

Curriculum Vitae

Taber, Michael Ralph

Updated October 20, 2023

POSITION Professor of Education
The Colorado College
Colorado Springs, Colorado 80903

EDUCATION

<u>Year(s)</u>	<u>Degree</u>	<u>Institution</u>	<u>Area of Study</u>
1999	Ph.D.	Iowa State University	Water Resources - Micrometeorology
1987	M.A.T.	The Colorado College	Secondary Earth Science Teaching
1986	B.A.	The Colorado College	Geology

AREA OF SPECIALIZATION

Areas of specialization include education research on rural educator teacher preparation, inquiry, culturally responsive curriculum design, using data in the classroom to inform instruction, and how we learn complex systems. Science research focuses on heterogeneous surface energy fluxes.

ACADEMIC POSITIONS

<u>Year(s)</u>	<u>Institution/Organization</u>	<u>Position</u>	<u>Responsibilities</u>
Current	Education, Colorado College	Professor	Teaching, Research, Service
2006-19	Education, Colorado College	Associate Professor	Teaching, Research, Service
2005-06	Earth Sciences, University of Northern Colorado	Associate Professor	Teaching, Research, Student Teacher Supervision, Service
2000-04	Department of Earth Sciences, University of Northern Colorado	Assistant Professor	Teaching, Research, Student Teacher Supervision, Service
1999-00	School of Education and Social Policy, Northwestern University	Research Assistant Professor	Project Manager, Investigating the Environment Curriculum Project
1994-99	Iowa State University	Graduate Research Assistant	Global Change Education; Shelterbelt heat fluxes
1995-98	International Institute of Theoretical and Applied Physics, Iowa State University	Graduate Research Assistant	Design and Implementation of Web-based course instruction
1990-94	Panorama Middle School, Colorado Springs, Colorado	Teacher	Sixth Grade Math, Science, and Reading
1988-90	Hanks High School, El Paso, Texas	Teacher	Physics, Biology, Physical Science

LEADERSHIP POSITIONS HELD

<u>Year(s)</u>	<u>Institution/Organization</u>	<u>Position</u>
2022-23	Colorado College	Co-Chair, Campus Budget Committee
Spring 2022	Colorado College	Associate Chair
2010-2019	Colorado College	Department Chair
2006-19	Colorado College	Faculty Director, Summer Children's Programs
2013-14	Colorado Council of Deans of Education (CCODE)	Co-chair
2007-09	Colorado College	Director, Environmental Program
2009-10	National Association of Geoscience Teachers	President
2008-09	National Association of Geoscience Teachers	1 st Vice President
2007-08	National Association of Geoscience Teachers	2 nd Vice President
2001-06	University of Northern Colorado	Chair, Science and Math General Education Committee

OTHER WORK EXPERIENCE – Professional Academic

2013	Federal University of Juiz de Fora	Visiting Scholar	Directed a two-week workshop, <i>Water in a Changing World: Challenges for Education Paradigms</i>
1997	University Corporation for Atmospheric Research (UCAR)	Workshop instructor for COMET	Web-based instructional design
1996	Iowa State University	Symposium co-chair	Methods for improving post-secondary science education

RESEARCH

Active

(Lead PI) Colorado College Noyce Scholarship Program (CCNSP). Many Whitaker, Tina Valtierra, Howard Drossman, Co-PIs. Funding for providing a community of undergraduate science interns to develop into science teachers. \$1,193,400. NSF Award #1540672.

Recently Completed (2013-18)

(Lead PI) Proactive Positioning of Future Educators for Rural Community Success. Co-PI: Robert Mitchell, Assistant Professor of Education, UCCS. Funding for providing an early rural education experience for future teachers. \$63,199. *Funding is supported by the Colorado Department of Higher Education.* Concluded December 2019.

(Co-PI) Colorado College Rural Organizational Pikes Peak Partnership (CCROPPP). Kathy Randolph, Lead PI. Co-PIs Many Whitaker and Tina Valtierra. A project to develop a strategic partnership between the Colorado College Education Department and the Pikes Peak Board of Cooperative Education Services (BOCES) for improving the preparation of rural teachers. \$41,875. *Funding supported by the Colorado Department of Higher Education.* Project completed in July 2018.

