# Andrea S. Foster

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#### Education

**PhD.** Curriculum & Instruction, Area of Emphasis: Science Education, Texas A&M University, College Station, TX, 1998

**M.Ed**. Curriculum & Instruction, Area of Emphasis: Personnel Management, Texas A&M University, College Station, TX, 1984

**B.S.** Curriculum & Instruction: Area Emphasis: Art, Texas A&M University, College Station, TX, 1982

**Certification:** K-8 Life Certificate; Early Childhood Certification, Art Certification

### **Professional Experiences**

- Assistant Professor, San Houston State University, 2005 present
- Assistant Professor, University of Houston, Houston, TX 2000-2005
- High School Science Teacher, Northside School District, San Antonio, TX 1999-2000
- Lecturer, Texas A&M University, College Station, TX 1998-1999
- Science Coordinator, Bryan ISD, Bryan, TX 1998-1999
- Research Assistant, Texas A&M University, College Station, 1996-1998
- Project 2061 National Team Member, 1989-1995
- K-12 Science/Art Teacher, Northside School District, San Antonio, TX 1984-1996
- 6<sup>th</sup> grade teacher, St. Joseph Parochial School, Bryan TX, 1982-1984

#### Honors/ Awards

SHSU COE Teaching Excellence Award, Finalist, 2008

Rebecca Sparks Award for Excellence in Elementary Science, 2004

New Faculty Research Award, \$5,950, 2000-2001

External Funding Achievement Award, \$39,000 Houston Annenberg Challenge, 2000

Presidential Award for Excellence in Science and Mathematics Teaching, \$7,500, 1994

Outstanding Science Educator, Texas Medical Association, \$1,000, 1993

Trinity Prize for Excellence in Science Teaching, 1989-1990

Outstanding Middle School Science Educator, 1990

#### **Current Professional and Academic Association Memberships**

American Educational Research Association

American Association for the Advancement of Science

National Association of Research in Science Teaching

American Educators of Teachers of Science

National Science Teachers Association

American Association for Supervision and Curriculum Development

Phi Delta Kappa, Sam Houston State University

Phi Delta Kappa, Texas Lone Star Chapter, President (2007-2008)

Kappa Delta Pi, Texas A&M Univresity

# **Current Professional Organization Assignments and Activities**

Texas Presidential Awardee Association, President (2000-2003)

Texas Council of Elementary Science, Vice President (2002-2004)

American Association for the Advancement of Science, Project 2061 Team Member

Science Teachers Association of Texas, Awards Committee, Member (1995-1998)

Metropolitan Area of Teachers of Science, President-elect (2005)

### **Publications**

Foster, A. S. (2005). Exploring the role of laptop computers in field-based settings. *Forging Alliances in Community and Thought: Professional Development Book serives*. Allyn&Bacon.

Foster, A. S. (2004). Whose work is it anyway? Promoting academic integrity and intellectual property rights of science teachers. *Texas Science Teacher*.

Foster, A. S. (2003). Let the dogs out! Exploring the principles of force and motion with bobble head dogs. *Science Scope*, 28, NSTA Publications.

Loving, C., & Foster, A. (2000). The religion-in-the-science-classroom issue: Seeking graduate student conceptual change. *Science Education*, *84*, 445-468.

Foster, A. S. (1998). Seeing things through science eyes: A single case study of an exemplary elementary teacher. Dissertation.

Foster, A. S. (1996). *Interviews of elementary science presidential awardees: Patterns that portray excellence in science teaching.* A report prepared for the Texas Statewide Systemic Initiative. Austin: Charles A. Dana Center.

Foster, A. S. (1995). Before the lights go out. *New Elementary Science Series*. Orlando: Harcourt Brace.

Foster, A. S. (1995). Murder in the science lab? *Science Scope, 18*, 12-15, NSTA Publications. Foster, A. S. (1991). Towers of Spaghetti: Interdisciplinary teaching. *Instructor*, *9*, 24-25. Scholastic.

# **Papers/ Presentations**

Foster, A. S. (2004, April). *Exploring the role of laptop computers in a field based science methods class*. Paper to be presented at the annual meeting of the National Association of Research in Science Teaching conference, Vancouver, B.C.

Stuessy, C. L., Parrot, J., and Foster, A. S. (2003, October). *Using classroom observation to analyze the how and what of science teaching.* Paper to be presented at the annual meeting of School Science and Mathematics Association, Cleveland, Ohio.

Craig, C., Foster, A. S, McDonald, D., Schorzman, E., Phillips, J., Decman, J. (2003, April). Faculty Academy presentation to the Invisible College, AERA, Chicago, Illinois.

Stuessy, C. L., Foster, A.S., & Knight, S. L. (2002, January). <u>Patterns of practice: Teaching science in urban secondary learning environments.</u> Paper presented at the annual meeting of the Association for the Education of Teachers of Science, Charlotte, NC.

Foster, A. S. (2002, April). <u>Responding to a raven's call: Evaluation, impact, and sustainability of five Annenberg reform imperatives.</u> Paper accepted for the annual meeting of the National Association of Research in Science Teaching, New Orleans, LA.

Stuessy, C. L., Foster, A.S., & Knight, S. L (2002, April). <u>Looking Inside: A cross case analysis of the complexity, balance, and flow of urban secondary science settings.</u> Paper accepted for the annual meeting of the National Association of Research in Science Teaching, New Orleans, LA.

Foster, A. S. (2002, March). <u>Teachers inquiring into science learning and teaching</u>. Poster session to be presented at the annual meeting of the National Science Teachers Association, San Diego, CA.

Stuessy, C. L., Foster, A.S., & Knight, S. L (2002, April). <u>Revised Stallings observation system in science classrooms.</u> Paper accepted for the annual meeting of the American Educational Research Association, New Orleans, LA.

Foster, A. S. (2001, August). <u>Great performances: Creating classroom-based assessment tasks</u>. Presentation for Regional Collaboratives for Excellence in Science and Mathematics, Austin, TX.

Foster, A. S. (2001, October). <u>Texas presidential awardees: Learning from the best of the best.</u>
Paper presented at the annual meeting of the Conference for the Advancement of Science Teaching, Austin, TX.

Foster, A. S. (2001, January). <u>Teaching with the brain in mind</u>. Keynote presentation for the Texas Council of Elementary Science annual Leadership Symposium, Port Aransas, TX.

Foster, A. S. (2001, August - December). <u>Foamin' around with science inquiry</u>. Featured presenter for the Comprehensive Assessment Training in Science (CATS) delivered in 10 cities (Houston, El Paso, San Antonio, Kilgore, McAllen, Richardson, Waco, Lubbock, Corpus Christi, San Angelo) for 2000 Texas Science Teachers, Center for Leadership in Science and Mathematics, Alamo Community College, San Antonio, TX and the Texas Education Agency, Austin, TX.

Foster, A. S. (2002, January). <u>Discovering and exploring habits of mind in a sea of science</u> <u>learning environments</u>. Keynote address for the Texas Council of Elementary Science, Sea World, San Antonio, TX.

#### **Grants/Contracts Funded (Principal or Co-Principal Investigator)**

- Teacher Quality Type A Grant for Integrated Physics and Chemistry, NSF, \$300,000
- Houston Annenberg Challenge Evaluation Program, University of Houston, University of Texas,
   Rice University, \$78,000, Fall 2000-Spring 2002

- New faculty research grant, "Observing middle grade and high school science lessons from the perspective of multiple representations." \$5,920.
- National Presidential Award for Excellence in Science and Mathematics, 1994 NSF, \$7,500