GETTING STARTED IN MORE EFFECTIVE COLLEGE TEACHING
Craig E. Nelson

I. TEACHING BASICS

Good Teaching Overviews—Pick One: Wilbert James McKeachie and Marilla Svinicki. 2005. *Mckeachie's Teaching Tips: Strategies, Research And Theory for College And University Teachers*. 12th Edition. **OR:** Linda B. Nilson, 2003. *Teaching at Its Best: A Research-Based Resource for College Instructors*. Anker. **OR:** Maryellen Weimer. 2002. *Learner-Centered Teaching: Five Key Changes to Practice.* Jossey-Bass. ***[Check descriptions of all books this handout on Amazon].***

Great First Downloads: **IDEA Papers**. Topics include *Improving Lectures, Improving Discussions, Improving Essay Tests, Improving Student Writing, Improving Grading, Evaluating Teaching and many more*. 4-8 pages each, feature both techniques and introduction to literature. Free PDFs http://www.idea.ksu.edu/resources/Papers.html [*Second round*, check the archives of the ***Tomorrow's Professor Listserv*** http://sll.stanford.edu/projects/tomprof/newtomprof/postings.html]

Use one of these in Designing or Revising a Course: **[1]** John Bean. 1996. *Engaging Ideas: The professor's Guide to Integrating Writing, Critical Thinking, and Active learning in the Classroom.* Jossey-Bass. **OR [2]** L. Dee Fink. 2003. *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. Jossey-Bass. **OR [3]** Laurie Richlin. 2006. *Blueprint for Learning.* **OR [4]** Grant Wiggins and Jay McTighe. 2000. *Understanding by Design*. Association for Supervision & Curriculum Development. [ASCD] (See also: Jay McTighe, Grant Wiggins. 2004. *Understanding by Design: Professional Development Workbook*. ASCD.)

Use one of these in designing or revising student evaluation and grading: [1] Barbara E. F. Walvoord, and Virginia J. Anderson. 1998. Effective Grading: A Tool For Learning And Assessment. Jossey-Bass. **OR [2]** Dannelle D. Stevens, Antonia J. Levi. 2004. Introduction To Rubrics: An Assessment Tool To Save Grading Time, Convey Effective Feedback and Promote Student Learning. Stylus.

Three Key Summaries of Important Research [for ALL Faculty]. **[1]** Marcia Baxter Magolda. 2001. *Making Their Own Way: Narratives for Transforming Higher Education to Promote Self-Development. S*tylus. [Fundamental to understanding liberal education including critical thinking and mature valuing.] **[2]** Lion F. Gardiner. 1994. *Redesigning Higher Education : Producing Dramatic Gains in Student Learning.* ASHE Higher Education Report. (All the fundamentals in 200 pp.) **[3]** Marcia Mentkowski and Associates 1999. *Learning that Lasts* Jossey-Bass. (Alverno and beyond)

Two Major Collections of Teaching Resources: **[1]** Bernice A. Pescosolido & R. Aminzade, Eds. 1999. *The Social Worlds of Higher Education: Handbook for Teaching in a New Century.* Pine Forge Press [55+ articles]. With a companion CD: *Field Guide for Teaching in a New Century: Ideas from Fellow Travelers.* (Includes70+ additional items on pedagogical techniques.) **[2]** K. A. Feldman, & M. B. Paulsen, Eds. 1998. *Teaching and Learning in the College Classroom.* 2nd Edit. ASHE Reader / Ginn Press [50+ articles. ASHE = Association for the Study of Higher Education]

II. STRUCTURED STUDENT-STUDENT INTERACTION: THE KEY TO EFFECTIVE LEARNING

Good Sources of Proven Techniques: **[1]** Elizabeth Barkley, K. Patricia Cross, Claire Howell Major. 2004. *Collaborative Learning Techniques: A Handbook for College Faculty.* Jossey-Bass. **[2]** Charles C. Bonwell and James A. Eison. 1991. *Active Learning: Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Report. **[3]** Barbara J. Millis and Philip G. Cottell. 1997. *Cooperative Learning For Higher Education Faculty*. American Council on Education/ Oryx Press.

Great Starting Site: **Collaborative Learning.** National Institute for Science Education, University of Wisconsin Madison. http://www.wcer.wisc.edu/archive/CL1/CL/default.asp Includes: **1.** Doing CL, **2.** Tough Questions [on CL], **3.** James Cooper & Pamela Robinson. 1998. *Small-group Instruction in Science, Mathematics, Engineering and Technology (SMET) Disciplines: A Status Report and an Agenda for the Future*. **4.** J. Cooper & P. Robinson. 1997. Small-group instruction: An annotated bibliography of science, mathematics, engineering and technology resources in higher education. **5**. L.Springer, M .E. Stanne & S. S. Donovan. 1997. *Effects Of Small-Group Learning On Undergraduates In Science, Mathematics, Engineering And Technology, A Meta-Analysis.* http://www.wcer.wisc.edu/nise/CL1/CL/resource/scismet.htm

Great Starting Site: **Team Based Learning.** http://atlas.services.ou.edu/idp/teamlearning/index.htm
See Also: Michaelsen, L. K., A. B. Knight and L. D. Fink. Eds. 2004. *Team-Based Learning: A Transformative Use of Small Groups in College Teaching.* Stylus.

Great Starting Site: **National Center for Case Study Teaching in Science.** SUNY-Buffalo (Clyde Herreid) [How to and many cases.] http://ublib.buffalo.edu/libraries/projects/cases/case.html Don't miss the links to other case studies sites: http://ublib.buffalo.edu/libraries/projects/cases/webcase.htm See Also: Herreid, C. F. 2004. Using case studies in science—And still "covering the content." pp 105-114 *In* Michaelsen, L. K., et al. Eds. 2004. *Team-Based Learning.* Stylus.

