The Difficulties and Pleasures of Student Learning in the 21st Century

Talking about Teaching & Learning
Eastern Washington University
Thinking about your classes, your teaching, your students here at EWU....

1. What’s especially exciting about teaching today?

1. What sometimes makes you want to pull your hair out?
Plan and Goals

- Reflect on the conditions of t&l today
- Review research about learning
- Identity a learning “problem” you care about
- Sample possible strategies for MLV
- Add your own examples, applications
- Plan for follow up
Shifting Ground

• Students more diverse in all kinds of ways that matter in learning and teaching
• A dizzying array of teaching approaches
• New technologies
• New pressures: for more research, productivity, efficiency, accountability
• New goals for learning in the 21st century
• New insights about learning itself
New Learning about Learning

• Active vs passive knowledge building
• The importance of knowing what the student brings to learning (an asset model)
• Novice learners’ need for explicitness and scaffolding (“decoding the discipline”)
• The power of ongoing, formative assessment and feedback
• Metacognition: strategies that learners use to manage their own learning
How Do We Keep Our Footing?

See the classroom as a site for inquiry.
Randy Bass, Professor of English, Georgetown University:

• “One telling measure of how differently teaching is regarded from traditional scholarship or research within the academy is what a difference it makes to have a "problem" in one versus the other.

• In scholarship and research, having a "problem" is at the heart of the investigative process;...But in one’s teaching, a "problem" is something you don’t want to have, and if you have one, you probably want to fix it....

• How might we make the problematization of teaching a matter of regular communal discourse? How might we think of teaching practice, and the evidence of student learning, as problems to be investigated, analyzed, represented, and debated?”

A Target Course and “Problem”

1a) Think of a course where you have a problem in the sense that Bass means: an issue, question, or puzzle about your students’ learning and experience...

1b) What is the “problem” or question about your students’ learning you’d like to explore?
Collecting Your Problems/Questions
“Flash Examples”

• Strategies for investigating what students are and aren’t understanding, in ways that can help you make mid-lesson, mid-course improvements...

• ...and that can also build your students’ metacognitive skills

• No magic bullets, must adapt.

• Theme: making learning visible
An Overachiever at B.U.

Every other Monday, right before class ends, Muhammad Zaman, a Boston University biomedical engineering professor, hands out a one-page form asking students to anonymously rate him and the course on a scale of one to five. Zaman graphs the results of his evaluations and e-mails [students] to explain how he will make changes. He also asks: “How can the professor improve your learning of the material?” “Has he improved his teaching since the last evaluation? In particular, has he incorporated your suggestions?” “How can the material be altered to improve your understanding of the material?” “Anything else you would like to convey to the professor?”

--www.nytimes.com/2012/03/29
Self-Assessment at Alverno College

• The Big Idea: Students must take responsibility for their own learning...
• And this is a capacity that must be developed.
• Assignments include a criteria sheet on which students routinely rate their own work before turning it in
• Then the faculty member rates them on the same criteria...
• Including their ability to assess their own work
Exam Wrappers at Carnegie Mellon

• Fact: Students focus on their grade on an exam
• Problem/Question: How could they also learn from the experience?
• Exam Wrappers in science courses ask students to
  – identify their own individual areas of strength and weakness to guide further study
  – reflect on the adequacy of their preparation time and the appropriateness of their study strategies;
  – characterize the nature of their errors to find any recurring patterns that could be addressed.

With thanks to Bill Cerbin
Smarter Discussion at Mills College

• An interest in the relationship between good writing and the quality of class discussion
• Goal: To use discussion to foster attention to coherence, connections, transitions, etc.
• Students use colored cards—each signaling a different discussion “move”:
  – Building on
  – Disagreeing
  – Summarizing
  – Changing topics
  – Etc

“Conversacolor,” by Cynthia Scheinberg
Clickers, Required Reading, and Following In-Class Lectures

• Context: chemistry for pre-nursing and pre-dental hygiene students
• Problem: Students often struggle to follow lectures when presented with material they haven't encountered before.
• Solution: I am generally opposed to multiple choice exams but have discovered that coupling iClickers with multiple-choice responses better motivates students to do the required reading for class and helps them follow better in class. I started this process by using Scantron sheets with multiple-choice responses to test students' reading and comprehension; however, that is time consuming both in and out of class with the logistics of distributing, collecting and scoring responses. I have found that using iClickers is much easier, saves time, and gives me immediate feedback on student reading and comprehension.

Thanks to Michael Kesling, EWU
More from EWU

2. From your own courses and teaching: what further examples can you add of ways to “make learning visible” that also help students become more self-aware and reflective about themselves as learners?
What Do These Examples Have in Common?

• They give instructors a window into students’ learning
• They give students good, rich feedback
• They help make students smarter about their own learning, able to “go meta.”
• They’re fairly portable, from discipline to discipline
• They’re pretty simple, though some are more complicated.
• They’re examples of how faculty can “take back assessment,” making it a regular part of effective teaching and learning.
Faculty-Driven Assessment in a Nutshell

• Are my students learning what I think I’m teaching?
• How do I know?
• How can I create more opportunities for students to achieve the learning that matters most?

ONE MORE EXAMPLE
Capturing Chemistry Learning at Seattle Central CC

• Small-group learning experience in first-year chemistry: videotaped (with student permission)
• One especially telling segment (on charge distribution) “captured” in still photos and text
• Shared with whole class, to reflect together on:
• The learning that occurred, the learning process, building on one others’ ideas, patience with the messiness of learning hard concepts, going forward.
“We are attempting to put the learner at the center of our investigation and shift the focus from being faculty who are concerned about covering content to being faculty in a reciprocal relationship with our students in reflective practice.”

– Tom Drummond and Kalyn Shea Owens

“Capturing Students’ Learning”

in

Engaging Student Voices
IN THE STUDY OF TEACHING AND LEARNING
At Your Tables...
3. Are there 2-3 ideas or questions from this workshop you would like to hear more about at the follow-up event on June 1?

3a. In what other venues can conversations about teaching, learning, the scholarship of teaching and learning, and faculty-driven assessment be continued and built upon?

4. Optional and individually: Go back to your “target course” and your problem/question/puzzle....Did you hear any ideas today that you could use to explore (and strengthen) your students’ learning in that course?
Resources

• Exploring How Students Learning--website by William Cerbin: https://sites.google.com/a/uwlax.edu/exploring-how-students-learn/


• Self Assessment at Alverno College (2000)by the Alverno College Faculty; Georgine Loacker, editor [not online]


• Carnegie Foundation multi-media gallery of faculty explorations of their students’ learning http://gallery.carnegiefoundation.org/gallery_of_tl/castl_he.html
• Intro chapter to The Advancement of Learning: Building the Teaching Commons, by Huber and Hutchings, on the scholarship of teaching and learning: http://www.carnegiefoundation.org/publications/advancement-learning-building-teaching-commons