Margaret A. Hammer

Assistant Professor
Curriculum & Instruction
College of Education
Sam Houston State University

Degrees Earned

- Ph.D. in Curriculum & Instruction with an emphasis on science, Texas A&M University, 2001, Phi Kappa Phi & Kappa Delta Pi.
- M.Ed. in Curriculum & Instruction with an emphasis on science, Texas A&M University, 1991, Phi Kappa Phi & Kappa Delta Pi
- BA in Elementary Education with a minor in Art, **Sam Houston State University**, 1980, Cum Laude, Alpha Chi, & Kappa Delta Pi.
- AA in General Studies, North Harris Montgomery Community College District, 1976, Phi Theta Kappa

Professional Licensure and Certification

Texas Teacher Certification Lifetime Certificate 1—8th Texas Teacher Certification Lifetime Art

Peer-Review Publications and Artistic Performances/Exhibitions

- **Hammer, M. A.**, Robles-Piña, R. A., Williams, P. A., & Sullivan, S. L. (Winter Special Edition 2007/08). Dealing with discipline: Factors causing novice and experienced teachers stress. *SRATE Journal*. 16(1),
- Williams, P., **Hammer, M.** A., McCauley, J. K., & Sullivan, S. (Summer **2007**) Waking up the back row: Using effective communicating-to-learn strategies in education courses. *Action in Teacher Education*. 29(3).
- Williams, P., **Hammer, M. A.**, & Pierczynski-Ward, M., & Henson, K. (2007, Spring). Straight from the editors' pens. *The Delta Kappa Gamma Bulletin*, 73(3), 13-20.
- **Hammer, M.A.** (Dec/Jan. 2006-2007). The Floyd story: A gifted child in disguise. *Tempo*, 27(1), 14-15.
- **Hammer, M. A.**, Polnick, B. (December 2006-January 2007) Preparing tomorrow's science teachers. *Educational Leadership*, 64(4), 80-83.

- **Hammer, M. D.** & Williams, P. (2005). Rejuvenating retirees: Mentoring first-year teachers. *The Delta Kappa Gamma Bulletin*, 71(4), 20-25.
- Hammer, M. A., Rohr, S. M., & Porter, B. (1997 & revised 2000 [peer reviewed/award winning Web site]). Ocean World —an educational Web site (http://oceanworld.tamu.edu). Texas A&M University. Work on this project was funded and supported by the National Aeronautics and Space Association (NASA) & Jet Propulsion Laboratories (JPL)
- **Hammer, M. A.,** Stewart, R. H., & James, R. K. (2000). Reaching out to teachers—What works? *Texas Science Teacher*, 29(2), 40-43.

Proceedings

- Williams, P., Hammer, M. A., & Casey, N. (2007, June). Energizing University
 Classes and Professional Development Seminars: Activities for General
 Education Faculty. Global Challenges in Special Needs Education: Past,
 Present, and Future. Proceedings of the Tenth Biennial Conference of the
 International Association of Special Education, Hong Kong, June 2007.
 (pp. 150-151).
- Stewart, R., **Hammer, M. A.**, & James, R. (2002, January). <u>Oceanworld: Bringing the ocean to the classroom</u>. Paper presented at the 11th Symposium on Education of the American Meteorological Society, Orlando, FL (March). Proceedings of the American Meteorological Society, paper 2.11, pages 113-115 or it can be retrieved electronically at: http://ams.confex.com/arms/annual2002/techprogram/programexpanded_86.htm.

Research Monographs and Technical Reports

- Why U.S. Students Fail to "Measure Up" in Science: A Look into Elementary Classrooms My research question seeks to answer who's to bless and who's to blame? Is it the elementary experience, the secondary experience, the college/university experience, or school district experience that is key in this failure scenario? I have collected two years (four semesters) of data from university methods students who have figuratively put on their "science eyes" to see if science is going on in their assigned field placement school.
- Top Ten Issues Facing America's Teachers: National Winners Speak Out! Margaret Hammer, Ph.D., Barbara Polnick, Ed.D., Diane Reed, Ph.D., Sylvia Taube, Ph.D. & Andrea Foster, Ph.D. My team and I are presently working on research regarding the

perceptions of award winning teachers (Wal-Mart and Phi Delta Kappa Teacher of the Year finalists) as to what the major issues are in education today. It is a qualitative/quantitative piece covering four years (2003—2006). My colleagues and I are in the data analysis stage.