Comparative Environmental Issues - Diverse Study Solutions: *Collaborative exchange between Colorado College, Carleton College, member Associated Colleges of the Midwest, University of Juiz de Fora, and the Universidade de Brasília*. A \$264,000 project through U.S. Department of Education Fund for the Improvement of Postsecondary Education (FIPSE), CFDA 84.116M. Completed in May 2014.

Elementary Integrated Math-Science Partnership with Colorado Springs School District 11 and Colorado College Education Department. Funding for developing a cohort of teacher leaders on the integration of math and science at the elementary level. A three-year project funded by the Colorado Department of Education (\$952,000). Completed in May 2014.

Collaborative International Event: Approaches to Pedagogy and Learning about the Environment. An ACM FaCE Collaborative Event project with Nick Gomersall from Luther College and Fabio Roland from University Federal of Juiz de Fora. (\$15,000). Completed in May 2012.

Enhancing Use of Data in Education: Bridging the Scientific and Educational Communities: A collaborative project with Tamara Shapiro Ledley (TERC) and Ben Domenico (UNIDATA/UCAR). (Subcontract with TERC). \$135,441 awarded by NSF (EAR-0623136). (<http://serc.carleton.edu/usingdata/accessdata/index.html>). Completed in May 2010.

Completed (prior to 2010)

A Collaborative Project: DLESE Data Services - Facilitating the Development and Effective Use of Earth System Science Data in Education. A collaborative project with Tamara Shapiro Ledley (TERC) and Ben Domenico (UNIDATA/UCAR). \$154,680 awarded by NSF (EAR-0305074). Completed October 2008.

Thematic Realtime Environmental Data Distributed Services – Second Generation, for development of curriculum modules. NSF Subcontract Award of \$42,052 from University Corporation for Atmospheric Research (E0333600). Completed August 2008.

USRA Continuing Grant for Research on Global Change Education at Colorado College. \$6,542.26 funded by USRA/NASA. Completed August 2007.

Global Change: A new upper division undergraduate major course at the University of Northern Colorado for Stage 2 participation in Earth System Education for the 21st Century Program (ESSE21). \$58,697 funded by USRA/NASA. Completed August 2005.

Visualization Learning Environments for Teaching Inquiry and Earth Science Concepts: A Model for Improving Earth Science Teaching (MODEST), \$80,661 funded by NSF (GEO-0122026). Completed May 2005.

Development of two, 4-credit Integrated Science Courses for Guarantee Course Transfer. \$59,979 funded by CCHE under No Child Left Behind 2003-04 (Award #904). Completed October 2004.

Alpine Micrometeorological field data analysis of energy fluxes at Niwot Ridge (Colorado) Long-Term Ecological Research Station. UNC SPARC Research and Development Grant, \$5,527. Completed June 2003

WorldWatcher Curriculum Project – *Looking at the Environment (LATE)*: a year-long high school environmental science, utilizing geographic information systems (GIS) technologies for data analysis and visualization (\$23,259 subcontract with Northwestern University). Completed June 2002.

Infusion of Technology into GEOL 100. UNC PT3 grant, \$3,750. Completed summer 2002.

Infusion of Technology into SCI 465. UNC PT3 grant, \$3,500. Completed summer 2001.

PUBLICATIONS – Juried

In preparation

Taber, M.R. Rethinking Constructivism: Developing a Critical Consciousness Through Visual Thinking Strategies and Culturally Responsive Praxis. *Journal of Science Education*.

Taber, M.R. Redefining STEM Teacher Preparation: Dismantling ‘isms for the creation of socioscientific reasoning. *Journal of Science Education*.

Under Revision

Taber, M.R., K. Randolph, N. Wurzweiler. Teacher Autonomy and Job Satisfaction: Comparing Rural, City, and Suburban Teachers. Submitted to *Journal of Research in Rural Education*.

Articles

Taber, M.R., Kummel, M. 2022. Reframing the Teaching of Climate Change through Empathy and Social Innovation. *New Perspectives in Science Education: Conference Proceedings, 12th Edition*. Published by Liberiauniversitaria, Florence, Italy.

