Assessment of Student Learning

Q&A with Myron Allen, Vice President for Academic Affairs

Q: How would you define "assessment of student learning?"

A: It's the process by which we gauge our students' learning against established goals, using the results to improve our teaching. Done right, it's a scholarly endeavor, pursued at the level of the individual faculty member, at the level of the department, and at the college and university levels.

Q: Why is it important to the University of Wyoming?

A: UW is in the learning business. Students and faculty members learn in classrooms, in laboratories, in studios, at professional meetings, and late at night in our offices. We ought to be able to say how well we're doing our job.

Moreover, a university that's not getting better is falling behind. Any significant effort at improving teaching and learning requires a lot of work on the part of faculty members, and they're working at it continually. If we value their time, it only makes sense to have a systematic way of determining the degree to which that hard work is paying off.

Q: Assessment has been on the radar screen at UW for about 10 years now, with a more focused emphasis on it since the development of Academic Plan II in 2004. Overall, how do you think the university is doing in meeting its goal of completing one assessment cycle by 2007?

A: Some departments have implemented extraordinarily creative assessment plans. Some have done reasonable but not especially inspiring jobs. And some are floundering. By the end of this academic year, we may be able to claim, *formally,* that we've completed an assessment cycle. But I

doubt we'll be willing to say that assessment is an integral part of the institution's fabric.

One concern I have about assessment is that the jargon can turn off some of the best minds among our faculty. So let's demystify the jargon: an assessment cycle is nothing more than the department-level process of documenting clear learning goals, determining the degree to which students are achieving those goals, and using this analysis to change our teaching and curriculum as necessary.

Q: What should departments and programs be doing this year to help the university meet this goal?

A: I think we have many solid models of assessment and several outstanding ones. The departments that have been successful have a leadership role to play. And the departments that are floundering might find the project more rewarding by paying attention to the models. If your department meetings aren't as scintillating as you'd like, invite an assessment expert to visit. There might be several in the building next door.

Q: Assessment is not a new issue within higher education. Why do you think there is still resistance to it?

A: I see three reasons:

▶ First, there's the problem of jargon, which I mentioned earlier. Critical thinkers have a natural aversion to jargon. Faculty members and administrators who understand assessment have a duty to frame the matter as clearly as possible.

▶ Second, too often people talk about assessment as something outsiders—such as accrediting bodies—impose on us. Who could possibly be enthusiastic about that?

From the Inside *Looking* Out

Erika Prager, university assessment specialist, hiking this summer in Rocky Mountain National Park, Colorado.

As we begin the 2005–06 academic year, I am pleased to share with you the second edition of the new Assessment of Student Learning newsletter. The newsletter is published twice a year at the beginning of both fall and spring semesters in an effort to increase communication regarding various assessment issues and to highlight successful assessment projects from across the university. This year stands to be a busy and productive year for assessment as the university outlined a goal in Academic Plan II for each department to complete one assessment cycle by 2007. UW has a number of resources available to assist individual faculty and departments with these assessment efforts. While Academic Affairs is not sponsoring a Fall Assessment Forum as it did last year, there will be several workshops on various assessment topics offered through the ECTL. In addition, the call for proposals for a third round of Assessment Assistance Grants is out. Departments and programs may apply for up to $2,500 to be used for a specific assessment project. See pages 4 and 5 for further details about this year's call as the process has changed a bit from prior years. This is a great opportunity to build momentum and make significant progress at a department or program level. As always, I am happy to meet with individuals and groups to discuss your assessment issues or to answer specific questions. Finally, do not forget to check out the Assessment of Student Learning website for other great assessment resources.

As the university assessment specialist, my goal is to help connect faculty to the many assessment resources currently available and to continue to develop new resources to meet the ongoing assessment needs of the university community. If you have an interesting project you would like to see profiled in the newsletter or on the website, or if you have other ideas on how to improve the coordination of the university's assessment of student learning efforts, please contact me at ekprager@uwyo.edu or 766-2897. I learn from all of you so please keep me informed about the great work you are doing.

