

## JAMES MINOGUE

North Carolina State University  
Department of Elementary Education  
Campus Box 7801 Raleigh, NC 27695  
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919.513.3317

### EDUCATION

*North Carolina State University*  
Ph.D. Science Education 1999 - 2005  
Dissertation: *Investigating the Impact of Touch on Students' Understandings of the Cell*  
Chairperson: Dr. M. Gail Jones

*East Stroudsburg University of Pennsylvania*  
East Stroudsburg, PA 18301  
M.Ed. Science Education 1994 - 1997  
Certification in Secondary Education Science

B.S. Dual Degree Biology and Marine Science 1990 - 1994

### K-12 TEACHING EXPERIENCE

*Durham Public Schools- Durham, NC*

- o Lowe's Grove Middle School 2000 - 2003
- o Carrington Middle School 1996 - 2000

*St. Mary's County Public Schools- St. Mary's County, MD*  
Leonardtown High School 1995-1996

### HIGHER EDUCATION TEACHING EXPERIENCE

*North Carolina State University*

Instructor of ELM 420 a junior-level science teaching methods/practicum course Fall 2007-Present

Instructor of ELM-400 a senior-level elementary instructional design seminar Fall 2010-Present

Instructor of ELM-573 a graduate-level initial licensure elementary science teaching methods course Summer 2010

Instructor of MST-594T an advanced graduate-level elementary science teaching methods course Spring 2008

*The College of New Jersey*

Instructor of MST 202 an undergraduate science teaching methods/practicum course Fall 2005-Spring 2007

Instructor of EDUC 501- a graduate course that explores the teaching profession Summer 2006

*North Carolina State University*

Co-instructor of EMS 5017794- an on-line graduate science education research course Fall 2004

Instructor of ECI496-an introductory educational psychology course for alternative licensure teacher candidates Summer 2004

Co-instructor of EMS 475-methods of teaching science for secondary science teacher interns Fall 2003

*NCTeach Program, University of North Carolina at Chapel Hill*

Master Teacher for a secondary science teaching preparatory program for lateral entry teachers Summer 2002

**INSTRUCTIONAL SUPERVISION***North Carolina State University*

Supervisor of Elementary Education Teacher Candidates Fall 2007- Spring 2008

*The College of New Jersey*

Supervisor of Elementary Education Teacher Candidates Fall 2005- Spring 2007

*Durham Public Schools*

Mentor of an *Initially Licensed Teacher* of science 2002-2003

**DOCTORAL SUPERVISION***Committee Membership*

Lauren Madden, Science Education Completed Spring 2011  
*Examining elementary teachers' identities through analysis of student science notebooks.*

Marta Klesath, Science Education Completed Fall 2011  
*Exploring the Viability and Perceived Pedagogical Value of the Virtual Interactive Biology Experience (VIBE) Assignment Format in Higher Education Life Science Courses.*

Matthew Peterson, Design Completed Fall 2011  
*Comprehension with Instructional Media for Middle School Science: Holistic Performative Design Strategy and Cognitive Load.*