Tales from the Field – Andrea Foster, Ph.D. & Margaret Hammer, Ph.D. This research deals with perceptions of teacher quality professional development experiences and the potential impact on elementary science teaching practices. This study set out to explore the perceptions of elementary school teachers who participated in an intensive two week Earth science summer institute and a semester long follow up experience supported by a Teacher Quality enhancement grant and how their experiences may or may not have impacted their teaching of science. The study also attempted to determine the level of implementation of the professional development experience on the teaching and learning of science in urban elementary school classrooms.

Funded External Grants

- Hammer, M. A. & DeShaw, J. (2005). Texas Commission on Environmental Quality (TCEQ) grant (\$19,000) TEACHING ENVIRONMENTAL SCIENCE (Recruited 15 new SHSU grant-supported graduate students for field trip based summer environmental science course.)
- Hammer, M. A. & DeShaw, J. (2004) Texas Commission on Environmental Quality (TCEQ) grant (\$19.000) TEACHING ENVIRONMENTAL SCIENCE (Recruited 19 new SHSU grant-supported graduate students for field trip based summer environmental science course.)
- Jasper, W. & Hammer, M. A. (2003-2004). Teacher Quality Grants Higher Grants Program (\$80,000) IMPROVING SCIENCE AND MATHEMATICS TEACHING IN RURAL SCHOOLS (Recruited 19 new SHSU grant supported graduate students for summer/fall math & science course.)
- Contant, T.& Hammer, M. A. (2003). Texas Commission on Environmental Quality (TCEQ) grant (\$19,000). TEACHING ENVIRONMENTAL SCIENCE. Dr. Jim DeShaw (SHSU) was paid as MasterTeacher by the grant. (Recruited 15 new SHSU grant supported graduate students for field trip based summer environmental science course.)
- Contant, T, & **Hammer, M. A**. (2002). Texas Natural Resource Conservation Commission (TNRCC) Grant (\$15,000). *Teaching Environmental Science*.

<u>Dr. Jim DeShaw (SHSU) was paid as Master Teacher by the grant.</u> (Recruited 19 new SHSU grant-supported graduate students for field trip based summer environmental science course.)

Peer-Reviewed Presentations/Posters

- Williams, P., **Hammer, M. A.**, & Casey, N. (2007, June). <u>Energizing University Classes and Professional Development Seminars: Activities for General Education Faculty</u>. *Global Challenges in Special Needs Education: Past, Present, and Future*. The Tenth Biennial Conference of the International Association of Special Education, Hong Kong, June 2007.
- Williams, P., **Hammer, M.,** Sullivan, S., & Robles-Pina, R. (2007, February). What are the Real Discipline Problems?: Two Decades of Research 1987—2006. Session presented at the ATE Conference in San Diego, CA. 2007.
- Williams, P., **Hammer, M.**, Sullivan, S., & Robles-Pina, R. (2006, November). <u>Dealing with Discipline: Factors that Cause Teachers Stress</u>. Session presented at the Southeastern Regional Association of Teacher Educators (SRATE) Conference in Baltimore, MD November 3, 2006.
- Williams, P., **Hammer, M.,** & Sullivan, S. (2006, September) <u>Classroom</u> <u>Discipline: Two Decades of Research</u>. Session presented at CREATE 2006 Research Conference on Teacher Education in San Antonio, TX September 11, 2006.
- Williams, P. & **Hammer, M.** (2006, February). The Mentor's Perspective: Perks and Pitfalls to Mentoring. Session presented at Association of Teacher Educators (ATE) Conference in Atlanta, GA.
- Jasper, W. & **Hammer, M. A.** (2005, November). <u>Improving Science and Mathematics Teaching in Rural Middle and Elementary Schools</u>. Workshop presented at the School Science and Mathematics Association Convention (SSMA) 2005