Erika K. Prager

University Assessment Specialist

USP Committee Working on Assessment Strategy for CH

By Marianne Kamp, USP Committee Chair (2005–06) and Associate Professor of History

Last year, the University Studies Program (USP) Committee received an Assessment Assistance Grant to begin developing an assessment strategy for CH: Cultural Context in the Humanities. The USP Committee's major goal was to begin to build a culture of assessment among CH instructors. Ultimately, USP is working toward an overall assessment of general education at the University of Wyoming, by forming assessment strategies for various elements of USP. To date, USP has worked on assessments for WA and WC (Writing) courses, for O (Oral Communication) courses, for L (Information Literacy) courses, and with this piece, for CH (Cultural Context in the Humanities) courses. To begin this project, we first gathered information on current approaches to CH assessment using the criteria sheets instructors submitted when requesting CH status for their courses, and then brought some CH instructors together for conversations about how we assess learning in the humanities.

The criteria sheet evaluation showed that in most cases, instructors did not articulate their assessment strategies with precision. Most instructors wrote that they would have students take tests or write essays. In a few cases, instructors included examples of the kinds of questions they ask to assess student learning in the humanities. Analysis of materials from other university humanities assessment programs showed there are many well-developed programs. However in most cases, these programs are applied to one universally taught course (Humanities 101), and thus provided no example for the kind of cross-course assessment that UW needs to develop. In other cases, assessment is undertaken by asking students to take an exam or do a presentation or turn in a portfolio, all of which may give comprehensive information on student learning (desirable), but require that something happen outside the classroom (perhaps not desirable and impossible for as large and diverse an assessment as we need).

The committee invited a humanities assessment expert, Professor Tim Riordan, a philosophy professor and academic dean from Alverno

In the Spotlight: WA Assessment

By Julianne Couch, English 1010 Program Coordinator

In spring 2005, the English Department undertook an assessment of the university's first-year writing course (WA). The course, College Composition and Rhetoric, English 1010, is taught largely by graduate students and their faculty mentors in a cohort known as the 1010 program. The assessment project was intended to discover the effectiveness of WA and determine what improvements could be made. It was designed to study the program itself, not to evaluate individual student papers. This project took its cue from national trends in assessment and strived to develop the best methods and tools possible to get the clearest results. It promised to give us a good snapshot of how WA was being delivered and how well students were learning the fundamentals of expository writing.

We received funding from an Assessment Assistance Grant provided through the Ellbogen Center for Teaching and Learning. The grant allowed us to hire a graduate student to assist in the project, and to compensate members of a team that developed the assessment rubric and did the scoring. Members of the English department's Writing Programs committee and numerous graduate students teaching 1010 at the time also assisted in the work.

Preparation for the project was ongoing in spring 2005, which included determining the outcome we wished to assess, developing language to describe the attributes of papers of various levels of competency, and testing the rubric through practice grading sessions. A day-long session of reading and scoring student papers took place in May, on the Friday of finals week. We collected 93 samples of student writing from teachers of the 1010 course, both inside and outside of our program. The assessment team worked in pairs, and each paper received two readings. Teams sometimes discussed a paper together in order to think through how to apply the rubric. It was not necessary that a team reach consensus in order to score a paper; however, the data showed consistency in scoring between team members.

Of the four conventions (see sidebar), the student scores were most evenly distributed in the Thesis competency. Thirty percent received a ranking of 2; 29 percent received a ranking of 3; and 31 percent received a ranking of 4.

We ran into an unanticipated complication in scoring, which we had not encountered during our practice session or discussion. We realized that if students wrote an argument paper that did not contain a clear thesis, it was difficult for us to give a score above 2 to their use of structure or details to support the thesis. In some cases, papers did include a sophisticated structure, but if there was no clear thesis, it could not be said, in the language of the rubric, to "orient the reader to the structure of the argument." Further, even if there was well-considered detail, without a thesis that paper could not be said to "provide consistently relevant examples and applicable evidence that supports each claim and connect to the thesis." The decision made by most scorers was to score lower on Thesis, Structure, and Details if the thesis was weak.

It is my belief that with stronger in-class emphasis on clear thesis, those papers could have been scored higher on Structure and Details. As program coordinator, I have made some adjustments to the emphasis given to thesis, structure and evidence in our course syllabus. I have related those adjustments to other teachers of 1010 outside of our program, as a point of information. My adjustments include spending more class time teaching thesis, and requiring students to present orally, though informally, various aspects of their argument papers in "mini-argument" sessions. These sessions invite classmates to comment upon thesis, strength of argument, and possible counterarguments for the writer to consider.

