Workshop 1: Shifting from a Teaching to a Learning Model

College teachers aim to change student conceptions and levels of understanding, and they admit that this can be done most effectively by focusing on student learning rather than the mere transfer of information. Yet research shows that most faculty still rely on a content-centered model of education that emphasizes lecturing and a teacher-centered approach to what goes on in class, how technology is used (in and out of class), and which policies are adopted regarding assignments.

- The challenge: many students lack basic skills for college, are busy with other concerns (work, family), lack confidence in themselves as learners, procrastinate, seek easy options, prefer extra credit points over deep learning. In response, teachers have made more rules about attendance, deadlines, number of required sources, word lengths, give regular quizzes on assigned readings and extra points for participation. These structures and extrinsic motivators perpetuate passive learners and diminish students' commitment to autonomous learning.
- Comparison: in the teaching-centered model, students passively receive knowledge from the (lecturing) professor, whose responsibilities include transmitting knowledge and evaluating students on whether they get the right answers. In the learning-center model, students pursue answers to questions they find intriguing by gathering, synthesizing, and critiquing information in consultation with the professor and other students.
- The response: to promote learning more effectively, focus less on covering content and more on making sure that students are learning. Design assignments and projects that provide students with opportunities to use what they study to develop their self- and peer-assessment skills.
- Provide guidance questions for readings before class. Have students (in groups) give examples, summarize discussions, explain the purposes and benefits of assignments.
- Grades: give more tests with lower stakes. Instead of using evaluative comments, write constructive, descriptive comments on how to learn better on returned exams. Make yourself available for exam reviews.
- Students resist learner-centered teaching because it requires more work and is more threatening and unsettling because it makes them responsible for their learning. Overcome that resistance by talking with them about what is happening to them in their shift to learning-centered education. (Maryellen Weimer, *Learning-Centered Teaching*, 2002.)
  - Robert B. Barr and John Tagg, "From Teaching to Learning: A New Paradigm for Undergraduate Education," *Change* (Nov-Dec. 1995), 13-25: ilte.ius.edu/pdf/BarrTagg.pdf
  - Weimer ch. 2: philosophy.tamu.edu/~sdaniel/Notes/Weimer%20ch.%202%20Learning.pdf

Workshop 2: **Outside the Classroom**

Faculty complain that students often do not read assignments before class or simply fail to come to class at all. Responses: electronic interactions, learning communities, and collaborative learning.

- Assignments to be read before class need to have instructor-prepared sets of questions that guide students through readings, helping them identify the important points. Answers to the questions are the bases for class discussions and written assignments.

- Students should consult with one another online (e.g., on a course Facebook page) about the readings and identify the points they are puzzled by and post them on the page. Those points will be the basis for class discussion.
- Have undergrads who have previously done well in the course monitor the discussion groups, giving them extra credit or other compensation.
- Most of the discussion of content occurs before class. Class time is devoted to higher-level engagement with the material, not basic introductory information. The key is to identify a clearly stated objective of the class discussion. This is true regardless of class size.
- Tests can be online.

- Weimer ch. 2: philosophy.tamu.edu/~sdaniel/Notes/Weimer%20ch.%202%20Learning.pdf
- David Yamane, "Course Preparation Assignments: A Strategy for Creating Discussion-Based Courses," *Teaching Sociology* 34 (2006): 236-48.

Workshop 3: **Teaching Large Classes**

Although large (more than 75 student) classes pose challenges regarding attendance, participation, and writing/grading, they can still be environments in which high-level learning occurs.

