## **RELEVANT AND RECOMMENDED RESOURCES**

## Personal Reports of Faculty Experiences with Learner-Centered Teaching Approaches

- Bean, J. C. Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking and Active Learning in the Classroom. San Francisco: Jossey-Bass, 1996. --super collection of strategies, applicable to and in many discipline
- Black, K. A. "What to do When You Stop Lecturing: Become a Guide and a Resource." Journal of Chemical Education, 1993, 70 (2), 140-44.
  --chemistry prof recounts his experiences completely redesigning his chemistry courses; insightful and reflective
- Brookfield, S. D. *Becoming a Critically Reflective Teacher*. San Francisco: Jossey-Bass, 1995. --in addition to introducing critical pedagogy ably, contains many personal experiences and reflections of his own growth and development
- Deeter, L. "Incorporating Student Centered Learning Techniques into an Introductory Plant Identification Course." NACTA Journal, 2003, (June), 47-52.
   --some especially creative assessment techniques that respond constructively to exam anxiety
- Felder, R. M. and Brent, R. "Navigating the Bumpy Road to Student-Centered Instruction."
  *College Teaching*, 1996, 44 (2), 43-47.
  --best piece I've read that deals with student resistance to learner-centered approaches
- Finkel, D. L. *Teaching with Your Mouth Shut.* Portsmouth, NH: Boynton/Cook, 2000. --excellent book, especially good on "using" content instead of "covering" it
- Lewis, S. E., and Lewis, J. E. "Departing from Lectures: An Evaluation of a Peer-Led Guided Inquiry Alternative." *Journal of Chemical Education*, 2005, *82* (1), 135-139 --substituted one lecture per week with a guide-inquiry discussion and found covering less content did not result in less learning
- McNeal, A. P., and D'Avanzo, C. (eds.). Student-Active Science: Models of Innovation in College Science Teaching. Fort Worth, TX: Saunders College Publishing, 1997.
   --some programmatic descriptions but lots of good chapters written by science faculty who are working with strategies that involve students in science courses
- Paulson, D. R. "Active Learning and Cooperative Learning in the Organic Chemistry Lecture Class." *Journal of Chemical Education*, 1999, 76 (8), 1136-1140.
  --especially good example of how the effects of learner-centered strategies can be assessed
- Singham, M. . "Moving Away from the Authoritarian Classroom." *Change*, May/June 2005, pp. 51-57. --sees the authoritarian language and structure of course syllabi as symptomatic of the

breakdown of trust in the teacher-student relationship; describes his experience with a redesigned syllabus in a large physics course

Strong, B., Davis, M., and Hawks, V. "Self-Grading in Large General Education Classes: A Case Study." *College Teaching*, 2004, *52* (2), 52-57.
 --compares a self-grading experiment with a semester of the course graded traditionally and found some positive benefits occurred when student self-graded

## Good Places to Start in the Literature on Learning

- Biggs, J. Teaching for Quality Learning at University: What the Student Does. Buckingham, England: Open University Press, 1999.
   --excellent book that covers all aspects of instructional practice in terms of cognitive psychology research on learning
- Biggs, J. "What the Student Does: Teaching for Enhanced Learning." *Higher Education Research & Development*, 1999, *18* (1), 57-75.
   --a great condensation of the book above
- Candy, P. C. Self-Direction for Lifelong Learning. San Francisco: Jossey-Bass, 1991. --a great source, thorough, well-referenced, well-organized and easy to read
- Gardiner, L. F. Redesigning Higher Education: Producing Dramatic Gains in Student Learning. ASHE-ERIC Higher Education Reports, Volume 23, No. 7. Washington, DC: ERIC Clearinghouse on Higher Education and the Association for the Study of Higher Education, 1994.
   -brings together in one place an amazing collection of work on learning, very impressive overview of this vast literature, and makes sensible recommendations based on the literature
- Horton, M. and Freire, P. We Make the Road by Walking: Conversations on Education and Social Change. Philadelphia: Temple University Press, 1990.
   --well edited conversation between two important and innovative educational theorists
- Prince, M. "Does Active Learning Work? A Review of the Research." *Journal of Engineering Education*, July 2004, 223-231. --a comprehensive and compelling analysis of the impact of active learning experiences
- Ramsden, P. (ed.). *Improving Learning: New Perspectives*. London: Kogan Page, 1988. --another great collection that integrates and explores research on learning
- Stage, F. K., Muller, P. A., Kinzie, J., and Simmons, A. Creating Learner Centered Classrooms: What Does Learning Theory Have to Say? ASHE-ERIC Higher Education Report Volume 26, No. 4. Washington, DC: ERIC Clearinghouse on Higher Education and the Association for the Study of Higher Education, 1998.
   --super monograph that clearly and cogently writes about major educational theories; the best intro and overview of radical pedagogy and constructivism that I encountered

Maryellen Weimer, Ph.D. Professor of Teaching and Learning Penn State Berks grg@psu.edu