Julianne Couch

To view the complete English 1010 rubric, go to www.uwyo.edu/acadaffairs/assessment/Pages/links.asp or email Julianne Couch at jcouch@uwyo.edu

Competencies Assessed on Scale of 1–4

Clear & arguable thesis (Thesis)

Organizational structure appropriate to argument (Structure)

Details and evidence that support thesis (Details)

Adherence to conventions of standard English and avoidance of rules-based errors (Conventions)

Assessment Assistance Grants Program Improved for 2006–07

By Jane Nelson, ECTL Director

Jane Nelson

In partnership with the College Assessment Coordinators, the Ellbogen Center for Teaching and Learning provides small grants for departments to advance their assessment projects. The call for proposals is issued in the fall semester, and grant recipients typically have 12 to 18 months to complete projects. Applications are reviewed and awarded by the College Assessment Coordinators Committee.

In the first two years of this grant program, 2004–2006, twenty-one applicants received funding of up to $3,000 for a variety of entry-level, mid-level, and advanced-level assessment projects.

In their final reports, the recipients have expressed high satisfaction with and enthusiasm for the results of their grant work. For many departments and programs, the grants helped them to bring together faculty groups to discuss shared aspirations for student learning, articulate in writing their goals and objectives, conduct assessment projects, and examine and begin revising their curricula in the light of these activities. With grant funds, several faculty members have been able to attend discipline-specific assessment meetings at national conferences. Departments have also brought experts to UW who have given valuable advice and also conducted important assessment projects. The grants program has been very successful, and we are pleased to continue another round of grant projects for 2006–2007.

Based on the experience of the first two years, we are revising the process for this next round of grants. The major difficulty grant writers had in the first two rounds was providing a budget narrative. To help grant recipients with budget details, we have created a two-part process. Grants will be awarded after the October 13 deadline based on the narrative of the assessment project

that includes details about the project participants. In part two, grant recipients will meet together in November to discuss best uses of grant funding. We anticipate that recipients will be able to find ways to pool available funds for good results. For example, it may be possible for two different projects to hire one graduate student to assist with their work to the benefit of all. The November discussions will also reveal what kind of assessment experts we will want to invite to campus in 2007. Depending on the needs of the grant recipients, additional money may be available to bring these experts to campus or to send UW faculty to other universities.

The grant recipients will continue to meet occasionally as a group during the spring semester to discuss their progress and any challenges they are having. Depending on the projects being funded, we will identify previous grant recipients to assist during this third round. They will attend the November budget meetings and will be available to help with implementing grant projects. The assessment assistance grants have been of significant help to departments and programs. We encourage your applications this fall. See page 5 for the call for proposals.

First Year of CLA Longitudinal Study Complete

By Erika Prager, University Assessment Specialist

The University of Wyoming was among 50 successful colleges and universities awarded grants from the Lumina Foundation to participate in a four-year nationwide study to assess gains in student learning using the Collegiate Learning Assessment (CLA). The CLA is a relatively new assessment tool to examine critical thinking, written communication, and analytic reasoning. Last fall, a cohort of 276 freshmen was recruited to take the three-hour online assessment to determine their incoming level of skills in the areas of critical

thinking, written communication, and analytical reasoning. In spring, 125 seniors were also recruited to take the CLA before graduation. The next steps in this longitudinal study are to retest the freshmen cohort in spring 2007 and finally one last time in spring 2009 before graduation.

Each student who participated received an individual results report showing how they performed in each area compared to other students taking the CLA nationwide. The university also received the aggregate scores of the UW

freshmen cohort and of students at other participating to compare and evaluate our performance. Results from the seniors tested are expected by early fall.

"I think there will be considerable value in this study, especially once it is complete. This is the first time we are following the same group of students for four years to see what they learn over time," says Rollin Abernethy, associate vice president for academic affairs. "Our next challenge is to track down these freshmen and convince them to take

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Assessment Assistance Grants Application Information

Request for Proposals for Academic Year 2006–07

Deadline for Project Application: Friday, October 13, 2006
Deadline for Detailed Proposal: Friday, December 1, 2006

Eligibility

UW faculty members (tenure-track and APLs) may request funds to support assessment of student learning efforts (both undergraduate and graduate) related to the following:

1. *Entry-level assessment:* Programs still in the beginning stages of assessment that may need assistance revising a departmental assessment plan, formulating learning outcomes or goals, or beginning an initial assessment project.
2. *Mid-level assessment:* Specific projects to collect and analyze data for departmental, programmatic, or general education assessment.
3. *Advanced-level assessment:* Programs wanting to take assessment to the next level, including the development of websites and other materials to communicate with students and other constituencies, using assessment to make changes to program, etc.