- Students prefer lectures because they don't have to work. As evidenced by off-campus tutorial services, students also value any activity that helps improve exam performance. The key is to test them only on skills (e.g., critical thinking, developing new ideas) for which you have prepared them.
- Don't lecture, read from a script or from your PowerPoint slides, or worry about "covering content." Focus on what you consider the important topics; present the topics in a defensible order; and talk with (not at) your students. In class individuals representing small groups should report positions to the entire class and formulate sample test questions or problems.
- Group activities: work on problems, pre-class test items; online discussion boards should include no more than 25 students each: everyone should be responsible for all: ask how are we doing as a group? In class group identification, use Facebook to post photos and names; students post links to clips demonstrating points at issue. Ask for oral answers in class.
- Prepare everything beforehand. Check out your classroom before the semester. Put all policies in writing. Most of the discussion of the basics should occur before class. Class time is devoted to higher-level engagement with the material, not basic introductory information. Again, the key is to identify a clearly stated objective of the class discussion.
- Do everything online (paperless)
- Resources:
  1. ht.ly/6HzTE (CTE website)
  2. www.cshe.unimelb.edu.au/assessinglearning/03/large.html
  3. cgi.stanford.edu/~dept-ctl/cgi-bin/tomprof/posting.php?ID=786
  4. serc.carleton.edu/NAGTWorkshops/earlycareer/teaching/LargeClasses.html
  5. teaching.berkeley.edu/bgd/largelecture.html
  6. www.schreyerinstitute.psu.edu/Tools/Large/
  7. ctl.iupui.edu/common/uploads/library/CTL/CTL15270.pdf

Workshop 4: **Testing/Grading**

The key to assessing learning lies in providing effective and timely feedback, identifying ways of determining (through testing, grading) high-order skills (including writing). Those skills (identified in the AACU Valid Assessment of Learning in Undergraduate Education rubrics) include:

- Inquiry and analysis: focuses on a topic, collects and analyzes evidence drawing on various points of view, produces informed conclusions/patterns, identifies limitations
- Critical thinking: states issue clearly/comprehensively, provides relevant information/ assumptions/contexts, acknowledges complexities/limits of proposed positions
- Creative thinking: synthesizes existing and new ways to address an issue, recognizes consequences, and articulates reasons for adopting a strategy
- Written communication: draws on the styles, data, or technologies appropriate for task, demonstrates awareness of context/audience/purpose in organization and presentation.
- Oral communication: promotes understanding through precise, organized, imaginative, engaging, and memorable presentation
- Reading: identifies central points in texts, recognizes their implications for other issues, evaluates their justifications
- Quantitative literacy: appeals skillfully to numerical data (e.g., draws appropriate insights) and demonstrates the ability to apply them to everyday situations.
- Information literacy: demonstrates ability to know when to appeal to information and how to use it effectively (distinguishing assumptions, citation, and paraphrase)
- Teamwork: encourages alternative ideas from team members, helps all members complete assigned tasks, emphasizes importance of team's project and abilities
- Problem solving: designs, evaluates, and implements strategies to answer questions or achieve goals; recognizes context/history of problem, feasibility/impacts of solution.
- Ethical reasoning: assesses one's own values, social context, decision strategies; explains alternatives and limitations.

- Identify practical classroom or course techniques by which students can develop those skills

  - Assignments and feedback should be oriented toward developing the skills listed above. Feedback should be separated from grades; focus on learning and self-assessment, specify how students can achieve desired effects; design ways to foster further dialogue among students, peers, and teacher, especially outside the classroom.
  - Keep feedback criteria lists short (e.g., three comments/essay). This helps students grasp the difference between what they actually produce and their intentions.

- Identify strategies for assessing student mastery of skills (testing, providing feedback)

  - Multiple choice exams often provide no information about why a choice is made and thus do not focus (as all assessment feedback should) on high-order skills. Essay exams demonstrate higher order skills, but grading is time consuming. Informal student writing (e.g., one-page summaries, journals) and presentations demonstrate development in learning but must be evaluated on clearly enunciated, previously announced guidelines.
  - Create online tests, so that students can access them anytime.

- www.aacu.org/value/rubrics/index_p.cfm?CFID=35520380&CFTOKEN=28570110
- www.aacu.org/publications/pdfs/StudentsBestreport.pdf

Workshop 5: Student/Colleague Feedback

Why do you have specific assignments, exams, policies? What do students say helps them learn?