John Bedward, Science Education Anticipated Spring 2012

Iris Wagstaff, Educational Leadership Anticipated Spring 2013

Takeisha Ford, Educational Leadership Anticipated Spring 2013

## PUBLICATIONS

- Cook, M., Annetta, L., Dickerson, D., & **Minogue, J.** (2011). In-Service teachers' perceptions of online learning environments. *Quarterly Review of Distance Education: Research That Guides Practice*, 12, 73-80.
- Annetta, L., **Minogue, J.**, Cook, M., Shymansky, J., & Thurmond (2011). Rural elementary school teacher attitudes toward varying science teacher professional development activities at a distance. In C.L. Fund & W.Y. Yip (Ed). *Evidence-Based Education*. New York: Nova Science.
- Minogue, J.** (2010). What is the teacher doing? What are the students doing? An application of the Draw-a-Science-Teacher-Test. *Journal of Science Teacher Education*, 21, 767-781.
- Minogue, J.**, Madden, L., Bedward, J., Wiebe, E., & Carter, M. (2010). The cross-case analyses of elementary students' engagement in the strands of science proficiency. *Journal of Science Teacher Education*, 21, 559-587.
- Minogue, J.** Wiebe, E., Madden, L., Bedward, J. & Carter, M. (2010). The intersection of science notebooks, graphics, and inquiry. *Science and Children*, 48(3), 52-55.
- Wiebe, E. N., **Minogue, J.**, Jones, M.G., Cowley, J. & Krebs, D. (2009). Haptic feedback and students' learning about levers: Unraveling the effect of simulated touch. *Computers and Education*, 53, 667-676.
- Minogue, J.**, & Jones, M.G. (2009). Measuring the impact of haptic feedback using the SOLO taxonomy. *International Journal of Science Education*. 31, 1359-1378.
- Annetta, L., **Minogue, J.**, Holmes, S., & Cheng, M.T. (2009). Investigating the effect of video games on high school biology students' learning and engagement. *Computers and Education*, 53, 74-85.
- Annetta, L.A., **Minogue, J.**, Holmes, S., Folta, E., Cheng, M.T., & Klesath, M. (2009). Using case studies as the narrative to game design and development. In D. Gibson and Y.K. Baek (Eds.). *Digital simulations for improving education: learning through artificial teaching environments*. Hershey, PA: IGI Global.
- Cowley, J., Wiebe, E.N., **Minogue, J.**, Jones, M.G., & Krebs, D. (2008). Haptic feedback in the instructional environment and its relationship to visual attention and learning. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 52 (8), 638-642.
- Minogue, J.** (2008). Getting a "feel" for serious games. In L.A. Annetta (Ed.), *Serious educational games* (pps. 73-81). Rotterdam, The Netherlands: Sense Publishing.
- Minogue, J.** (2008). A lemon of a lesson. *Science and Children*, 45(6), 25-27.

- Jones, M. G., Taylor, A., **Minogue, J.**, Broadwell, B., Wiebe, E., & Carter, G. (2007). Understanding scale: Powers of ten. *The Journal of Science Education and Technology*, 16 (2), 191-202.
- Minogue, J.** & Jones, M.G. (2006). Haptics in education: Exploring an untapped sensory modality. *Review of Educational Research*, 76 (3), 317-348.
- Minogue, J.**, Jones, M.G., Broadwell, B., & Oppewal, T. (2006). Exploring cells from the inside out: New tools for the classroom. *Science Scope*, 29, 28-32.
- Minogue, J.**, Jones, M.G., Broadwell, B., & Oppewal, T. (2006). The impact of haptic augmentation on middle school students' conceptions of the animal cell. *Virtual Reality*, 10, 293-305.
- Minogue, J.** & Guttensberger, T. (2006). Paper towers: Building students' understandings of technological design. *Science Scope*, 30 (6), 18-20.
- Jones, M.G., **Minogue, J.**, Oppewal, T, Cook, M. & Broadwell, B. (2006). Visualizing without vision at the microscale: Students' with visual impairment explore cells with touch. *The Journal of Science Education and Technology*, 15, 345-351.
- Jones, M.G., **Minogue, J.**, Tretter, T., Negishi, A. & Taylor, R. (2006). Haptic augmentation of science instruction: Does touch matter? *Science Education*, 90, 111-123.
- Tretter, T. R., Jones, M. G., Andre, T., Negishi, A., & **Minogue, J.** (2006). Conceptual boundaries and distances: Students' and adults' concepts of the scale of scientific phenomena. *Journal of Research in Science Teaching*, 43 (3), 282-319.
- Tretter, T.R., Jones, M.G., & **Minogue, J.** (2006). Accuracy of scale conceptions in science: Mental orders of spatial magnitude. *Journal of Research in Science Teaching*, 43 (10), 345-351.
- Jones, M.G., Broadwell, B., Falvo, M., **Minogue, J.**, & Oppewal, T. (2005). It's a small world after all. *Science and Children*, 43, 44-46.
- Annetta, L.A. & **Minogue, J.** (2004). The Effect teaching experience has on perceived Effectiveness of interactive television as a distance education model for elementary science teachers' professional development: Another digital divide? *Journal of Science Education and Technology*, 13, 485-494.

