Welcome

Welcome to the first edition of the Achieving Student Learning Outcomes newsletter. The purpose of this newsletter is to provide the Mines community with information and advice related to assessing student learning outcomes. Feedback regarding content is welcome; contact Kay Schneider, Director of Assessment, at kmschnei@mines.edu or 3087.

Mission and Purpose

The mission of assessment is to promote excellence in student learning and educational practices by fostering a campus culture of self-evaluation and improvement. Assessment efforts support CSM's mission in educating students related to:

1. The discovery and recovery of the Earth's resources,
2. Their conversion to materials and energy,
3. Their utilization in advanced processes and products, and
4. The economic and social systems necessary to ensure their prudent and provident use in a sustainable global society.

Exploring Software Options

We will be exploring the possibility of purchasing assessment/accreditation management software. If you are interested in participating in this process, please contact Kay.

Programmatic Assessment of Student Learning Process

This diagram displays the process used at Mines to assess student learning outcomes in academic programs. Keep in mind though, that while all the steps are critical, the purpose of assessment is to improve student learning, the fourth step in the process. The Director of Assessment and the Assessment Committee can assist with your efforts regardless of where you are in this five-step process.
Resources

The assessment website includes links to other institutions’ assessment plans, a FAQ, information about our HLC Quality Initiative, sample rubrics, and information regarding creating an assessment plan.

Examples of Best Practices

Carnegie Mellon University’s Mechanical Engineering faculty have external reviewers assess students’ capstone design projects, ask faculty to assess lab reports, conduct a recruiter survey, and conduct a graduating student exit survey to obtain information about students’ achievement of learning outcomes. These assessment methods have resulted in refurbishing of computer labs, redesign of courses, and integration of new experiments into courses. Details are online.

Assessment in a Minute

There are a variety of classroom assessment techniques (CATs) that serve as formative assessment activities. Formative assessments can provide faculty with valuable information on what, how much, and how well students are learning. Formative assessment focuses on improving student learning while students are enrolled in the course/program/institution. One type of formative assessment is the "minute paper," because this in-class activity can be accomplished in about a minute. Here are some examples of questions you can ask with minute papers:

1. What was the muddiest point in today's class, lab, or lecture?
2. What is one important question that you'd like to pursue further?
3. Give an example of ________.
4. What was the most surprising information about ________?
5. Give an application of ________.

Responses to minute papers provide faculty with insights they can use during the next class session. Additional samples of CATs are online.

You are invited:
Closing the Loop--Using Information to Improve Student Learning

Faculty will share examples of how they have used assessment information to impact student learning outcomes. Please join us on November 7 at noon in Hill Hall 300. Lunch will be provided.

Thank you to the Center for Engineering Education for sponsoring this event.

Quote of the month

“If we care -- truly care -- about our students, then we likely care about students learning what we would like them to learn. And one way we can show that we care about their learning is assessment.”

Melanie Booth, Dean for Learning & Assessment at Marylhurst University