

First page of this Teaching Resource document was compiled by  
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### General Background

Bio 2010: Transforming Undergraduate Education for Future Research Biologists, 2003 National Research Council

### Teaching Resources from Anker Publishing Co.

Teaching at Its Best, 2nd ed. By Linda Nilson, 2003

The Course Syllabus: A Learning Centered Approach, by J. Brunert, 1997

The New Professor's Handbook: A Guide to Teaching and Research in Engineering & Science, By C. Davidson & S. Ambrose, 1994.

Good Start: A Guidebook for New Faculty in Liberal Arts Colleges  
by G. Gibson, 1992

### Mentoring and Management

At the Helm, by Kathy Barker, 2002 CSH Press

Techniques for Effective Undergraduate Mentoring, by Stephanie  
and Howard Adams, 1998 National Consortium for Graduate  
Degrees for Minorities in Engineering and Science

Lab Dynamics, by Cohen & Cohen 2005 CSHL Press

Making the Right Moves: A Practical Guide to Scientific  
Management for Postdocs and New Faculty

[www.hhmi.org/grants/pdf/labmgmt/book.pdf](http://www.hhmi.org/grants/pdf/labmgmt/book.pdf)

Department Chair's Role in Developing New Faculty into Teachers  
and Scholars, by E. Bensimon, K. Ward and K Sanders, 2000  
Anker Publishing Co.

Entering Mentoring, by Handelsman, J. et al.

[http://www.hhmi.org/grants/pdf/labmgmt/entering\\_mentoring.pdf](http://www.hhmi.org/grants/pdf/labmgmt/entering_mentoring.pdf)

### Literature: Research

At the Bench, by Kathy Barker 1998 CSHL Press

Lab Ref, Jane Roskams & Linda Rodgers (eds.) 2002 CSHL Press

Lab Math: Handbook of lab measurements, calculations, etc.,  
by Dany Spencer Adams, 2004 CHSL Press

### Careers:

Alternative Careers in Science, Cynthia Robbins-Roth (ed). 1998  
Academic Press.

Resource List: College Biology/Science Teaching  
Compiled 08/2005 by Lisa Elfring, Univ. of Arizona

PEER-REVIEWED JOURNALS ON SCIENCE TEACHING

*Journal of College Science Teaching*

Published by the National Science Teachers Association (NSTA), this journal is published seven times a year and includes monthly columns on case-study-based teaching, research and teaching, and science headlines as well as peer-reviewed research articles on teaching in all the science disciplines.

<http://www.nsta.org/college#journal>

*Journal of Research in Science Teaching*

Published monthly, this journal focuses on both K-12 and post-secondary education and teaching issues.

<http://www3.interscience.wiley.com/cgi-bin/jhome/31817>

*Journal of Microbiology and Biology Education (previously known as: Microbiology Education) and Focus on Microbiology Education*

Both journals are published by the American Society for Microbiology. *Focus on Microbiology Education* is published quarterly; *Microbiology Education* is published yearly. For both, a subscription is required for full-text articles. The web site for the journals, <http://www.microbelibrary.org/>, also contains useful images and animations, microbiology curriculum for lectures and labs, and reviews of educational materials.

*Biochemistry and Molecular Biology Education*

Published by the American Society for Biochemistry and Molecular Biology, this journal features articles on teaching techniques, assessment, research on biochemistry and molecular biology education, and lab curricula.

<http://www.bambed.org/>

*Cell Biology Education*

This quarterly, online journal, published by the American Society for Cell Biology, features policy articles, guidelines and sample curricula, and research articles on cell biology education.

<http://www.cellbioed.org/>

*Journal of Chemical Education*

Published by the American Chemical Society, this journal features articles for both K-12 and college chemistry teaching and sections on teaching different chemistry topics as well as chemistry education research.

<http://jchemed.chem.wisc.edu/>

*American Biology Teacher*

This journal for both K-12 and college biology teachers is published by the National Association of Biology Teachers. Features include how-to-do-it suggestions for the classroom, field, and laboratory, field activities, interdisciplinary programs, and articles on recent advances in biology and life science. Each issue features reviews of books, classroom technology products, and "Biology Today."

<http://www.nabt.org>

*Frontiers in Ecology*

Published by the Ecological Society of America. Every issue includes a column on *Pathways to Scientific Teaching*, based on a research article in that issue.

<http://www.frontiersinecology.org/>

*Journal of Science Education and Technology*

Quarterly journal providing peer-reviewed articles across sciences disciplines and from K-college.

<http://www.springeronline.com/sgw/cda/frontpage/0,11855,4-40406-70-35747844-0,00.html>

BOOKS AND REPORTS

*Active Learning: Creating Excitement in the Classroom.* Charles C. Bonwell and James A. Eison. ASHE-ERIC Higher Education Report No. 1. Washington, DC: The George Washington University, School of Education and Human Development. 1991.

*Applying the Science of Learning to University Teaching and Beyond.* Diane F. Halpern and Milton D. Hakel, Editors. Jossey-Bass, San Francisco. 2002.

*BIO 2010: Transforming Undergraduate for Future Research Biologists.* National Research Council of the National Academies. National Academies Press, Washington DC. 2003.

*Classroom Assessment Techniques: A Handbook for College Teachers.* Thomas A. Angelo and K. Patricia Cross. Jossey-Bass Publishers, San Francisco. 1993.

*College Pathways to the Science Education Standards.* Eleanor D. Siebert and William J. McIntosh, editors. NSTA Press, Arlington Virginia. 2001.

*Cooperative Learning: Increasing College Faculty Instructional Productivity.* David W. Johnson, Roger T. Johnson, and Karl A. Smith. ASHE-ERIC Higher Education Report No. 4. Washington, DC: The George Washington University, School of Education and Human Development. 1991.

*How People Learn: Brain, Mind, Experience, and School.* National Research Council. National Academy Press, Washington DC. 2000.

*National Science Education Standards.* National Research Council. National Academy Press, Washington DC. 1996.

*Peer Instruction: A User's Manual.* Erik Mazur. Prentice Hall, Upper Saddle River, NJ. 1997.

*Science for All Americans.* F. James Rutherford and Andrew Ahlgren, AAAS. Oxford University Press, New York. 1989.

*Tools for Teaching.* Barbara Gross Davis. Jossey-Bass Publishers, San Francisco. 1993.

#### PROGRAMS AND PROJECTS

National Academies Summer Institute on Undergraduate Education in Biology  
<http://www.academiessummerinstitute.org/>

Wisconsin Program for Scientific Teaching  
<http://scientificteaching.wisc.edu>

National Center for Case Study Teaching in Science  
<http://ublib.buffalo.edu/libraries/projects/cases/ubcase.htm>

Project Kaleidoscope  
<http://www.pkal.org>

Tomorrow's Professor Listserv  
<http://ctl.stanford.edu>

