental responses: (1) variations in the speed of adoption of assessment activity; (2) variations in the specificity of statements of knowledge and skill outcomes; (3) variations in the level of analytical power of the measurement system; (4) uneven amounts of faculty time and departmental attention devoted to assessment in general.

The second principle of the College's strategy is that assessment activity should be supported by the resources available in the department. The assessment plan is a "local" plan, produced and implemented by department faculty, even though the use of external resources might produce more elegant analyses. In general, this "local control" of assessment implementation means that the activity is not as extensive, and the approach is not as scientifically or statistically rigorous, as an approach that uses external resources to design and implement detailed assessment studies. On the other hand, the activities are thoughtful and are targeted on issues the faculty believes are important. Most important, the assessment activity is sustainable over time by resources that are under the control of the faculty in the department. Assessment is not dependent on external resources that cannot be sustained in the future. Again, one consequence of the reliance on "local" resources is variation in the level of assessment activity by department.

Implicitly, the College implementation strategy accepts the variation in the plans and implementation activity as a reasonable price to pay for a set of plans that are well-suited to the department's program, implemented by departmental faculty, likely to produce results that the faculty in the department will use, and likely to be sustainable over the long run. The assessment grid is attached.

4. Describe plans for academic assessment activities for the coming year in your school/college. These activities could be at level of individual academic programs, or college-wide programmatic or curricular reviews.

In the coming year, the Associate Dean in the Office of Academic Student Affairs has appointed a work group of faculty and staff to more closely examine academic assessment and recommend ways in which the process of assessment for program improvement can be made more meaningful. Experience tells us that there is significant energy from faculty and staff who have instituted change in programs to improve the education of students at all levels. However, many of these changes are based on observations that are consensual but not always systematic. The topic of improvement is quite prominent when problems are visible. The goal over the next year is to raise the level of discussion of assessment in the departments to a level where the observations and actions are driven by a more systematic and intentional effort. How this might happen is not yet known and it will continue to follow the principles of Assessment planning that have been a part of the College Assessment activities from the start: bottom up; resource relevant; and meaningful.

A PLAN FOR ASSESSMENT OF STUDENT LEARNING IN THE COLLEGE OF AGRICULTURAL AND LIFE SCIENCES

The University of Wisconsin-Madison is mandated by the Board of Regents and by the University's major accrediting agency, the North Central Association, to develop an assessment plan for measuring and evaluating student learning outcomes in general education, in undergraduate majors, and in graduate education. The University has determined that assessment is best accomplished within the schools and colleges, so each school and college must develop an assessment plan. The plan outlined in this document was formulated by the CALS Instructional Improvement Council and was approved by CALS Academic Planning Council.

The objective of assessment is to measure the results of our academic programs in particular to determine if program objectives are met, and to use the knowledge gained from these measurements to improve the quality of education we provide our students. Programmatic assessment is not an evaluation of individual students or faculty but an analysis of the learning results of an entire curriculum. Individual assessment is already a regular part of the activity of the faculty as individual faculty consider the intellectual growth of their student advisees. Assessment is a necessary part of any truly dynamic and progressive educational program.

Assessment is in keeping with the College's long tradition of evaluating our programs to improve the quality of service to students. Each department and program in the College performs programmatic assessment activities such as periodic program reviews, self-studies, curriculum reviews, assessment of advising, review of graduate program results in preliminary examinations or dissertations, analysis of the results of final examinations in individual courses, evaluation of the curriculum integration in capstone coursework, evaluation of student performance on professional credential exam, and surveys of current students and graduates. In many cases, new assessment strategies have been and will continue to be implemented.

OVERALL APPROACH

CALS will employ a logical, three-stage assessment strategy focused at the departmental level:

1. Each department should clearly articulate desired learning outcomes for its students.
2. Each department should then develop mechanisms which measure the extent to which these outcomes have been met.

3. Using these assessments, each department should then monitor its program and make appropriate changes to improve student learning and the attainment of its educational goals.

Desired learning outcomes may be skills acquired in a biological sciences laboratory, communication skills acquired through practice in writing and editing, interpersonal skills that are enhanced in small group projects, and other types of skills appropriate for various majors. In a University setting, skills are an important means of applying, enhancing or extending knowledge in practical settings and are complementary to the process of acquisition of knowledge rather than an independent element of the curriculum.

The College of Letters and Sciences has developed an assessment plan for general education applicable to all schools and colleges at the University of Wisconsin-Madison based on very successful previous work by the departments of Mathematics and English. The general education assessment procedures address learning in communication and quantitative reasoning. The College of Agricultural and Life Sciences assessment plan incorporates, by reference, the General Education Assessment Plan developed by the College of Letters and Science. The College will review the results of the general education assessment and may, at a later date, develop its own general education assessment.

The Graduate School will be conducting assessment activities on behalf of all graduate programs at the University of Wisconsin-Madison, providing data to departments on time-to-degree, financing of graduate students and other data useful to analysis of graduate programs. The CALS Assessment Plan has incorporated, by reference, the assessment activities of the Graduate School, and the College will continue to work with the Graduate School in assessment activities for graduate programs.

ASSESSMENT IN THE UNDERGRADUATE MAJOR

The nature of the undergraduate major in the College of Agricultural and Life Sciences varies according to departmental educational objectives and the nature of the discipline and its intellectual/skill content. Therefore, the exact nature of the assessment process varies according to each unit doing the assessment. However, the following activities will be a part of all assessment plans:

1. The faculty in each department and program offering an undergraduate major will clearly articulate the goals of the educational program and the desired outcomes attained students as a result of successful completion of the major.
2. Each department and program will develop mechanisms which measure the extent to which students have achieved desired outcomes deemed essential by the department. These mechanisms may include analysis of performance

in capstone courses; surveys of alumni, graduate departments or employers; content analysis of examination performance in key courses; student portfolios; and general tests.

3. The faculty should use these measures, as appropriate, in making changes in the undergraduate program that will address deficiencies or generally improve undergraduate student attainment of skills and knowledge.

ASSESSMENT IN GRADUATE EDUCATION

Each CALS graduate program has particular objectives unique to the field of study which will dictate its assessment program. However, the College of Agricultural and Life Sciences adopts the following general procedures for assessment of graduate programs:

1. The faculty in each department and program offering graduate degrees will clearly articulate the goals of the educational program.
2. Each department and program will then develop mechanisms which measure the extent to which the goals of the program have been achieved. These measures include those provided by the Graduate School and others specific to the field of study.
3. The department or graduate program faculty will use these measures, as appropriate, in making changes in the graduate program that will address deficiencies or generally improve graduate student attainment of skills and knowledge.

IMPLEMENTATION OF ASSESSMENT PROGRAMS

Departments will use feedback from their assessment activities to continually improve their curricula. In almost all cases, departments have changed assessment plans developed in the late 19090's. It is expected that changes will be made in the future as well.