



Barbara M. Olds
Associate Vice President for Educational Innovation
Professor of Liberal Arts and International Studies
Colorado School of Mines

A. Professional preparation

- Ph.D., University of Denver, English, 1984
- M. A., University of Denver, English, 1972
- B. A., Stanford University, English, 1969

B. Appointments

- 2006-present, Associate Vice President for Educational Innovation, Colorado School of Mines
- May 2005-April 2006, Acting Division Director, Division of Elementary, Secondary, and Informal Education, Directorate for Education and Human Resources, National Science Foundation
- March 2003-April 2006, Division Director, Division of Research, Evaluation and Communication, Directorate for Education and Human Resources, National Science Foundation (IPA)
- 2001-2003, Associate Vice President for Academic Affairs, Colorado School of Mines
- 1992-2000, Principal Tutor, McBride Honors Program, Colorado School of Mines
- 1995-present, Professor, Liberal Arts and International Studies, Colorado School of Mines
- 1988-1995, Associate Professor, Liberal Arts and International Studies, Colorado School of Mines
- 1988-1992, Director, EPICS Program, Colorado School of Mines
- 1984-1988, Assistant Professor, Liberal Arts and International Studies, Colorado School of Mines

C. Honors and Awards

- Wickendon Award (with Ronald L. Miller and Barbara M. Moskal) for best paper published in the *Journal of Engineering Education* in 2005.
- Fellow, American Society for Engineering Education
- William H. Corcoran Award (with Ronald L. Miller) for best paper published in the previous calendar year in *Chemical Engineering Education* in 1999.
- Fulbright Visiting Lecturer/Research Scholar, Sweden, Spring 1999.
- Sterling Olmsted Award for “making significant contributions in the teaching and administering of Liberal Education in Engineering Education,” from Liberal Education Division of American Society for Engineering Education, June 1997.
- CSM Senate Distinguished Lecturer, Fall 1993.

D. Service to engineering education

- Program co-Chair, ASEE Global Colloquium, Rio de Janeiro, Brazil, October 2006
- Program track chair, ASEE Global Colloquium, Sydney, Australia, 2005
- Board of Directors of ASEE, 2002-2004
- Former chair of Educational Research and Methods (ERM) Division of ASEE.
- Former Program Chair for ERM Division
- Former Chair of Liberal Education Division (LED) of ASEE
- Former Program Chair and Secretary/Treasurer of LED
- Frequent presenter of workshops to engineering educators on topics such as outcomes assessment, effective teaching, writing-across-the-curriculum, and multidisciplinary design.

E. Recent publications

- Leydens, Jon A. and Barbara M. Olds, "Publishing in Scientific and Engineering Contexts: A Course for Graduate Students," accepted for *IEEE Transactions on Professional Communication* for December 2006 issue.
- Streveler, Ruth A., Ronald L. Miller, and Barbara M. Olds, "Cognitive Legos©: Helping Your Students Construct Scientifically Accurate Mental Models," *Proceedings of the Frontiers in Education Conference* (electronic), Indianapolis, Indiana, October 19-22, 2005.
- Olds, Barbara M., Barbara M. Moskal and Ronald L. Miller, "Assessment in Engineering Education: Evolution, Approaches and Future Collaborations," *Journal of Engineering Education*, Vol. 94, No 1, January 2005, pp. 13-25.
- Ramaley, Judith A., Barbara M. Olds and Janice Earle, "Becoming a Learning Organization: New Directions in Science Education Research at the National Science Foundation," *The Journal of Science Education and Technology*, Volume 14, No. 2, pp. 173-190, 2005.
- Geist, Monica R., Ronald L. Miller, Mary A. Nelson, Barbara M. Olds, Ruth A. Streveler, "Concept Inventories Meet Cognitive Psychology: Using Beta Testing as a Mechanism for Identifying Engineering Student Misconceptions." *Proceedings of American Society for Engineering Education Annual Conference*, Portland, OR, June 2005.
- Shuman, Larry J., Mary Besterfield-Sacre and Barbara M. Olds, "Ethics Assessment Rubrics," in Mitcham, C., L. Arnhart, D. Johnson and R. Spiers, editors, the *Encyclopedia of Science, Technology, and Ethics*, Macmillian, Vol. II, pp 693-95, 2005.
- Olds, Barbara M. and Ronald L. Miller, "The Effect of First-Year Integrated Engineering Curriculum on Graduation Rates and Student Satisfaction: A Longitudinal Study," *Journal of Engineering Education*, January 2004, pp. 23-35.
- Loshbaugh, Heidi, Nigel Middleton, Barbara M. Olds, Ruth Streveler, "Change Remains Constant: Faculty Mini-Grants Facilitate Undergraduate Curricular Reform at Colorado School of Mines," *Proceedings of American Society for Engineering Education Annual Conference*, Salt Lake City, Utah, June 2004.
- Olds, Barbara M., Ronald L. Miller, Mary A. Nelson, Ruth Streveler, "Preliminary Results from the Development of a Concept Inventory in Thermal and Transport Science," *Proceedings of American Society for Engineering Education Annual Conference*, Salt Lake City, Utah, June 2004.
- Shuman, Larry, M. Sindelar, Mary Besterfield-Sacre, Harvey Wolfe, Rosa Pinkus, Ronald L. Miller, Barbara M. Olds, and Carl Mitcham, "Can Our Students Recognize and Resolve Ethical Dilemmas?" *Proceedings of American Society for Engineering Education Annual Conference*, Salt Lake City, Utah, June 2004.

Hsiung, Deh-I, Barbara M. Olds, and Jane Chu Prey, "Issues in Engineering Education in China and the U.S.A.: A Preliminary Comparative Study." *Proceedings of the 2004 International Colloquium*, American Society for Engineering Education, Beijing, China, September 2004.