Taber, M.R., 2018. A New Paradigm for Implementing Culturally Responsive Pedagogy to Pre-service Science Teachers. *New Perspectives in Science Education: Conference Proceedings, 7th Edition*. Published by Liberiauniversitaria, Florence, Italy

De Souza Machado, P. , J.H.C. Ribeiro, T. P. da Silva, Taber, M., E. B. Pasin, 3028. Atividades lúdicas relacionadas a questões hídricas: inclusão de abordagens CTS no currículo de Biologia do Ensino Médio. *Cadernos da Educação Básica*, vol. 1, n. 2, outubro 2016.

Taber, M.R., E. Benedict, E. Waterman, 2015. The Cognitive Development of Visual Literacy for Scientific Symbolic Problem Solving. *New Perspectives in Science Education: Conference Proceedings, 4th Edition*. Published by Liberiauniversitaria, Florence, Italy.

Taber, M.R., F. Roland, B. Milanez, E. Pasin, F Alvim Carvalho, 2014. Water in a Changing World: Developing Learning Materials for Pre-Professional Teachers in Brazil and the United States. *New Perspectives in Science Education: Conference Proceedings, 3th Edition*. Published by Liberiauniversitaria, Florence, Italy

Taber, M. R., T. Ledley, S. Lynds, B. Domenico, L. Dahlman, 2012. Geoscience Data for Educational Use: Recommendations from Scientific/Technical and Educational Communities. *Research results from the Enhancing Use of Data in the Classroom Project (EAR-0623136)*. *Journal of Geoscience Education*, Vol. 60(3), August 2012. Outstanding Paper Award for 2012.

Ledley T., M. R. Taber, S. Lynds, B. Domenico, L. Dahlman, 2012. A Model for Enabling an Effective Outcome-Oriented Communication Between the Scientific and Educational Communities. *Research results from the Enhancing Use of Data in the Classroom Project (EAR-0623136)*. *Journal of Geoscience Education*, Vol 60(3), August 2012.

Taber, M. R., 2012. Building new cognitive knowledge structures about complex systems: An illustration of a model activity. *Earth and Mind, Volume II*. Kastens and Manduca, eds. Geological Society of America Special Publication; pp 123 – 125.

Ledley, T., L. Dahlman, C. McAuliffe, N. Haddad, M. Taber, B. Domenico, S. Lynds, M. Grogan. Making Earth Science Data Accessible and Usable in Education. *Science*. Vol. 333. 30 September 2011. *Note: This paper was the recipient Science Prize for Online Resources in Education (SPORE) award from the journal, Science.*

Taber, M. R. and K. Quadracci, 2006 (November). Building Geoscience Vocabularies Using A Data Visualization Tool (WorldWatcher). In *Earth and Mind: How Geologists and Educators Think and Learn about the Earth*, Geological Society of America Special Publication, Manduca and Mogk, eds., 188 pps.

Ledley, T. S., B. Domenico, M. R. Taber, and L. Dahlman, 2005. Facilitating the Effective Use of Earth Science Data in Education through Digital Libraries: Bridging the Gap between Scientists and Educators. Proceedings of the 5th Annual Joint Conference on Digital Libraries, Sumner and Shipman, Program Chairs. June 7-11, 2005, Denver, Colorado. 436 pps.

Yarger, D. N., W. A. Gallus, Jr., M. R. Taber, J. P. Boysen, and P. Castleberry, 2000. A Forecasting Activity for a Large Introductory Meteorology Course. *Bulletin of American Meteorological Society*. Vol. 81, No. 1, pp. 31–40.

Takle, E. S. and M. R. Taber, 1995. Teaching on the Internet: Experience with a Course on Global Change. *Ag Bioethics Forum*, Vol. 7, No. 1, 6-7.

Chapters

Taber, M. R., C. Cervato, W. Ryan, R. Arko, D. Fils, V. Fitzjarrald, 2010. Climate History from Deep Sea Sediments, Earth Exploration Toolbox Chapter. http://serc.carleton.edu/eet/deep_sea_sediments/index.html. Published in September 2010 and updated July 2011.