## **MANUSCRIPTS UNDER REVIEW**

- Wiebe, E. N., Carter, M., **Minogue, J.**, Madden, L. & Bedward, J. C. Investigating Elementary Science Learning Opportunities Through the Lens of Science Notebooks. *International Journal Science and Mathematics Education*. (submitted for review).

Annetta, L.A., Lamb, R., **Minogue, J.**, Holmes, S.Y., Folta, E., & Cheng, R. Safe science classrooms: Teacher training through serious educational games. *International Journal of Game-Based Learning*. (submitted for review).

## PRESENTATIONS

**Minogue, J.** & Bedward, J. (January, 2012). *Combating a reasoning thin curriculum: Preservice elementary science teachers attention to student thinking*. Presented at the Association of Science Teacher Education (ASTE) International Conference, Clearwater, FL.

**James Minogue**, Bradford Mott, John Nietfeld, Hiller Spires, Marc Russo, Robert Taylor, & James Lester. (January, 2012). *Intelligent game-based learning environments for upper elementary science education*. Presented at the Association of Science Teacher Education (ASTE) International Conference, Clearwater, FL.

**Minogue, J.**, Bedward, J., Wiebe, E., Madden, L., Carter, M., & King, Z. (April, 2011). *An exploration of upper elementary students' storyboarded conceptions of magnetism*. Presented at the National Association of Research in Science Teaching (NARST) Annual International Conference, Orlando, FL.

**Minogue, J.**, Mott, B., Neitfeld, J., Spires, H., Lester, J., Russo, M., & Rowe, J. (April, 2011). *Crystal Island-Uncharted Discovery: An Intelligent game-based learning environment*. Presented at the National Association of Research in Science Teaching (NARST) Annual International Conference, Orlando, FL.

Madden, L., Wiebe, E., Bedward, J., **Minogue, J.**, & Carter, M. (April, 2011). *Teacher identities of three second-grade teachers: A case study from the students' perspective*. Presented at American Educational Research Association (AERA) Annual Meeting, New Orleans, LA.

Annetta, L. & **Minogue, J.** (March, 2011). *Science teacher training through serious educational games*. Presented at Society for Information Technology & Teacher education (SITE) International Conference, Nashville, TN.

Madden, L., Wiebe, E.N., Bedward, J.C., **Minogue, J.**, & Carter, M.C. (January, 2011). *Student perspectives on teacher identity: A Case study of three second grade teachers*. Presented at the Annual Meeting of the Association of Science Teacher Education (ASTE), Minneapolis, MN.

Madden, L., Bedward, J., Wiebe, E., Carter, M., & **Minogue, J.** (November, 2010). *GEES: Online PD tools for enhancing elementary science with graphics*. Presented at the North Carolina Science Teacher Association (NCSTA) meeting, Greensboro, NC.

Bedward, J., Wiebe, E., Madden, L., **Minogue, J.**, & Carter, M. (June, 2010). *Modeling in support of the engineering design process: Experiences in the elementary classroom*. Presented at the ASEE Annual Meeting, Louisville, KY.

