

BIBLIOGRAPHY

- Aikenhead, G. & Solomon, J. (Edts.), *STS Education: International Perspectives On Reform*, New York, Teachers College Press, 1994
- Allen, N.L., Swinton, S.S., Ishman, S.P., Zelenak, C.A., *Technical Report of the NAEP 1996 State Assessment Program in Science*, Washington, D.C., National Center for Education Statistics, 1997.
- American Association for the Advancement of Science, *Benchmarks for Science Literacy, Project 2061*, New York, Oxford University Press, 1993.
- American Association for the Advancement of Science, *Project 2061, Science for All Americans.*, Washington, D.C, 1989.
- American Association For The Advancement Of Science, *Resources for Science Literacy: Professional Development*, New York, Toronto, Oxford University Press, 1997.
- American Association of Physics Teachers, "The Implications of Cognitive Studies for Teaching Physics," *American Journal of Physics*, 1994.
- Biological Sciences Curriculum Study (BSCS), *Developing Biological Literacy*, Colorado Springs, 1993.
- Bourque, M.L., Champagne, A.B., Crissman, S., *1996 Science Performance Standards: Achievement Results for the Nation and the States*, Washington, D.C., National Assessment Governing Board, 1997.
- Bruer, J. T., "Education and the Brain: A Bridge Too Far," *Educational Researcher*.
- Burke, James, *Connections*, Boston, Toronto, Little, Brown and Company, 1978.
- Bybee, R. & DeBoer, George E. "Research on Goals for the Science Curriculum," *Handbook of Research on Science Teaching and Learning*. Ed. Dorothy Gabel. MacMillan, NY 1994, p. 384
- Bybee, Rodger W. (ed.), *National Standards & The Science Curriculum: Challenges, Opportunities, & Recommendations*, "Research on Goals for the Science Curriculum," Iowa, Kendall Hunt Publishing Company, 1996.
- Carey, S., "Cognitive Development," *Invitation to Cognitive Sciences, Thinking* ,vol. 3, ch. 6, Cambridge, MIT Press, 1990.
- Chiappetta, E. L. "Inquiry Based Science: Strategies and Techniques for Encouraging Inquiry in the Classroom," *The Science Teacher*, October 1997, p. 22 — 26.

Chiappetta, E. L., Koballa, T. R. Jr., & Collette, A.T. *Science Instruction: In the Middle and Secondary Schools*, 4th ed., New Jersey, Prentice Hall, Inc., 1998.

Council of State Science Supervisors Web Site, <http://csss.enc.org/>

Cothron, J. H., Giese, R. N. & Rezba, R. J., *Students and Research: Practical Strategies for Science Classrooms and Competitions* (Second Ed.), Dubuque, IA, Kendall Hunt Publishing Company, 1989, 1993.

Creed, R.P., S.P. Sheldon, and D.M. Cheek., *The Effect of Herbivore Feeding on the Buoyancy of Eurasian Watermilfoil*, Appalachian State University, 1992.

Eisenhower National Clearinghouse for Mathematics and Science Education, <http://www.enc.org>. (web-site), Columbus.

Feynman, R. P., "What is Science?" *The Physics Teacher*, September 1969, p. 313 - 320.

Hackett, J., "Means and Ends: Using the Standards to Define Inquiry Methods and Outcome." *The Science Teacher*, September 1998, p. 34 - 37.

Hausman, H. J., "Choosing a Science Program for the Elementary School", *Occasional Papers*, no. 24.

Hazen, R. M., Trefil, J., *Science matters: Achieving Scientific Literacy*, New York, Doubleday, 1991.

International Association for the Evaluation of Educational Achievement, *Science Achievement in the Middle School Years: IEA's Third International Mathematics and Science Study*, Boston, Center for the Study of Testing, Evaluation, and Educational Policy, Boston College, 1996.

International Technology Education Association, *Advancing Excellence in Technological Literacy; Student Assessment, Professional Development, and Program Standards*, Reston, VA, ITEA, 2003

Karplus, R., "Science Teaching and the Development of Reasoning," *Journal of Research in Science Teaching*, John Wiley & Sons, Inc., vol. 14, no.2, p. 169 - 175, 1977.

Kyle, William C. Jr. (ed.), *Journal of Research in Science Teaching*, New York, John Wiley & Sons, Inc., 1996.

Lowery, Lawrence F. (ed.), *NSTA Pathways To the Science Standards*, Elem. School Ed., Virginia, NSTA, 1997.

