

LAURA E. RUEBUSH

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RESEARCH INTEREST

Science education, Chemical education, Inquiry learning, Secondary science teacher professional development, Student science achievement and college readiness, Teacher retention

EDUCATION

June 2008-Present Texas A&M University College Station, TX
▪ *PhD Curriculum and Instruction with an emphasis in Science Education*

January 2005-August 2006 Texas A&M University College Station, TX
▪ *MS Chemistry with emphasis in Chemical Education*

August 2000-May 2004 Arizona State University Tempe, AZ
▪ *BS Chemistry, cum laude*

CERTIFICATION

August 2007-August 2012 TEA certified Chemistry 8-12 Texas
▪ *Classroom Teacher*

HONORS AND AWARDS

May 2006 Texas A&M University Chemistry
▪ *Excellence in Education from First Year Program*

EDUCATIONAL EXPERIENCES

August 2011-Present Texas A&M University College Station, TX
Graduate Research Fellow for Dr. Carol Stuessy
▪ Participate in statewide policy research for science education at highly successful, high-minority high schools in Texas
▪ Conducted site visits to solicit participation and collect data including both survey and interview protocols
▪ Conduct quantitative, qualitative, and mixed-method analysis

June 2008-August 2011 Texas A&M University College Station, TX
Graduate Research Assistant for Dr. Carol Stuessy
▪ Prepare for and assist in the implementation of two professional development projects for secondary science teachers funded through the Botanical Society of America

- Conduct quantitative, qualitative, and mixed-method analysis
- Conduct classroom observations using MSCOPS protocol of teachers as they implement innovative curriculum in their classrooms

August 2006-May 2008

St. Joseph Catholic School

Bryan, TX

Secondary Science Teacher

- Prepare logical curriculum sequence for instruction in middle and high school science classrooms
- Maintain complete and organized records of grades, attendance, and discipline
- Establish effective lines of communication between students, parents, administration, and other faculty
- Various other duties as assigned including interdisciplinary curriculum development, activity sponsor, outreach committees

January 2005-August 2006

Texas A&M University

College Station, TX

Teaching Assistant for General Chemistry

- Prepare quizzes and supplemental material for laboratory sections
- Maintain supervision and safety of laboratory for 2-3 classes of 22-24 students
- Grade and return laboratory reports and quizzes
- Attend weekly training meetings to practice and discuss laboratory experiments

PUBLICATIONS

Ruebush, L. (2011). Chemistry 8-12 QuickHelp. In *Science 8-12 QuickHelp*. Retrieved from <http://tap.tarleton.edu/pact>.

Ruebush, L.E., Grossman, E.L, Miller, S.A., North, S.W., Schielack, J.F., & Simanek, E.E. (2009) Scientists' perspective on introducing authentic inquiry to high school teachers during an intensive three-week summer professional development experience. *School Science and Mathematics Journal*, 109(3), 162-174.

Ruebush, L.E., Sulikowski, M., & North, S. (2009). A simple exercise reveals the way students think about scientific modeling. *Journal of College Science Teaching*, 38(3), 24-28.

Ruebush, L. E. & North, S.W. (2007) The teaching of consecutive first-order reaction kinetics: A chemical education research study of the impact of hands-on demonstrations, *Chemical Educator*, 13(3), 131-135.

McKee, E., Williamson, V.M., & Ruebush, L.E. (2007). Effects of a demonstration laboratory on student learning. *Journal of Science Education and Technology*, 16(5), 395-400.

PRESENTATIONS

- Richardson, R., Ruebush, L. & Ivey, T. *Recruit, Induct, Engage, Renew: School Support in a Healthy High School Science Teacher Professional Culture*. Paper presented at the annual National Association for Research in Science Teaching conference, Indianapolis, IN.
- Stuessy, C. L., Bozeman, D., Hollas, T., Ivey, T., Spikes, S., Richardson, R., & Ruebush, L. (2011, November). *Achievement gap: Differences in the practices of high schools and science teachers*. Paper presented at the annual meeting of the School Science and Mathematics Association, Colorado Springs, CO.
- Ruebush, L. (2011, October). *Schools and the teacher professional continuum*. Paper presented at the network meeting of the Policy Research Initiative in Science Education research group, Fort Worth, TX.
- Stuessy, C. L., Peterson, C. A., Ruebush, L., Hollas, T., & Johnston, J. (2011, January). *Where the rubber meets the road in authentic learning contexts: From professional learning to science classroom implementation*. Paper presented at the annual meeting of the Association for Science Teacher Educators, Minneapolis, MN.
- Ruebush, L. (2010, October). *Examining Relationships for Better SPCR Policies*. Paper presented at the annual meeting of the Southwest Association for Science Teacher Educators, Stillwater, OK.
- Peterson, C., Ruebush, L., Stuessy, C. (2010, May). *Patterns of instructional and representational scaffolding in two reform-based models of science learning*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Ogletree, Q., Ruebush, L., Spikes, S. (2010, May). *Determining Texas high schools' professional development policies and their retention rates*. Poster presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Ruebush, L. (2007, October). *Scientists' perspective on introducing authentic inquiry to high school teachers*. Paper presented at the meeting of the Southwest-Associations Science Teacher Educators, Dallas, TX.
- Ruebush, L. (2006, August) *Developing students' ideas about the nature of scientific models*. Paper presented at the 19th Biennial Conference on Chemical Education, West Lafayette, IN.
- Ruebush, L. (2006, August). *Three-step sequence for the teaching of consecutive first-order reaction kinetics*. Poster presented at the 19th Biennial Conference on Chemical Education, West Lafayette, IN.

WORKSHOPS

Ruebush, L., & Peterson, C. (2010, December). *Instructor's Guide for a Unit on the Nature of Scientific Models: Inquires in Life and Earth Sciences*. Workshop presented at Expanding Your Horizons, College Station, TX.

SERVICE

EDUCATION RELATED ACTIVITIES

Saturday Morning Biophysics Outreach—Image Life! (Fall 2008-2011).
Education liaison to document science activities conducted throughout program for high school girls.

COMMUNITY SERVICE

Safe Harbour Supervised Visitation Center (2005, July-2009, January). Monitored visits between non-custodial parents or family members and their children.

PROFESSIONAL REFERENCES

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|--|----------------------------|---------------------------------|
| Simon North | Texas A&M University | Chemistry |
| <ul style="list-style-type: none">▪ <i>Professor</i>▪ (979) 845-4947▪ north@mail.chem.tamu.edu | | |
| Jane Schielack | Texas A&M University | Math |
| <ul style="list-style-type: none">▪ <i>Professor</i>▪ (979) 458-0549▪ schielack@math.tamu.edu | | |
| Eric E. Simanek | Texas Christian University | Chemistry |
| <ul style="list-style-type: none">▪ <i>Robert A. Welch Professor</i>▪ (817) 257-5355▪ e.simanek@tcu.edu | | |
| Carol L. Stuessy | Texas A&M University | Teaching, Learning, and Culture |
| <ul style="list-style-type: none">▪ <i>Associate Professor</i>▪ (979) 845-8256▪ c-stuessy@tamu.edu | | |