- Wiebe, E. N., Bedward, J., Carter, M., Madden, L., & **Minogue, J.** (June, 2010). *Abstraction and re-representation in visualizations: Understanding where the learning occurs*. Presented at the ICLS Biannual Meeting. Chicago, IL.
- Minogue, J.**, Mott, B., Neitfeld, J., Spires, H., Lester, J., & Russo, M. (March, 2010). *Tracing the development of Crystal Island: Uncharted Discovery: An intelligent game-based learning environment*. Presented at the National Association of Research in Science Teaching (NARST) Annual International Conference, Philadelphia, PA.
- Bedward, J., **Minogue, J.**, Wiebe, E., Madden, L., & Carter, M. (March, 2010). *Reasoning about invisible forces: The use of graphics and written text to reveal elementary student sense making*. Presented at the National Association of Research in Science Teaching (NARST) Annual International Conference, Philadelphia, PA.
- Wiebe, E., **Minogue, J.**, Carter, M., Bedward, J., & Madden, L. (March, 2010). *Administrative symposium: Representational Reasoning in the Teaching and Learning of Science*. Presented at the National Association of Research in Science Teaching (NARST) Annual International Conference, Philadelphia, PA.
- Madden, L., Wiebe, E., Bedward, J., **Minogue, J.**, & Carter, M. (March, 2010). *Examining elementary science teacher identity through science notebooks: A case study of three exemplar teachers*. Presented at the National Association of Research in Science Teaching (NARST) Annual International Conference, Philadelphia, PA.
- Minogue, J.**, Bedward, J., Wiebe, E., Madden, L., & Carter, M. (January, 2010). *Concrete experiences and abstract thought: The importance of student-generated graphics*. Presented at the Association for Science Teacher Educators (ASTE) International Conference, Sacramento, CA.
- Minogue, J.** (April, 2009). *Language mediated haptic cognition: Exploring the role of grounding terms*. Presented at the National Research in Science Teaching (NARST) International Conference, Garden Grove, CA.
- Minogue, J.** (April, 2009). *Reflective practices and professional development through Japanese lesson study*. Presented at the National Research in Science Teaching (NARST) International Conference, Garden Grove, CA.
- Wiebe, E., Madden, L., Bedward, J., **Minogue, J.** & Carter, M. (April, 2009). *Examining science inquiry practices in the elementary classroom through science notebooks*. Presented at the National Research in Science Teaching (NARST) International Conference, Garden Grove, CA.
- Cook, M., Annetta, L., Dickerson, D., & **Minogue, J.** (April, 2009). *Students' perceptions of online learning environments*. Presented at the National Research in Science Teaching (NARST) International Conference, Garden Grove, CA.

Wiebe, E., Bedward, J., Madden, L., Carter, M. & **Minogue, J.** (April, 2009). *Graphic representations in science notebooks: A vehicle for understanding science inquiry in the elementary classroom*. Presented at American Educational Research Association (AERA) Annual Meeting, San Diego, CA.

**Minogue, J.**, Madden, L. P., Bedward, J. C., Wiebe, E. N., & Carter, M. (January, 2009). *The cross-case analyses of elementary students' engagement in the strands of science proficiency*. Presented at the Association for Science Teacher Education (ASTE) International Conference, Hartford, CT.

**Minogue, J.** & Annetta, L. (January, 2009). *Getting a "feel" for serious games*. Presented at the Association for Science Teacher Education (ASTE) International Conference, Hartford, CT.

Wiebe, E. N., **Minogue, J.**, Bedward, J. C., Madden, L. P., & Carter, M. (October, 2008). *Graphic-enhanced elementary science*. Presented at the National Science Teachers Association (NSTA) Area Conference, Charlotte, NC.  
Annetta, L., & **Minogue, J.** (October, 2008). *Engaging fifth grade students through haptically enhanced video games*. Presented at the National Science Teachers Association (NSTA) Area Conference, Charlotte, NC.

Cook, M., Annetta, L.A., Dickerson, D.L., & **Minogue, J.** (October, 2008). *In-service teachers' perceptions of online learning experiences*. Presented at the Annual Meeting of the Association for Science Teacher Education Southeastern (SASTE) Region, Columbia, SC.

Madden, L. P., Wiebe, E. N., Bedward, J. C., **Minogue, J.**, & Carter, M. (October, 2008). *Creating classroom observation protocols for elementary schools using graphically-enhanced science notebooks*. Presented at the Annual Meeting of the Association for Science Teacher Education Southeastern (SASTE) Region, Columbia, SC.

Cowley, J., Wiebe, E. N., **Minogue, J.**, Jones, M. G., & Krebs, D. (September, 2008). *Haptic feedback in the instructional environment and its relationship to visual attention and learning*. Presented at the Human Factors and Ergonomics Society (HFES) Annual Meeting, New York, NY.