Application Process

1. Submit a project application by Friday, October 13. The application should include the following information:
   a. Which level listed above best describes your department/program and where are you with regard to overall assessment? Give some details of your assessment plan and progress to date.
   b. What assessment projects or activities your department or program may engage in as part of this grant.
   c. How these identified activities will advance your department/program's assessment plan.
   d. Who will be involved in the project and proof of willingness to commit by participants. Give some details about who will participate in the discussion stage and who will be involved in the implementation of this project.
2. Applications will be reviewed by the College Assessment Coordinators Committee. Applications which are approved will be awarded up to $2,500 pending the successful completion of a detailed proposal by Friday, December 1.
3. Representatives from all awarded proposals will be members of a cohort who will meet in two work sessions during the month of November. The purpose of these work sessions will be to plan specific details for each project, including timelines and budgets.
4. Submit a detailed proposal by December 1.

Implementation of Projects

The time frame for implementation of the projects will be January–December, 2007, with analysis of results continuing into spring semester, 2008. Representatives from each project will continue to meet as a cohort throughout the implementation period in order to lend assistance to each other. Additional money may be available to assist with projects, depending on the outcome of the cohort meetings. The ECTL will convene the cohort meetings. Final reports, in the form of a brief written narrative and a public presentation sponsored by the assessment coordinators, will be required in the 2008 spring semester.

**For further information about the grants process, please contact
Jane Nelson, ECTL Director, at 766-4847/jnelson@uwyo.edu or
Erika Prager, University Assessment Specialist, at 766-2897/ekprager@uwyo.edu.**

The application can be found at www.uwyo.edu/acadaffairs/assessment/Pages/AAG.asp

Assessing Engineering Science

By Dick Schmidt, Associate Dean and Professor, College of Engineering

The Engineering Science (ES) program in the College of Engineering is a vital element of the curricular structure in the college. The ES program consists mainly of lower-division service courses taken by students from a variety of engineering disciplines. The college is developing a new administrative plan for ES as the basis for a continuous improvement effort consistent with such efforts in the individual departments. In AY 2000, the College of Engineering began development and implementation of its outcomes-based assessment process. The process was stimulated by the demands of ABET, the national accreditation body for engineering and computer science. However, outcomes-based assessment has also become an integral component of our continuous improvement efforts. A cultural shift is underway in which we ask ourselves:

▶ What should our graduates be able to do?
▶ How do we know they can do it?
▶ How do we improve our curricula in areas of need?

Taken as a whole, the objective of the ES program is to prepare students in the college for subsequent engineering coursework in their chosen degree programs. As service courses, each ES course must possess content and perspective broad enough to serve all who take it as well as rigor sufficient for development of the technical skills of our students. Program outcomes are defined at the level of the individual course. Course outcomes, also known as course learning objectives, are defined on a consensus basis by the departments served by the various courses.

Every ES course is coordinated by a member of the faculty in a department that has principal responsibility for the course, yet instruction in any course can conceivably be delivered by faculty from any department. Each course coordinator has a list of duties designed to achieve the coordination objectives. Key among these duties

is leading the assessment process for each course. Details of the assessment plan for each course are still being developed. But a two-level process is envisioned.

The first level will focus on primary outcomes and will be regarded as most critical, as it will measure students' knowledge and skills in the most fundamental principles of each course. It will also provide critical baseline and summative performance data for the feedback loops and the enforcement of standards for rigor and performance expectations. First-level assessment tools will consist of readiness exams given within the first two weeks of class (counting for 10 percent of final course grade) and common final exams (counting for 30 percent of final course grade).

The second-level assessment will be formative and will focus on the secondary outcomes of the course. However, primary outcomes may be assessed with this process as well. Course coordinators and instructors may use the second-level assessment within their groups to improve instruction and learning, as well as the overall coordination process. In order for a formative process to be effective, it must be less structured than the first-level (summative) process.

Course coordinators and instructors are encouraged to be creative in their choice of assessment tools and implementation process. Assessment should not inhibit instructor freedom in the classroom. Rather formative assessment should enhance instructional effectiveness by providing a customized method for measuring effectiveness without intruding on the course. To permit flexibility in implementation of the second-level assessment plan, instructors will be permitted to propose their own individual plans for their sections of a course. At a minimum though, the formative assessment plan must include at least one student work product and a reflective self-assessment.