Taber, M. R., G. Saunders, K. Champe, D. Hayes, J. Ledley, B. Youngman, 2010. Protecting Wetlands from Exurban Development. Earth Exploration Toolbox Chapter. <http://serc.carleton.edu/eet/wetlanddev/index.html>. Published in October 2010 and updated in May 2011.

Taber, M. R., B. Youngman, L. Di, F. Granshaw, W. Luo, M. Deng, 2010. Tsunami Run-up Prediction for Seaside, Oregon using MyWorld GIS. Earth Exploration Toolbox Chapter. <http://serc.carleton.edu/eet/tsunamiinseaside1/index.html>. Published in December 2010 and updated in June 2011.

PUBLICATIONS – Non-juried

Articles

Taber, M. R., 2011. Book review of *Stories in Stone* by David B. Williams. In *the Trenches*, an editor reviewed publication of the National Association of Geoscience Teachers. April 2011. <http://nagt.org/nagt/publications/trenches/issues/apr11.html>

Books and Chapters

Taber, M. R., K. Kester, P. May, A. Yurkanin, 2011. Environmental Stewardship – a dialog between religion and the environment, in Fostering Religious Diversity Across Campus, Miriam Diamond, ed. New Forums Press, Inc.

Taber, M. R., 2008. Freedom to Explore: Data are Motivating. *Vignette for AccessData*. (SERC at <http://serc.carleton.edu/serc/about.html>). (Article no longer available on SERC website.)

Taber, M. R., 2006. Putting Data First in Teaching Global Change. *Vignettes for the ESSE 21 Design Guide for Undergraduate Earth System Science Education*. (Article no longer available on USRA website.)

Taber, Michael R., Discovering Geology: An Introductory Laboratory Manual. Kendall-Hunt Publishers, 2003 (1st edition), 2004 (2nd edition), USBN 978-0-7575-2293-2

Take, E. S. and M. R. Taber, *Global Warming: Evaluating Alternatives*, Peregrine Publishers, 1996. (No longer active online with Peregrine, but available from Iowa State at <http://www.iitap.iastate.edu/gcp/iron/studentpage.html>)

Taber, M. R., 1999. Heat storage and atmospheric heat and moisture fluxes from mid-latitude constructed wetland and irrigated alfalfa field. Dissertation. Iowa State University, 124 pp.

Fils, D., and M.R. Taber, 1996: Technology on the horizon. Presented at the First Annual Symposium on Methods and Tools for Improving Post-Secondary Education *Network Enhanced Learning: Vision 2000*. Iowa State University, 24 February 1996.

PROFESSIONAL PRESENTATIONS – Juried

Taber, M.R. and Kummel, M., 2022. Reframing the Teaching of Climate Change Through Empathy and Social Innovation. *New Perspectives in Science Education* Conference. Presentation March 17-18, 2022. Florence, Italy

Taber, M. R., 2020. Why Effective Science Teaching in Rural Schools Matters in the United States. *New Perspectives in Science Education* conference, March 19-20, 2021. Abstract accepted on November 25, 2020. Conference Cancelled due to the COVID-19 Pandemic.

Mitchell, R., M.R. Taber, 2019. Rural Deep End: College Immersion in Remote Districts. National Rural Education Association 111th NREA Convention and Research Symposium. October 24-26, 2019. Paper accepted May 2019.

Valtierra, T., M.R. Taber, 2016. Teacher Dispositions: Putting Values into Action. Round Table paper discussion. 68th Annual meeting of the American Association of Colleges for Teacher Education. February, 2016.

Kummel, M., C. Dickson, M.R. Taber, 2013. What allows diffuse treelines to respond to regional warming? The role of boundary layer micrometeorology. 98th Ecological Society of America Annual Convention, August, 2013

Taber, M.R., M. Urban, G. Saunders, 2012. Earth Exploration Toolbook: Using Web-based, Large Datasets to Explore Science Concepts. Workshop Session at the Association of Science Teacher Educators (ASTE) Annual Conference. January, 2012.

Taber, M.R., T.S. Ledley, B. Domenico, L. Dahlman, 2010. Bridging the Gap on Data Access and Learning: A collaboration model that brings together scientists, educators, and data and tool specialists. Poster presentation at the European Geosciences Union Meeting, May 2010, Vienna, Austria. EGU2010-13146. Presented in Session SSS45/EOS10.