- Get formative feedback about how aspects of instruction affect the learning experiences of students. Ask students directly how a policy, practice, assignment, or class activity affected their efforts to learn. Ask them when they study, how much, what they do when they study. What do they consider the ideal classroom environment for learning, and how does it compare to what they actual experience? What did you (or their classmates) do that was most/least helpful to their learning? When were students most/least stimulated in the course? When were students most/least sure about what they understood? From which assignment did students learn the most/least and why? Ask students to write a note to students next semester indicating what those students need to do to prepare for the course and to do well in the course; what they would have done differently. Have students list the first ten things they remember from the course, what they think they will remember five years from now when they run into you at the mall. Discuss with students their comments and indicate how you plan to change things next time.

- Faculty assume responsibility only when they are convinced that improving their teaching will benefit both them and their students. Peer review should be based on informed (research-based), clearly articulated criteria, not mere experience. Research shows that there is a high correlation between summative student and peer evaluations, so not much is learned from peer evaluations in-class visits (108-9). Recommendation: abolish summative peer evaluations that involve classroom observations (110). Evaluation of course content, text choices, rigor of exams, etc. does not require a classroom visit but is useful for formative feedback. For that, consult the most qualified colleagues, including those from other departments. Common issues in all classes: academic integrity, participation, classroom management, fair grading, poorly prepared students, unmotivated students, students not doing homework before class, students resisting group work. Just because someone knows the content doesn't mean he can teach it. And good teachers don't necessarily know why they are good and are not necessarily good sources for guidance. Again, experience needs to be augmented with research plus the experience of others.

- Online resources are available on a range of topics: instructional technology, online learning, problem-based learning, learning communities, clickers, first-year seminars, group work. Suggestions for faculty: groups read articles and discuss (could be as little as 20 minutes/four times a semester), or one colleague summarizes a reading for the group and answers follow-up questions by email or through online discussions. Sit in on another class and note which examples were best, were there enough examples, were the questions posed by the instructor easy to understand, what were the confusing points, was the overall structure of the class obvious, the important points, the interesting points, what made listening difficult? (All of this should be non-judgmental.) Peer evaluations of the syllabus (to be done only after agreeing on the goal of the discussion): why these policies on participation (right to silence?), extra credit, deadlines, talking in class, laptops, three exams, non-cumulative final exam, coming to class unprepared? Does having a strong statement in the syllabus about coming to class unprepared

make students do the readings? Do you keep to your calendar? In general: why do you do that? Why believe that? Do you have research or other evidence to support your beliefs?

- Just as we insist on upholding standards of research, we should likewise insist on respecting the results of teaching and learning scholarship. The results of that research highlight overall bad practices: mostly lecture courses, content heavy courses, courses graded on a curve, courses in which the evaluation of learning is based on only one kind of criterion (e.g., mid-term and final multiple-choice exams). Multiple choice exams reward superficial memorization of concepts.

- Weimer, ch. 4 and 5: philosophy.tamu.edu/~sdaniel/Notes/Weimer%20ch.%204%20Student%20Feedback.pdf

Workshop 6: Instructor Evaluations

Research shows that easy courses, grades, class size, entertaining teachers, content/style don't affect evaluation results. Evaluations should be designed to enhance, not score, teaching. The emphasis should be on formative, not summative evaluations. We should teach the values of learning: what kind of person/thinker do you want your students to become?

- To improve teaching, develop "formative" evaluations that provide diagnostics, descriptive details, not overall ("summative") comparisons. For example, regarding organization in a class: do students know what to focus on, do you provide an overview at the beginning of class, use signs to show the progress of the class, highlight connections between classes, relate readings to class discussion? Evaluations should drop "what did you like/dislike about the course?" (irrelevant to the educational/learning experience). Identify what is not working and don't do it.

- Weimer, ch. 3: philosophy.tamu.edu/~sdaniel/Notes/Weimer%20ch.%203%20Evaluations.pdf

Workshop 7: Mid-Career and Senior Faculty

Issues: stress/burn-out, pedagogic drift; ways of renewing instructional vitality; leadership in teaching role (Weimer ch. 8-9).