Wiebe, E. N., Madden, L. P., Bedward, J. C., Carter, M., & **Minogue, J.** (June, 2008). *Improving early spatial intelligence through science notebook graphic production: Effective elementary classroom practices*. Presented at the Spatial Intelligence Symposium, Evanston, IL.

Annetta, L.A., Holmes, S. Y., **Minogue, J.**, Cheng, M.T., Sears, M. & Allen, K. (April, 2008). *Learning science through videogames*. Presented at the National Research in Science Teaching (NARST) International Conference, Baltimore, MD.

Wiebe, E.N., Jones, M.G., **Minogue, J.**, Cowley, J., & Krebs, D. (April, 2008). *Unraveling the influence of haptic feedback on students' learning about levers*. Presented at the National Research in Science Teaching (NARST) International Conference, Baltimore, MD.

Annetta, L.A., Bean, S., Talaiver, M., Gibson, D. **Minogue, J.**, Tagliarini, G., Michelson, K. (March 5, 2008). *Creating video games and simulations for science and mathematics: Perspectives from ITEST projects*. Presented at the Society for Information Technology and Teacher Education International Conference (SITE), Las Vegas, NV

**Minogue, J.** (January, 2008) *What is the teacher Doing? What are the students doing?* Presented at the Association for Science Teacher Education (ASTE) International Conference, St. Louis, MO.

Annetta, L.A., **Minogue, J.**, & Hudnutt, B.A. (September, 2007). *Scientific & mathematical knowledge acquisition: Professional development in interactive learning environments*. Presented at the NASA ModSim World Conference, Virginia Beach, VA.

**Minogue, J.**, Jones, M.G., Broadwell, B., & Oppewal, T. (April, 2007). *Haptic feedback and the structure of observed learning outcomes*. Presented at the National Association for Research in Science Teaching (NARST) International, New Orleans, LA.

Jones, M. G., Taylor, A., **Minogue, J.**, Broadwell, B., Wiebe, E., & Carter, G. (April, 2007). *The efficacy of 'Powers of Ten': Conceptions of size and scale*. Presented at the National Association for Research in Science Teaching (NARST) Annual Conference, New Orleans, LA.

**Minogue, J.**, Jones, M.G. (January, 2007). *The potential impact of haptic technology on science instruction*. Presented at the Association for Science Teacher Education (ASTE) International Conference, Clearwater Beach, FL.

**Minogue, J.**, Jones, M.G., Broadwell, B., & Oppewal, T. (April, 2006). *The impact of haptic feedback on students' understandings of the animal cell*. Presented at the National Association for Research in Science Teaching (NARST) International Conference, San Francisco, CA.

Jones, M.G., **Minogue, J.**, Broadwell, B., Patrick, M., & Oppewal, T. (April, 2006). *Visualizing without vision at the microscale: Students with visual impairment explore cells with touch*. Presented at the National Association for Research in Science Teaching (NARST) International Conference, San Francisco, CA.

Tretter, T., Jones, M.G., & **Minogue, J.** (April, 2006). *Conceptions of spatial scale: Leaping into other worlds*. Presented at the American Educational Research Association (AERA) Annual Meeting, San Francisco, CA.

Tretter, T., Jones, M.G., & **Minogue, J.** (April, 2006). *Navigating across spatial scales in science: Different worlds, unifying concept*. Presented at the National Association for Research in Science Teaching (NARST) International Conference, San Francisco, CA.

**Minogue, J.**, Jones, M.G., Kubasko, D., Tretter, T., & Dotger, S. (April, 2005). *Nanoscience education: Teaching tools for the exploration of this emerging field*. Presented at the National Science Teachers Association (NSTA) conference, Dallas, TX.



**Minogue, J.** & Jones, M.G. (April, 2005). *Virtual hands-on experiences: A study of haptic feedback devices and science learning*. Presented at the National Association of Research in Science Teaching (NARST) International Conference, Dallas, TX.

**Minogue, J.** & Jones, M.G. (April, 2005). *Investigating the efficacy of haptic science instruction*. Presented at the American Educational Research Association (AERA) conference, Montreal, Canada.