Presented Papers

- **Hammer, M. A**. (2004, April). <u>Technology Lab Stations</u>. NSTA (National Science Teachers Association) National Convention. Atlanta, GA.
- **Hammer, M. A.** (2004, March) National Science Education Leadership Association (NSELA) Conference Atlanta, GA March 30-31, 2004.
- **Hammer, M. A.** (2003, January). <u>Using Technology-Lab Stations in the Science Classroom</u>. Paper presented at the Association for the Education of

Teachers of Science (AETS) 2003 International Conference, St. Louis, MO (January/February).

Hammer, M. A. & Contant, T. L. (2002, summer). <u>Teaching Environmental Science at SHSU- A Cooperative Graduate Course for Teachers</u>. Paper presented at the Association for the Education of Teachers of Science (AETS) 2003 International Conference, St. Louis, MO (January/February). Interactive Panel Discussion/Paper

Contant, T. L. & **Hammer, M. A.** (2002). SHSU Elementary Science Methods: A Syllabus for Covering the Standards. Presented at the Association for the Education of Teachers of Science (AETS) 2003 International Conference, St. Louis, MO (January/February).

Stewart, R., **Hammer, M. A.**, & James, R. (2002, January). <u>Oceanworld:</u> <u>Bringing the ocean to the classroom</u>. Paper presented at the 11th Symposium on Education of the American Meteorological Society, Orlando, FL (March).

Work and Professional Experience

2001-Present	Sam Houston State University (Assistant Professor
	Tenure denied-Contract ends May 2008
1997-2001	Texas A&M University (Lecturer and Graduate Research Assistant)
1980-1997	Aldine ISD (Science teacher, Science Department Lead, & Grade Level Team Leader)

Honors and Awards

- Presented the Presidential Award for Excellence in Mathematics and Science Teaching by President of the United States, William "Bill" Clinton – June 1997
- Recognized as one of 20 Outstanding Elementary Science Teachers in the State of Texas by the National Science Foundation Honors Institute at Texas A&M – 1987
- Aldine ISD(Houston, TX) Elementary Teacher of the Year 1995
- Nominated by a colleague for 2006-2007 SHSU College of Education award
- Nominated by two colleagues for 2005-2006 SHSU College of Education award
- Who's Who Among America's Teachers 2004-2005
- Presented the National Science Foundation Presidential Award for Excellence in Mathematics and Science Teaching for the State of Texas in 1996.

Other Competencies

Consulting Editor

Served on the **Editorial Board** of *SRATE Journal* (The Journal of the Southern Regional Association of Teacher Education) 2004—2006.

Book Reviewer

Wadsworth, 220 Parklake Dr., Ste. 300, Atlanta, GA 30345. Reviewed *Elementary Science Methods: A Constructivist Approach.* (January 2005).

- 2006 Served as **Project Evaluator** for <u>Rice University 2005 Teacher</u>

 <u>Quality Earth Science Summer Institutes</u> (TQG003604-009-2005 & TQG003604-010-2005).
- Served as **Site Visit Evaluator for National Science Foundation** on multi-million dollar grant for <u>Center for Subsurface Sensing and Imaging Systems (CenSSIS)</u> A National Science Foundation Engineering Research Center. Northeastern University on May 20th-21st.
- Served as **Site Visit Evaluator for the National Science Foundation** on multi-million dollar grant for <u>Center for Subsurface</u>

 <u>Sensing and Imaging Systems (CenSSIS)</u>, *A National Science Foundation Engineering Research Center*. Boston University on April 8th and Northeastern University on April 9th & 10th.
- TVNC (Trinity Valley North Central) Destination ImagiNation™
 Regional Tournament **Head Appraiser** for problem: StranDid™.
 (02-23-02)