Dick Schmidt

> *" As service courses, each Engineering Science course must possess content and perspective broad enough to serve all who take it as well as rigor sufficient for development of the technical skills of our students. "*

Q&A with Myron Allen

We ought to think of assessment as *our* project, as professionals who care about education. And we ought to approach it in the same critical frame of mind we bring to other scholarly projects. What are the goals? What's the evidence? What problems remain to be solved? How can we solve them?

▶ Third, some accrediting bodies act as if they don't really believe in assessment, grand rhetoric notwithstanding. I recently saw a presentation by a professional accreditor. He listed nine standards. One dealt with learning goals; a second dealt with outcomes. The other seven dealt with highly quantifiable inputs: budgets, faculty lines, space. These inputs are easy to display in spreadsheets, but they're important *only* to the extent that they affect substantive goals and outcomes.

Listing them as separate categories of decision-making distracts people from the core questions, which are admittedly harder to answer. The guy should have stopped after listing his first two standards.

Q: Why should faculty care about assessment?

A: As a teacher, I'd go crazy if I had no well defined goals, no way to measure whether my efforts were successful, and no way to improve my teaching. I suspect most faculty members feel the same way about their own teaching. In this sense, we *do* care about assessment. Where things get difficult is at the department, college, and university level, where it's necessary to pay careful attention to our colleagues' work as well as our own. Collaboration and peer review are deeply embedded in academic culture when

it comes to research and creative activity. Yet we cling to a far more laissez faire set of attitudes when it comes to teaching and learning.

Q: Do you have any thoughts on the future of the assessment movement?

A: Academia at large is making much more headway now than it was during the 1990s. In that era, the rationale behind assessment seemed to center on public accountability, and outside agencies were the gorillas in the closet. If we can just get past the three conceptual barriers I mentioned earlier, assessment—the scholarly and creative methods we use to advance our teaching—might become as engaging for us, and as central to our sense of purpose, as the scholarly and creative work we produce for external audiences.

Assessment Strategy for CH

Tim Riordan (far right) from Alverno College talks with UW faculty members about CH assessment.

College in Milwaukee, Wisconsin. Alverno has tailored its curriculum toward teaching students complex thinking in a variety of spheres, and toward assessing student learning. CH instructors were invited to the meeting with Prof. Riordan to hear him set out some of the kinds of questions that a humanities assessment might want to answer.

Following Tim Riordan's visit and in order to get CH instructors to talk with one another and with the USP Committee about assessment, we invited CH instructors

to attend one of a series of five meetings. The meetings began with a discussion of the definition of humanities that USP uses in its criteria sheet. We asked instructors to talk about how their course focus relates to elements of this definition and what sorts of approaches they use to assess what students have learned in relation to those essential elements of the humanities. Discussion of what is common to humanities courses (and therefore, what might be open to cross-course assessment) produced a list of six major elements.

In exploring how to carry out an assessment across CH classes, we wanted to start with something simple. Instructors agreed that, however rudimentary, developing a rubric that could be used in assessing student learning for one course exercise (essay, exam, presentation, etc.) would probably be the best approach. No one thought that a rubric will produce the best information, but approaches that would produce more information would also demand more time from instructors and from students. Instructors agreed that any rubric would also need to be flexible. In the end, we discussed a rubric with five questions addressing a broad spectrum of humanities emphases. Instructors will select which question they are addressing, will give a brief explanation of the particular assignment, and then assess student learning for this objective.

The list of common elements and the idea for a rubric will continue to be explored by the USP Committee and CH instructors during fall semester. If you would like to know more information about this project, please contact Peter Moran, 2006–07 USP Committee Chair, at moranpw@uwyo.edu or 766-2369.

Mark Your Calendar

Assessment Assistance Grants Information Meeting

Thursday, September 14 from noon–1:00 p.m. (Coe 307)

Collegiate Learning Assessment (CLA) Study— First Year Results Brown Bag Session

Thursday, October 26 from noon–1:00 p.m. (Coe 307)

CLA

the CLA again. We know we won't find everyone, but we hope to retest at least 200 of them."

If you are interested in learning more about the CLA study and the first-year results, please contact Erika Prager at 766-2897 or ekprager@uwyo.edu. Also, consider attending the scheduled CLA brown bag session on Thursday, October 26, from noon–1 p.m. at the ECTL.

Congratulations, Janet Constantinides, on your retirement! Thank you for your service on the College Assessment Coordinators Committee.

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