Tretter, T. R., Jones, M. G., Andre, T., Negishi, A., & **Minogue, J.** (April, 2005). *Conceptual distances and conceptual boundaries: Students' and adults' conceptualizations of spatial scale in science*. Presented at the American Educational Research Association (AERA) Annual Meeting, Montreal, Canada.

Tretter, T. R., Jones, M. G., Andre, T., Negishi, A., & **Minogue, J.** (April, 2005). *Scale of scientific phenomena: Demarcation of distinct spatial scales in experts' and students' cognitive frameworks*. Presented at the National Association for Research in Science Teaching (NARST) International Conference, Dallas, TX.

**Minogue, J.** & Jones, M.G. (January, 2005). *Do hands-on experiences make a difference? A study of haptic feedback devices and science learning*. Presented at the Association for the Education of Teachers in Science (AETS) International Conference, Colorado Springs, CO.

**Minogue, J.**, Jones, M.G., Dotger, S., Falvo, M., & Kubasko, D. (November, 2004). *It's a small, small world: Teaching about nanotechnology*. Presentation at the North Carolina Science Teachers Association (NCSTA) conference, Greensboro, NC.

**Minogue, J.** & Jones, M.G. (October, 2004). *Touching cells in a virtual environment: Teaching with haptics*. Presentation at EDTECH conference, NCSU, Raleigh, NC.

Tretter, T., **Minogue, J.** & Jones, M.G. (Spring, 2004). *How small is small? Students' conceptions of scale*. Paper presented at the National Association of Research in Science Teaching (NARST) conference, Vancouver, British Columbia, Canada.

Tretter, T., **Minogue, J.** & Jones, M.G. (Spring, 2004). *Conceptual ecology of scale*. Paper presented at the American Educational Research Association (AERA) conference, San Diego, CA.

Jones, M.G., **Minogue, J.**, Kubasko, D., & Tretter T. (Spring, 2004). *Scale as a unifying theme: Size matters*. Paper presented at the National Science Teachers Association (NSTA) conference, Atlanta, GA.

**GRANT ACTIVITIES***External Funding*

- Co-PI on *Investigating An Intelligent Cyberlearning System for Interactive Museum-based Sustainability Modeling* Fall 2011-2013  
[DRL-ISE] (1114655) \$374,000  
James Lester PI
- Co-PI on R&D: *Developing Science Problem-Solving Skills and Engagement Through Intelligent Game-Based Learning Environments* Summer 2008-2012  
[NSF-DR K12] (0822200) \$2,500,000  
James Lester PI
- Co-PI on *Multimodal Science: Supporting Elementary Science Education through Graphic-Enhanced Communication* Spring 2008-2010  
[NSF-DR K12] (0733217) \$350,000  
Eric Wiebe PI
- Co-PI on *STIMULATE: Science Training Immersive Modules for University Learning Around Teacher Education* Spring 2008-2010  
[NSF-CCLI] (0737206) \$ 200,000  
Len Annetta PI

*Internal Funding*

- North Carolina State University *Educational Technology Fund (ETF) Advancing Kit-Based Science Instruction II* (\$2,200) Fall 2008  
Sarah Carrier Co-PI
- North Carolina State University *Educational Technology Fund (ETF) Advancing Kit-Based Science Instruction* (\$9,200) Fall 2007  
Sarah Carrier Co-PI

*Unfunded*

- PI on *Haptically Guided Learning: Considering the Role of Kinesthetic Feedback on Novices' Cognition* August 2009  
[NSF-Perception, Action, & Cognition] \$328, 607 for 2 years  
Steve Amendum & Rob St. Amant Co-PIs
- Co-PI on Project HELP: *Haptically Enhanced Literacy Program* October 2009  
[DoE-IES, Education Technology Goal 2] \$446,528 for 3 years  
PI Steve Amendum & Rob St. Amant Co-PI

Lead PI on unfunded research project November 2007  
*ASPECT: Advancing Science Performance  
 with Emerging Computer Technologies  
 U.S. DOE-Institute of Educational Sciences (IES)*  
 3 year \$1,500,000 Development Project  
 Dr. James Shymansky & Dr. Len Annetta Co-PIs