Great Starting Sites: **Problem-based Learning,** especially in large classes. http://chemeng.mcmaster.ca/pbl/pbl.htm **Problem Based Learning Clearing House**. University of Delaware. https://chico.nss.udel.edu/Pbl/ See also list of sites: http://www.udel.edu/pbl/others.html

Great Starting Site: **Just-in-Time-Teaching.** "JiTT is a teaching and learning strategy based on the interaction between web-based study assignments and an active learner classroom. Students respond electronically to carefully constructed web-based assignments which are due shortly before class, and the instructor reads the student submissions "just-in-time" to adjust the classroom lesson to suit the students' needs.… we are aware of approximately 300 faculty in 25 disciplines at approximately 100 institutions … who have adopted the JiTT strategy." http://webphysics.iupui.edu/jitt/jitt.html

Good overview: **PKAL's Perspectives on 21st Century Pedagogies.** [PBL, CPR, JiTT, POGIL, PLTL, SCALE-UP] http://www.pkal.org/documents/PerspectivesOn21stCenturyPedagogies.cfm [For another list see Starting Point http://serc.carleton.edu/introgeo/instructionalmethod.html#teaching (broad applicability, nominally about geosciences)

III. YOU CAN USE WRITING, EVEN IN LARGE CLASSES, WITHOUT GRADING KILLING YOU

Calibrated Peer Review (CPR)™ "is a Web-based program that enables frequent writing assignments even in large classes with limited instructional resources. In fact, CPR can reduce the time an instructor now spends reading and assessing student writing." Developed for science with $$ from NSF & Howard Hughes. http://cpr.molsci.ucla.edu/

Microthemes. Ray Smith. 1994. Sequenced Microthemes: A Great Deal of Thinking for Your Students, and Relatively Little Grading for You. *Teaching Resources Center Newsletter* 5 http://www.indiana.edu/~wts/cwp/assgn/microseq.html

Writing Across the Curriculum. *Language and Learning Across the Curriculum* [National Council of Teachers of English] includes extensive bibliography by discipline. http://www.sfasu.edu/lalac/ Discipline specific writing guides from George Mason http://wac.gmu.edu/guides/GMU%20guides.html and Marquette http://academic.mu.edu/aswriting/index.htm Annotated bibliography http://www.iub.edu/~cwp/lib/wacgen.shtml

IV. IS IT WORKING? ASSESS AND DOCUMENT WHAT IS HAPPENING IN YOUR CLASS

Use Some "CATs:" Check on how any course is actually working: Tom A. Angelo & K. Patricia Cross. 1993. *Classroom Assessment Techniques.* 2nd edit. Jossey-Bass. Related examples online as *Classroom Assessment Techniques* http://www.siue.edu/%7Ededer/assess/catmain.html and *FLAG (Field-Tested Learning Assessment Guide for Science, Math, Engineering, and Technology)* http://www.flaguide.org/

Course Portfolios. [1] Pat Hutchings (Ed). 1998. *The Course Portfolio: How Faculty Can Examine Their Teaching To Advance Practice And Improve Student Learning.* Stylus. **[2]** Daniel Bernstein et al. 2006. *Making Teaching and Learning Visible: Course Portfolios and the Peer Review.* Anker. **[3]** Carmen Werder. 2000. *How to prepare a course portfolio.* http://pandora.cii.wwu.edu/cii/resources/portfolios/preparation.asp **[4]** Gallery of Teaching and Learning, Carnegie Foundation http://gallery.carnegiefoundation.org/ **[5]** More Examples (several disciplines): Indiana U. http://www.indiana.edu/~deanfac/portfolio/def.html Xavier U. http://cat.xula.edu/initiatives/cpwg/ [Google for more.]

New Assessment Approach: **Knowledge Surveyor**—a new course, curriculum, and program assessment tool; helps faculty discover strengths and weaknesses--moves beyond peer observation and conventional student evaluations. (still developing) http://www.knowledgesurveyor.und.edu/ See: Edward Nuhfur & Delores Knipp. 2003. The Knowledge Survey: A Tool for All Reasons. *To Improve the Academy* 21:59-78. http://www.knowledgesurveyor.und.edu/includes/nuhfer_knipp_2003.pdf

Great Starting Sites: : **Assessment Resources,** National Resource Center on the First-Year Experience and Students in Transition, University of South Carolina. Includes a *Searchable Database of Assessment Instruments***,** a list of *Learning Styles Assessment Instruments, Invited Essays* on key topics and programs, a *List-serve* with *Searchable Archives* AND ***Resources for First, Second and Senior Year Courses*** including primers, syllabi and more http://www.sc.edu/fye/resources/index.html

V. Want to Find More Resources?

Jossey-Bass at http://www.josseybass.com/WileyCDA/Section/id-131511.html publishes over 100 titles on *teaching and learning in higher education*. The **Association of American Colleges and Universities (AAC&U)** publishes books and journal issues on undergraduate education, especially liberal learning and diversity, http://aacu-secure.nisgroup.com/acb/stores/1/category.cfm?SID=1& and also publishes two helpful journals, ***Liberal Learning*** **and** ***Peer Review***. I also like ***The National Teaching & Learning Forum*** http://www.ntlf.com/ Many college and university teaching development programs have sets of links. A good annotated set: http://www.clemson.edu/OTEI/Websites.htm

Created and links checked May 2006; Last revision M ay 07