Taber, M.R., T.S. Ledley, A. Prakash, B. Domenico, 2009. Making Geoscience Data Relevant for Students, Teachers, and the Public. Poster Presentation at the American Geophysical Union Annual Meeting, Session ED53E: Representing Geoscience Data: For Research, Instruction, and Communicating

With the Public II, December 2009. *Eos Trans. AGU*, 91(53), Fall Meet. Suppl., Abstract ED53-04.

Taber, M.R., R. McCrary, K. Calder-Thayer, M. Gottfried, 2009. Using GIS to Support Data Driven Constructivist Approach to Teaching Global Climate Change. Poster Presentation at the Geological Society Annual Meeting, October 2009.

Deng, Meixia, L. Di, W. L. Luo, M. Taber, F. Granshaw, 2008. GeoBrain Data Access and Analysis For Earth Science Education and Research. *Paper presentation at the American Geophysical Union Annual Meeting, Session ED12: Integrating Data and Technology in Education: Novel Ways to Promote Earth Science Literacy, December 15-19, 2008*. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract ED53A-0586.

Ledley, T.S., A. Prakask, C. Manduca, S. Fox, L. Dahlman, B. Domenico, M. Taber, 2008. Archiving Data to Facilitate Its Use in Education. *Abstract submitted to the American Geophysical Union Annual Meeting, Session U08: The Library - Data Center Alliance in Earth and Space Sciences, December 15-19, 2008*. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract U13D-05.

Ledley, T.S., L. Dahlman, B. Domenico, M. Taber, 2007. AccessData: Opening Effective Lines of Communication Between IPY Scientists and Educators to Bring IPY Data into the Classroom. *Eos Trans. AGU*, 88(52), 2007 Fall Meet. Suppl., Abstract ED13A-04 *Invited*.

Ledley, T.S., L. Dahlman, B. Domenico, M. Taber, 2007. AccessData: Making Geoscience Data Accessible and Usable by the Education Community. *GSA Abstracts with Programs Vol. 39, No. 6, Abstract No. 129628, October 2007*.

Taber, M. R., Buhr, S., and Urban, M., 2003. Assessment Strategies for Data Intensive, Upper Division Earth Science Course on Global Change. American Geophysical Union Annual Meeting, San Francisco California, December 2003. Paper No. ED22F-05.

Ledley, T.S., B. Domenico, M. Taber, L. Dahlman, 2003. DLESE Data Services: Facilitating the Development and Effective Use of Earth System Science Data in Education. *Geoscience Horizons: Seattle 2003, Abstracts with Programs, GSA Annual Meeting and Exposition, p568, November 2-5, 2003*.

Ledley, T.S., B. Domenico, M.R. Taber, L. Dahlman, 2003. DLESE Data Services-Facilitating Effective Use of Earth System Science Data in Education. Presented at the American Geophysical Union Meeting, San Francisco, CA, December 8-12, 2003.

Taber, M. R., K. Quadracci, and M. Javeri, 2002. Assessing the use of Visualization Learning Environments (VLEs) for Teaching Inquiry to Pre-service Elementary Teachers. Geological Society of America Annual Meeting, Oct 2002, abstract number 133-7.

Taber, M. R., K. Quadracci, and M. Javeri, 2002. Evaluating the use of visualization resources for teaching inquiry to pre-service elementary teachers. American Geophysical Union Annual meeting, December 2002, San Francisco, CA. Poster Session ED11B-0041, Evaluating Geoscience Education Projects.

Takle, E. S., Sorensen, E. K., Taber, M. R., and Fils, D, 2001. Virtual Portfolios: Lessons learned from four years of implementation. Seventh World Conference on Computers in Education (WCCE): Networking the Learner. Copenhagen. 19 July - 3 August. *Paper awarded best of conference*.

Taber, M. R., D. Edelson, and M. Brown, 2000. WorldWatcher: A visualization tool for learning and teaching geoscience concepts. Invited presentation at the annual American Geophysical Union meeting, December 15-19, San Francisco, CA. Session ED11A-03 Visualizations in Undergraduate Education.