- Tired teaching: lacks energy; easily offended by student immaturity; minimum feedback, office hours, use of technology, professional development, change in courses (e.g., syllabus).
- Studies indicate that teaching (which aims to develop abilities) and research (which aims to advance knowledge) do not necessarily enhance one another. Above average productivity in both teaching and research is rare (10%). No wonder stress is high.
- Large classes, no release time, student ratings, colleagues who complain about students, evaluations, and criticize innovation have a depressing effect.
- Few university teachers read anything about teaching or attend workshops about teaching effectiveness. Experience does not guarantee good teaching, nor does merely increasing content.
- How to maintain instructional vitality: take on fulfilling responsibilities, hang out with others committed to teaching, change courses or texts, try out new technologies, read new research on teaching, learn how learning progresses from content transfer to student-motivated inquiry.

- Senior faculty can advocate for better treatment of faculty (especially first-year and non-tenure track faculty), standardization of criteria for teaching awards, and improvement of instructor evaluation forms and rating policies. Specifically, senior faculty can help dispel myths like:
  - Content coverage is most important in teaching
  - There is a high correlation between easy courses, high grades, and high evaluations
  - Entertaining teachers get high evaluations; teachers of large classes get low evaluations
  - Effective teaching and research can be simultaneously done by most faculty
  - The harder the courses (the more workload), the more students learn
  - Experience in the classroom is enough to develop mastery in teaching; appealing to the research in learning is not essential
- Senior faculty can mentor other faculty, taking the initiative to get others talking about teaching, student ratings, syllabuses, exams, classroom management
- Senior faculty can take risks, try out innovations (e.g., about the shift from teaching to learning, learning communities, online learning).

Workshop 8: New Faculty

Issues: "covering content," establishing policies, and interacting with students; balancing teaching and research (Weimer, Ch. 7).

- Mistaken beliefs by new faculty: teaching is a gift, the techniques for teaching mastery are easy to learn, you should model your teaching on instructors you have had. Teaching excellence is not natural: the skills (organization, clarity, enthusiasm, knowledge/love of content, ability to stimulate thought and interest) are acquirable, but not in a two-day orientation or a workshop once or twice a year. "Training" (which is a simple task) is not the same as artistry: for example, there is no easy technique for handling bad questions or answers.
- Mistakes about content: the importance of assignments or readings will be obvious to students; students will recognize how your course is more important than all else they study.
- You are an example: if you insist on deadlines, you should turn things back to students quickly; if you insist on attendance, then keep conference absences to a minimum.
- Students don't learn by listening but by doing. Simply covering material does not promote long-term, in-depth learning. Don't merely lecture and then entertain questions at the end of class.
- Don't assume that students can't succeed in a course.
- Discuss with students what bothers them and you and agree to work together on them (e.g., cell phones, texting, turning in papers late, sleeping in class, late arrivals, packing up early, wanting extra credit and make-ups, side conversations, not listening to others, not ending class on time).
- The syllabus should focus on what students will learn, not what they should not be doing.
- Before a course begins, contact students (by email) to ask what the teacher and students did in the best/worst class they've ever taken. Make them part of the policies/syllabus preparation.

A Proposed Course Model

1. Before a course begins, contact students (by email) to ask what the teacher and students did in the best/worst class they've ever taken. Ask what bothers them (e.g., class not ending on time, distractions from other students, not being listened to by others) and tell them what bothers you (e.g., cell phones, texting, turning in papers late, sleeping in class, late arrivals, packing up early, students wanting extra credit and make-ups). Make students feel like they are part of designing the policies of the course.

2. The syllabus (no longer than two pages) should focus on what students will learn, not what they should not be doing. Additional information can be posted on a course website.

3. Tell students that they are expected to outline the readings in their notebooks before every class and be prepared to discuss the
   - central claims made in the readings
   - arguments given to support those claims
   - objections to or limitations of the views developed in the readings
   - issues that remain unclear

   For each reading, indicate items to be included in the outline; provide specific questions students should be able to answer. Tell students to consult with one another prior to class (using Facebook or e-learning groups) to make sure their outlines are accurate and complete. To facilitate this, add students to a course Facebook page at the beginning of the semester.