## **SERVICE ACTIVITIES**

### *Professional Organizations*

|  |                     |
|--|---------------------|
| <i>Association of Science Teacher Education (ASTE)</i><br>Member at Large-Publication Committee  | Spring 2011-2014    |
| <i>Journal of Science Education and Technology (JSOT)</i><br>Editorial Board Member  | Summer 2010-Present |
| <i>Journal of Research in Science Teaching (JRST)</i><br>Publications Advisory Committee   | Spring 2010-2013    |
| <i>International Journal of Science Education (IJSE)</i><br>Manuscript Review Board  | Spring 2009-Present |
| <i>Computers and Education (CaE)</i><br>Manuscript Review Board  | Fall 2009-Present   |
| <i>Journal of Research in Science Teaching (JRST)</i><br>Manuscript Review Board   | Fall 2008-Present   |
| <i>Journal of Research in Science Teaching (JRST)</i><br>Outstanding Paper Award Committee   | Spring 2007-2010    |
| <i>Journal of Science Education and Technology (JSOT)</i><br>Manuscript Review Board   | Spring 2007-2010    |
| <i>International Journal of Science and Mathematics Education (IJSME)</i><br>Manuscript Review Board   | Fall 2007-Present   |
| <i>Electronic Journal of Science Education (EJSE)</i><br>Manuscript Review Board   | Fall 2007-Present   |
| <i>American Educational Research Association (AERA)</i><br>Division C, Section 7 Proposal reviewer for the<br>International Conference   | Fall 2007           |
| <i>National Association of Research in Science Teaching (NARST)</i><br><i>Educational Technology; Science Teaching- Primary<br/>School Strand</i> International Conference proposal reviewer | Fall 2006-Present   |

*Association of Science Teacher Education (ASTE)*  
 Educational Technology Thread Coordinator for the  
 2007 International Conference Summer 2006

*North Carolina State University*

Member of the College of Education's *Committee on Professional Education* Fall 2011-Present

Member of the College of Education's *Student Grievance Committee* Fall 2011-Present

Member of the College of Education's *Awards Committee* Fall 2011-Present

Member of the College of Education's *Faculty Mediation Panel* Fall 2010-Present

Member of the College of Education's *Research Committee* Fall 2007- Spring 2010

Member of the College of Education's *Peer Teaching Evaluation Committee* Spring 2008

*The College of New Jersey*

Member of the School of Education's *Travel Committee* Fall 2006- Spring 2007

Member of the collegewide *Information Technology Planning Council* Fall 2005- Spring 2007

Faculty Advisor for environmental student organization *Water Watch* Spring 2006-Spring 2007

*Durham Public School's Science Teacher Leadership Fellows* Fall 2003-Spring 2005  
 Assisted in the planning & delivery of inservice sessions for practicing middle school science teachers.

Served on Durham Public School's *Steering Committee for Inquiry Based Science Education* Fall 2000

**OTHER RELATED ACTIVITIES**

*North Carolina State University* Spring 2009-Fall 2010  
*MAT in Elementary Education* Program Coordinator

*SensAble Technologies Developer Challenge* Spring 2005  
 Co-recipient of Honorable Mention awarded at SIGGRAPH 2005 for the *HapticCell* educational software

North Carolina State University

Graduate Research Assistant on two NSF sponsored grants: *Investigating Viruses with Touch: Nanotechnology and Science Inquiry & Scale and Scaling Across the Content Domains*- responsibilities include research planning and data collection, organization, analysis, and dissemination Fall 2003-Spring 2005

Participated in the *Center for Inquiry Based Learning (CIBL)* institute at Duke University, Durham, NC Summer 1999

### **PROFESSIONAL ORGANIZATIONS**

Member, *American Educational Research Association (AERA)*, 2002-Present

Member, *Association of Science Teacher Education (ASTE)*, 2004-Present

Member, *National Association of Research in Science Teaching (NARST)*, 2002-Present

Member, *National Science Teachers Association (NSTA)*, 2002-Present