Yarger, D. N., Gallus, W. A., Jr., Boysen, J. P., Cruz-Neira, C., Pease, L., Castleberry, P., Meinert, K., Heer, R., and Taber, M. R., 2000. The Use of Visualization to Engage Students in Active Learning. Invited presentation at the annual American Geophysical Union meeting, December 15-19, San Francisco, CA. Session ED11A-03 Visualizations in Undergraduate Education.

Taber, M. R., D. C. Edelson, and M. Brown, 1999. Scientific visualization of data as a tool for assisting students in developing meaningful relationships among complex variables. Geological Society of America Annual Meeting, Oct 1999, abstract number 51947.

Takle, Eugene S., M. R. Taber, and D. Fils, 1998. Interactive Courseware on Global Change Issues for Universities and Policymakers. 2nd International Conference on Climate and Water, Espoo, Finland, 17 - 20 August 1998.

Taber, M. R. and J. Prueger, 1997. Evapotranspiration from a Constructed Wetland. Paper number C-0081 presented at the Annual Meeting of the American Water Resources Association, October 22, 1997, Long Beach, California.

Taber, M. R., E. S. Takle, and Douglas Fils, 1997: Use of the Internet for Student Self-Managed Learning. Presented at the *Sixth Symposium on Education*, Annual Meeting of the American Meteorological Society, February 2-7 1997, Long Beach, California.

Takle, E. S., and M. R. Taber, 1996: Use of the Web as a Tool for Interactive Learning. Presented at the *World Conference of the Web Society*, October 16-19, 1996, San Francisco, California.

Takle, E. S., and M. R. Taber, 1996: Use of the Internet as a platform for a university course on global change. Paper presentation at the Fifth Symposium on Education, Annual Meeting of the American Meteorological Society, January 28-February 2, Atlanta, GA. *Paper J1.11*

PROFESSIONAL PRESENTATIONS – Non-juried

Taber, M. R., 2004. Benefits, Challenges, and *Opportunities* in Building Cross-Disciplinary, Cross Grade Level Science-Math-Tech Alliances *Lessons Learned from the Colorado Alliance for Science (CAS)*. Invited Presentation to the Revolutions II in Earth Science workshop, October 2004, American Geophysical Union, Washington, D. C.

Taber, M. R., 2004. Strategies for Building Data Access Tools for Teachers and Learners. Invited presentation to the Ridge 2000 Open Data Exchange Workshop, July 2004, Lamont-Doherty Earth Observatory, Palisades, NY.

Taber, M. R., M. Urban, S. Buhr, and E. Takle, 2004. First Year Report: A Course on Global Change at the University of Northern Colorado, 2004. Presentation at the Earth System Science Education for the 21st Century (ESSE21) annual meeting, June 2004, Monterey, California.

Taber, M. R., J. Entwisle, 2001. Teaching Climate Change, invited presentation, Digital Library for Earth System Education (DLESE) Annual Meeting. Flagstaff, Arizona. August 2-4, 2001 (<http://www.dlese.org/annualmtg/2001/index.html>)

Spangler, T., M. R. Taber, 2001. Principles for Developing Effective Digital Resources, invited presentation, Digital Library for Earth System Education (DLESE) Annual Meeting. Flagstaff, Arizona. August 2-4, 2001 (<http://www.dlese.org/annualmtg/2001/index.html>)

Taber, M. R., 2001. Building Curriculum Around GIS: WorldWatcher Curriculum Project. GeoTech: Colorado Geographic Alliance Annual Meeting. May 2001.

Taber, M. R., E. S. Takle, and D. Fils, 1998. Global Change Course Project. Presented at NUMAPS 1998 workshop at the International Institute for Theoretical and Applied Physics. 16 June 1998.

Taber, M. R., D. Yarger, P. Boysen, E. S. Takle, D. R. Fils, 1997. Technology-Based Teaching. PAGE focus group presentation, Boulder Colorado, 17 October 1997.

