

Bibliography

Selective Bibliography

- American Association for the Advancement of Science, *Benchmarks for Science Literacy*. New York: Oxford University Press, 1993.
- American Association for the Advancement of Science, *Science for All Americans*. New York: Oxford University Press, 1989, 90.
- American Association for the Advancement of Science, *Project 2061 Update 1994*. New York: Oxford University Press, 1994.
- American Association for the Advancement of Science, *Project 2061 Update 1997*. New York: Oxford University Press, 1997.
- American Association for the Advancement of Science, *Resources for Science Literacy*. New York: Oxford University Press, 1997.
- American Chemical Society, *ChemCom: Bringing Chemistry to Life*. (revised edition). Dubuque, IA: Kendall Publishing Company, 1993.
- Bridges, Edwin M. and Philip Hallinger, *Implementing Problem Based Learning in Leadership Development*. Eugene: ERIC Clearinghouse on Educational Management, 1995.
- Brooks, Jacqueline Grennon and Martin G. Brooks, *The Case for Constructivist Classrooms*. Alexandria, VA: ASCD, 1993.
- Conn, Kathleen, "Engineering Student Success: Practical Applications for Physics Concepts" in *The Science Teacher*, Vol. 62, No. 6 (September 1995).
- Conn, Kathleen, "Patenting Student Success" in the *Pennsylvania Journal of Teacher Leadership* (Winter, 1993-1994).
- Fogler, H. Scott, and Steven E. LeBlanc, *Strategies for Creative Problem Solving*. Englewood, NJ: Prentice-Hall, 1994.
- Frye, Ellen, "Engines 21 in the High School Classroom" in *Thayer School Directions* (Fall, 1995). *Global Change Education Resource Guide*. Washington, DC: National Oceanic and Atmospheric Administration.
- Guidebook to Excellence*. Washington, DC: U.S. Government Printing Office.
- Harel, Idit and Seymour Papert, *Constructionism*. Norwood, NJ: Ablex Publishing Corporation, 1991.
- Hess, Sister Alice, "Problem Solving: A Method for All Seasons" in *The Mathematics Teacher*, Vol. 89, No. 7 (October 1996).
- Housley, James, "Guiding Students in Project Work" in *The Physics Teacher*, Vol. 33 (Sept. 1995).
- Jabot, Michael, "Activity Guide for New York State Learning Standards on Mathematics, Science, and Technology." Posted on the Internet: www.nysed.gov.
- Jackson, Jane, "Service Learning in High School Physics." Paper delivered at the American Association of Physics Teachers Summer Meeting, August 1996.
- Johnson, Roger and David. *Learning Together and Alone: Cooperation, Competition and Individualization*, 2nd ed. Englewood Cliffs: Prentice-Hall, 1987.
- Kagan, S. *Cooperative Learning: Resources for Teachers*. Riverside, Ca.: University of California Press, 1985.
- Learning Standards for Mathematics, Science, and Technology*. Albany, N.Y.: University of the State of New York and the State Education Department, 1996.
- Lumsdaine, Edward, and Monika Lumsdaine, *Creative Problem Solving: Thinking Skills for a Changing World*. New York: McGraw-Hill, Inc., 1995.
- Muller, Carol B., and John P. Collier, "Engineering Concepts for the High School Classroom: the Dartmouth/Thayer Problem-Solving Methods." Paper delivered at the ASEE/IEEE Frontiers in Education Conference, November 1995.
- National Council for Teachers of Mathematics, *Curriculum and Evaluation Standards for School Mathematics*. Washington, DC: NCTM, 1989.
- National Research Council, *National Science Education Standards*. National Academy Press, 1996.
- Pizzini, Edward L. "A Comparison of the Classroom Dynamics of a Problem-Solving and Traditional Laboratory Model of Instruction Using Path Analysis." *Journal of Research in Science Teaching*, 29 (March 1992), 243-58.

- Poirot, James, "Engineering: Professions at the Crossroads." *Careers & the Engineer* (Spring 1994).
- Principles of Engineering. An MST Approach to Technology Education, Grades 9-12 Elective.* Albany, N.Y.: The University of the State of New York and the State Education Department, 1995.
- Principles of Engineering. A High School Course in Problem Solving. A Video Introduction.* Albany, N.Y.: The University of the State of New York and the State Education Department, 1995.
- Schamel, Douglas, and Matthew Ayres. "The Minds-On Approach: Student Creativity and Personal Involvement in the Undergraduate Science Laboratory." *Journal of College Science Teaching.* 21 (Feb. 1992), 226-29.
- Shelly, Richard W., and John E. Cannaday, Jr., "Nurturing the Transformation to Science that Meets the Benchmarks: Materials Science from Paper to Practice" in the *National Consortium for Specialized Secondary Schools of Mathematics, Science, and Technology Journal* (May 1996).
- Slavin, R. *Using Student Team Learning.* 3rd Edition. Baltimore: Johns Hopkins University Press, 1986.
- Struble, Daniel O., "Encouragement Fosters Minorities' Success in Engineering Careers." *Careers & the Engineer* (Spring 1994).
- Suter, Larry (Ed.), *The Learning Curve: What We Are Discovering about U.S. Science and Mathematics Education.* Washington, D.C.: National Science Foundation, Division of Research, Evaluation, and Communication, Directorate for Education and Human Resources, 1996.
- "Technology Revolution Underlines Importance...." *On-Target* (Spring 1994).
- The Team Handbook.* Joiner Associates, Inc., 1988.
- Todd, Ron, "Design and Technology," *On-Target* (Spring 1994).
- Webb, N. "Student Interaction and Learning in Small Groups: A Research Summary." *Learning to Cooperate, Cooperating to Learn.* Ed. R. Slavin, et al., New York: Plenum, 1985.
- Weber, Robert J., *Forks, Phonographs and Hot Air Balloons.* New York: Oxford University Press, 1992.
- Wolff, Catherine, "Ten Weeks in 2 1/2 Days" in *Thayer School Directions* (Fall 1992).
- Woods, Don, *Problem-Based Learning: How to Gain the Most from PBL.* New York: Plenum, 1996.