4. At the start of each class, list (on the board or on one PowerPoint slide) the skeletal outline of:
   - the central points to be discussed
   - the arguments supporting those claims
   - the objections to those arguments
   - possible replies to those objections

   This visually indicates points to be covered in the discussion and how they are related.

5. Class time is not spent on instructor lectures; it is too important to be spent on the kind of information transfer that can be done online. Rather, in class ask students (individually or representing small groups) to comment on points included in their outlines and direct exchanges among students about the issues raised.

6. Students who miss class (for whatever reason) or who are not prepared for class should send the instructor (by email attachment) short answers to the issues addressed. This encourages attendance and keeps students current on readings. There should be no separate grade for attendance or participation, because each is expected in any course. Students should be told that both affect the grading of submitted work.

7. In classes where essays are the basis for assessment, provide questions at least a week before the due date to encourage discussions among students online and consultations with you. Multiple-choice test questions should focus on the issues and higher-level skills developed in class discussions. Offer extended office hours prior to the submission of tests and papers. Most quizzes, tests, and essays can be completed online (freeing up valuable class time) and returned graded online (using appropriate security measures such as filex, turnitin, or e-instruction).

Suggestions for teaching based on James Lang's *On Course* (2008) and TAMU guidelines:

1. The Syllabus: make sure the assignments on your syllabus explicitly meet the course objectives.
    - The overall course description should indicate (a) what students should know and be able to do at the end of the semester, and (b) how assignments and activities meet those objectives
    - List student responsibilities: readings, attendance, participation policies
2. First Day of Class: go over the syllabus, cover initial material, have students get used to participating by getting into groups that ask questions about what is and is not on the syllabus.
    - Have students fill out an information sheet: name, major/possible major, email address
    - Have students write a short essay on a question that they should be able to answer by the end of the course that would demonstrate development of their critical thinking skills. Identify features of a good essay (thesis statement, supporting arguments, objections, replies).
3. Technology Use: if something can be done online more efficiently than in the classroom, do it. Limit use of PowerPoint, Clickers, spaced out at 15-20 minute intervals (consult Blackboard Vista at itsinfo.tamu.edu). Erase the board of notes and announcements before class.
4. In class: focus on three to five ideas. Provide guidance questions prior to readings. Don't point out that you don't have enough time to discuss a topic thoroughly. Don't attack the readings until you have defended them (even then, give plausible replies to your objections).
    - Don't keep looking at the screen or board; focus on the students. Have them focus on oral strategies of reasoning rather than mere copying notes (which could be put on a website).
    - Students learn more in groups or interactions with the instructor than they do from lectures. Don't ask "Anyone have a question?" Ask specific students for their take on an issue, and allow others to help out. Get everyone involved, especially those who do not volunteer.
5. Grades: mix up types of graded assignments. Specify the criteria used in evaluating assignments and grade performances explicitly on how they achieve course objectives. List rubrics for each graded assignment *before* the assignment (useful in coordinating TA grading).
6. Policies: late work: there is no evidence that punitive grading teaches students to be prompt. Don't grade on a curve; it is arbitrary and indicates only a teaching or testing failure. Don't be constrained by a 100-pt scale, use total points with letter grade cutoffs. In returned work, give constructive criticism; don't just justify your grade, have your comments help learning. Return work within a week. Limit comments (preferably) to three significant points.
7. Recognize that students learn differently: (a) some assimilate new information to what they already know; (b) some learn based on Perry's three stages: dualism (everything is either true or false), relativism (everything is only an opinion), open-ended commitment (everything is backed up with reasoned argument that is open to reconsideration).
8. Cheating: students are more likely to cheat when they have only a few assignments of the same kind. Specify in the syllabus and assignments what plagiarism is and how it will be dealt with. If you know student names, they will be less inclined to want to cheat (on you). Make assignments difficult to plagiarize: link them explicitly to your specific course objectives.
9. Other problems: you can prevent having disruptive students by being engaging (talk *to* them, not *at* them); ban cell phones. Absences can be minimized by making class interesting rather than mandatory. After all, why would you go to a boring event?
10. At mid-semester try something new (field trips, court trials, case studies); go to someone else's class, attend Center for Teaching Excellence workshops.