

Gender Equity Project Colloquia and Workshops

Teaching Effectively and Efficiently Activities and Discussion

Read:

Tips for Teaching Effectively and Efficiently (Miami and Tobery, 2004)

Section 2.5: Teaching Efficiency in Teaching Engineering (Wankat and Oreovicz, 1993)

Fairness in the Classroom (Whitley et. al., 2000)

Advice for new faculty members: Nihil Nimus (Boice, 2000) pp. 4-18, 99-101.

Activity 1 (complete before the workshop): Teaching resources suggest that the attention span of students is anywhere from 10-30 minutes, with most estimating 15-20 minutes. One suggestion is to prepare your lecture as a series of 10-15 minute mini-lectures that are separated by activity breaks (discussion of current events, summary, group work, mini-experiment, quiz, brainstorming exercise, etc.). Think about how you can break an upcoming lecture into mini-lectures and what interactive activities you can include. Come prepared to discuss your ideas with a group.

Activity 2 (complete before the workshop): Pick three suggestions from the tips list that you would like to incorporate into your teaching. [We suggest this tip as one of your three: *At the start of each class, present an outline of what you will cover and refer back to this throughout the lecture.*] Come prepared to discuss your ideas with a group.

Activity 3: Discuss in groups of three the best way to implement the changes you would like to include to improve your teaching. Consider if these changes can be incorporated this semester or need to be in place at when the semester begins. Report back some ideas to the entire group.

Discussion: Think about your department's needs for teaching and your needs as a researcher. Try to merge these needs by considering how your teaching can benefit your research while fulfilling a need in the department.

- Is there an area of research that you would like to learn more about?
 - What class currently taught in your department could cover that material?
- Could you tailor the topics covered in an introductory course to focus on issues important to your research and related areas?
- Do you have material you could use for a special topics class that might fill a need in your department and not require too much time to develop?

References

- * Boice, R. (2000). *Advice for new faculty members: nihil nimus*. Boston: Allyn.
- * Davis, B. G. (1993). *Tools for teaching*. San Francisco: Jossey-Bass.
- Felder, R. M. (2002). The effective, efficient professor [Electronic version]. *Chemical Engineering Education*, 36(2), 114-115. (Review of Wankat's book)
- Miarmi, L. and Tobery, C. (2004). *Tips for teaching effectively and efficiently*. Unpublished manuscript, Gender Equity Project, Hunter College.
- ‡ Wankat, P. C. & Oreovicz, F. S. (1993). *Teaching Engineering*. New York: McGraw-Hill.
- * Wankat, P. C. (2002). *The effective, efficient professor: teaching, scholarship, and service*. Boston : Allyn and Bacon.
- Whitley, B. E., Jr., Perkins, D. V., Balogh, D. W., Keith-Spiegel, P., & Wittig, A. F. (2000, July/August). Fairness in the classroom. *APS Observer*, 24-27.

Web resources accessed 29 September 2004:

Teaching and Learning Center. (n.d.) Retrieved August 24, 2005, from Hunter College CUNY Web site: <http://www.hunter.cuny.edu/tlc/>
Provides linked resources, citations of published works, and information regarding events and workshops targeted towards bettering the teaching and learning experience of both faculty and students.

Derek Bok Center for Teaching and Learning: Bok Center Online Documents. (2004). Retrieved August 24, 2005, from Harvard University Web site: <http://bokcenter.harvard.edu/docs.html>
Provides extensive written information on topics ranging from grading, syllabus planning, and lecturing, to tips for handling specific difficult moments in the classroom, among many others.

The McGraw Center: The McGraw Minifiles. (2003). Retrieved August 24, 2005, from Princeton University Web site: http://web.princeton.edu/sites/mcgraw/mcgraw_minigraphs.html
Gives concise bulleted information on topics regarding class dynamic, and engaging and evaluating students. Also provides citations of pertinent published works.

The McGraw Center: The Scholar as Teacher. (2003). Retrieved August 24, 2005, from Princeton University Web site: http://web.princeton.edu/sites/mcgraw/Scholar_as_Teacher.html
From the same website, provides information on more specific topics, such as designing worthwhile final exams and office hours, creating an effective first day, and handling lulls in class discussion, among many others.

* Available at Hunter's Teaching and Learning Center

‡ Available online:

https://engineering.purdue.edu/ChE/News_and_Events/Publications/teaching_engineering/index.html