Taber, M. R., E. S. Takle, and Douglas Fils, 1997: Presentation for models of effective distance teaching. A satellite program presentation for Faculty Development in Distance Education, March 11, 1997, Iowa State University. *Distance Teaching*, a satellite program presentation for Faculty Development in Distance Education, March 11, 1997, Iowa State University.

Yarger, D. N., G. S. Takle, M. R. Taber, and D. R. Fils, 1995: Distance learning on a tight budget. Proceedings *Bridging the Distance*, Distance Education Conference and Professional Development Seminar, July 6 - 9, Iowa State University.

Yarger, D. N., E.S. Takle, and M.R. Taber, 1995: Workshop on Cu-SeeMe and Collage: tools for bridging the distance. *Bridging the Distance*, Distance Education Conference and Professional Development Seminar. July, 1995.

Taber, M.R., and E.S. Takle, 1995: Classroom teaching with the World Wide Web. Iowa General Chemistry Network (IGCN) Workshop. June, 1995.

Taber, M.R., and E. S. Takle, 1995: Global change course project - World Wide Web and ABC. Workshop on Networks for Use in Math and Physical Science (NUMAPS). January, 1995.

PROFESSIONAL CONSULTATION/REVIEWS

Year(s)	Institution/Organization	Role
2014-	International Conference for New Perspectives in Science Education	Scientific Committee Member
2009-2013	Climate Literacy and Education Network (NSDL project)	Advisory Board Member
2007-2010	NAGT Cutting Edge Workshops (NSF funded)	Advisory Board Member
Nov 2007	Beloit College Education Department	External Reviewer
2005-current	Journal of Geoscience Education	Manuscript reviewer
2004	National Aeronautics and Space Administration (NASA)	Proposal reviewer for NASA Research Announcement, <i>Inspiring the Next Generation of Earth Explorers: Integrated Solutions for K-16 and Informal Education</i>

Year(s)	Institution/Organization	Role
2003-current	Institute for Global Environmental Strategies (IGES)	Panel reviewer for NASA educational materials (Annual Fall Panel Participant)
2003-	National Science Foundation	Robert F. Noyce Scholarship Program Proposal Reviewer (2018); Geoscience Education Panel Member (2014); Hyrdological Sciences Proposal Reviewer (2010); EarthScope Proposal Reviewer (2006); DLESE proposal reviewer (2005)
2003-	Various publishers	Reviewer for introductory geology and meteorology textbooks
2002-04	Digital Library for Earth System Education (DLESE)	Advisory board member for the Evaluation Tool Kit (Susan Buhr, PI)

PROFESSIONAL ASSOCIATION MEMBERSHIP

- 2009- Association of Teacher Educators (ATE)
- 2008- Association of Science Teacher Education (ASTE)
- 2007- American Association for Colleges of Teacher Education (AACTE)
- 2001- National Association of Geoscience Teachers (NAGT)
- 2000- National Science Teachers Association (NSTA)
- 2000- American Geophysical Union (AGU)
- 1999- Geological Society of America (GSA)
- 1996-99 American Meteorological Society (AMS)

HONORS AND AWARDS

- Sept. 2012 Science Prize for Online Resources in Education (SPORE) from the journal *Science*.
- Oct. 2012 Outstanding Paper Award – Journal of Geoscience Education
- Oct. 2010 Past-President, National Association of Geoscience Teachers (NAGT)
- Oct. 2009 Elected President, National Association of Geoscience Teachers
- Oct. 2008 Elected 1st Vice President, National Association of Geoscience Teachers
- Oct. 2007 Elected 2nd Vice President, National Association of Geoscience Teachers
- 2004-06 National Association of Geoscience Teachers Distinguished Speaker
- Nov. 2003 New Faculty Recognition Award in Sponsored Programs in recognition and appreciation for outstanding work in Sponsored Research, SPARC, University of Northern Colorado, November 2003
- 1996 Global Change Scholarship to attend the 7th Symposium on Global Change at the 76th Annual Meeting of the American Meteorological Society, January 28-February 2 1996, Atlanta, GA.
- 1996 1996 Iowa Educational Technology Award for *Global Change*, a Web based course for the Department of Atmospheric Science.
- 1994 Teacher of the Year, Panorama Middle School, Harrison SD 2, Colorado Springs, CO