- Lowery, L. F., *The Scientific Thinking Process*, Berkeley, University of California, Lawrence Hall of Science, 1990.
- McComas, W. F. (ed.), *The Nature of Science and Science Education*, Netherlands, Kluwer Academic Publishers, 1998.
- McComas, W. F., "15 Myths of Science: Lessons of Misconceptions and Misunderstandings from a Science Educator," *Skeptic Magazine*, vol. 5, no. 2, 1997, p. 88 - 95.
- McNeely, Margaret E. (ed.), *Guidebook To Examine School Curricula.*, U.S. Department of Education, 1997.
- Mestre, J. P., "3 Cognitive Aspects of Learning and Teaching Science," *Teacher Enhancement for Elementary and Secondary Science and Mathematics: Status, Issues, and Problems*, ch. 3, p 1 - 44.
- National Academy of Sciences, *Every Child a Scientist: Achieving Scientific Literacy for All.*, Washington, D.C., National Academy Press, 1998a.
- National Academy of Sciences, *Teaching About Evolution and the Nature of Science*, Washington, D.C., National Academy Press, 1998b.
- National Assessment of Educational Progress, *Learning by Doing* (Report No: 17-HOS-80), Princeton, Educational Testing Service, 1987.
- National Assessment Governing Board, *Science Framework for the 1996 and 2000 National Assessment of Educational Progress*; NAEP Science Consensus Project, Washington, DC, NAGB, 2000.
- National Center for Education Statistics, *A Profile of American Eighth-Grade Mathematics of Science Instruction* (NCES 92-486), Washington, D.C., U.S. Department of Education, 1992.
- National Research Council, *Classroom Assessment and the National Science Education Standards*, Washington, D.C., National Academy Press, 2001.
- National Research Council, *Education and Learning to Think*, Washington, D.C., National Academy Press, 1987.
- National Research Council, *Improving Teacher Preparation and Credentialing Consistent with the National Science Education Standards: Report of a Symposium*, Washington, D.C., National Academy Press, 1997.
- National Research Council, *National Science Education Standards*, Washington, D.C., National Academy Press, 1996.

- National Science Teachers Association, *Pathways to the Science Standards 2nd High School Edition*, Washington, DC, NSTA Press, 2003
- National Science Foundation, *Indicators of Science & Mathematics Education*, Washington, D.C., Author, 1992.
- National Science Resources Center, National Academy of Sciences, Smithsonian Institution, *Science For all Children: A Guide to Improving Elementary Science Education in Your School District*, Washington, D.C., National Academy Press, 1997.
- North Carolina Department of Public Instruction, *North Carolina Public Schools Statistical Profile*, Raleigh, 1996.
- North Carolina Mathematics and Science Coalition, *A Shared Vision for Mathematics and Science Education in North Carolina*, Chapel Hill, The University of North Carolina at Chapel Hill, 1993.
- O'Sullivan, C.Y., Reese, C.M., Mazzeo, J., *NAEP 1996 Science Report Card for the Nation and the States*, Washington, D.C., National Center for Education Statistics, 1997.
- O'Sullivan, C.Y., Weiss, A.R., Askew, J.M., *Students Learning Science: A Report on Policies and Practices in U.S. Schools*, Washington, D.C., National Center for Education Statistics, 1998.
- Project 2061 and the National Science Teachers Association, *Atlas of Science Literacy*, Washington, DC, Project 2061, 2001.
- Purcell, C. "*The Machine in America: A Social History of Technology*." 1995.
- Rakow S. J., *NSTA Pathways to the Science Standards (Middle School Ed.)*, Arlington, NSTA, 1998.
- Rhoton, Jack and Bowers, Patricia (ed.), *Issues in Science Education*, Virginia, National Science Teachers Association, 1996.
- Rowe, Mary Budd, "*Teach Your Child To Wonder*", Reader's Digest, May 1995.
- Schmidt, William H., McKnight, Curtis C., and Raizen, Senta A., *A Splintered Vision: An Investigation of U.S. Science and Mathematics Education*, Dordrecht, Boston, London, Kluwer Academic Publishers, 1997.
- Subcommittee on Global Change Research, Committee on Environment and Natural Resources of the National Science and Technology Council, *Our Changing Planet: An Investment in Science for the Nation's Future*, 1996 FY Budget.

"The Total Science Safety System," Secondary, 8th ed., JaKel, Inc. CD ROM Edition, 2003.

"Tolls for Discussion: Attaining Excellence Through TIMSS," *Eisenhower National Clearinghouse for Mathematics and Science Education*, (CD-ROM).

University of California, Lawrence Hall of Science, *Science Teaching and the Development of Reasoning: General Science*, Berkeley, 1977.

U.S. Department of Education and National Center for Education Statistics, *Pursuing Excellence: A Study of U.S. Fourth-Grade Mathematics And Science Achievement in International Context*, Washington, D.C., U.S. Government Printing Office, 1997.

U.S. Department of Education, National Center for Education Statistics, *Pursuing Excellence*, NCES 97-198, Washington, D.C., U.S. Government Printing Office, 1996.

U.S. Department of Education, Office of Educational Research and Improvement, *Attaining Excellence: A Video Presentation of Pursuing Excellence: U.S. Eighth Grade Findings From the Third International Mathematics and Science Study* (Video).

U.S. Department of Education, Office of Educational Research and Improvement, *Introduction To TIMMSS: The Third International Mathematics And Science Study*, 1997.

Wahl, G. H., Jr. (Ed.), *Reduction of Hazardous Waste for High School Chemistry Laboratories*, Raleigh, NC, North Carolina Department of Natural Resources and Community Development.