

AMY R. TAYLOR

University of North Carolina Wilmington
Department of Elementary, Middle Level and Literacy Education
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EDUCATION

- Ph.D. 2008 North Carolina State University, Raleigh North Carolina
Science Education
Dissertation: *Students' and Teachers' Conceptions of Surface Area to Volume in Science Contexts: What Factors Influence the Understanding of the Concept of Scale?*
- M.A. 1995 East Carolina University, Greenville, North Carolina
Science Education with concentration in biology
Thesis topic: *The Effect of Traditional Classroom Assessment on Learning and Understanding of Science*
- B.S. 1993 East Carolina University, Greenville, North Carolina
Science Education, Biology concentration

National Board Certified Teacher, 2003.

North Carolina Teaching License in Elementary Education (K-6) Curriculum, Instruction, and Assessments, Middle School Science (6-8), and Comprehensive Science (9-12)

State of North Carolina Certified Teacher Mentor

PROFESSIONAL EXPERIENCE

Associate Professor in the Department of Elementary, Middle level, and Literacy Education teaching elementary science methods courses. University of North Carolina Wilmington, 2008-present.

Research Assistant Collaborated on three National Science Foundation funded projects (Scale and Scaling Across the Science Domains, NIRT: Bio-Inspired Actuating Structures, NUE: Teaching Nanoscale Engineering Across Undergraduate Disciplines). North Carolina State University, 2005-2008.

Co-Instructor for Secondary Science Methods Course for Student Teaching at North Carolina State University, Fall, 2007.

Consultant for science teachers, Durham Public School System, 2006, 2007.

Student Teacher Supervisor North Carolina State University, Fall of 2006 and 2007.

Co-Instructor for NCTEACH @ NCSU (Alternative licensure program), North Carolina State University, Summer 2006.

Advisor for National Science Honor Society, Wake Forest-Rolesville High School, Wake Forest, NC, 2004-2005

Science Department Chair, Wake Forest-Rolesville High School, Wake Forest, NC, 2003-2005.

Science teacher (9-12), Taught biology, earth science, AP environmental science and AP biology. Wake Forest-Rolesville High School, Wake Forest, NC, 1998-2005.

Member of the School Improvement Leadership Team, Wake Forest-Rolesville High School, Wake Forest, NC, 2002-2005.

Science teacher 9-12, Taught biology and environmental science. Rocky Mount Senior High School, Rocky Mount, NC, 1995-1998.

Chairperson for Planning Committee for School Renewal, Rocky Mount Senior High School, Rocky Mount, NC, 1997-1998.

After school instructor for biology, Rocky Mount Senior High School, Rocky Mount, NC 1996

Graduate research assistant, Department of Science Education, East Carolina University, Greenville, NC 1994-1995.

AWARDS AND HONORS

Phi Kappa Phi Honor Society, North Carolina State University, Raleigh NC, 2006.

Agnes and Garfield Stiff Fellowship, North Carolina State University, Raleigh NC, 2007.

John and Nell Penick Fellowship, North Carolina State University, Raleigh NC, 2006.

Nominated for Teacher of the Year, Wake Forest-Rolesville High School, Wake Forest, NC, 2004.

North Carolina Jaycees Young Educator, Rocky Mount Senior High School, Rocky Mount, NC, 1995.

Outstanding Student Teacher Award, East Carolina University, Greenville, NC, 1993.

Outstanding Senior Award, East Carolina University, Greenville, NC 1993.

Golden Key National Honor Society, East Carolina University, Greenville, NC 1993.

TEACHING

Teaching Elementary Science Methods Block Course (EDN 336) University of North Carolina Wilmington, Fall 2008- present.

Teaching Elementary Science Methods Course (EDN 336) University of North Carolina Wilmington, Fall 2008 and Spring 2009.

Taught one online class for the graduate level course Curriculum (EDN 530), March 2009

Teaching Elementary Science Methods Online Course (EDN 336) University of North Carolina Wilmington, Summer 2009- present

Teaching Science K-6 (EDN 544) University of North Carolina Wilmington, Spring 2009-present.

Island Ecology for Educators (EDN 495/595). University of North Carolina Wilmington, Summer 2011.

BOOK PUBLICATIONS

Jones, M.G., Taylor A., & Falvo, M. (2009). *Extreme Science*. Arlington VA: NSTA Press, 356 pages.

Jones, M.G., Falvo, M., Taylor, A., & Broadwell, B. (2007). *Nanoscale Science*. Arlington VA: NSTA Press, 155 pages.

REFEREED PUBLICATIONS

Jones, J., Gardner, G, Taylor, A., Wiebe, E., & Forrester, J. (2010). Conceptualizing magnification: The roles of spatial visualization and logical thinking. *Research in Science Education*. [Journal acceptance rate=21%]

Gardner, G., Jones, G., Taylor, A., Robertson, L., Forrester, J., & Krebs, D. (2009). Students' risk perceptions of nanotechnology applications: Implications for science education. *International Journal of Science Education*. [Journal acceptance rate=20%]

Jones, G. and Taylor, A., & Broadwell, B. (2009). Concepts of scale held by students with visual impairment. *Journal of Research in Science Teaching*, 46(5), 506-519. [Journal acceptance rate=12.5%]

Taylor, A. & Jones, M.G. (2009). Proportional reasoning ability and concepts of scale: Surface area to volume relationships in science. *International Journal of Science Education*, 31(9), 1231-1247. [Journal acceptance rate=20%]

- Jones, G., Taylor, A., & Broadwell, B. (2009). Estimating linear size and scale: Body rulers. *International Journal of Science Education*, 31(11), 1495 – 1509. [Journal acceptance rate=20%]
- Jones, G. & Taylor, A. (2009). Developing a sense of scale: Looking backward. *Journal of Research in Science Teaching*, 46(4), 460-475. [Journal acceptance rate=12.5%]
- Taylor, A., Jones, M.G., Broadwell, B., & Oppewal, T. (2008). Creativity, inquiry, or accountability? Scientists' and teachers perceptions of science education. *Science Education*, 92(6), 1058-1075. [Journal acceptance rate=12.8%]
- Jones, M.G., Tretter, T., Taylor, A., & Oppewal, T. (2008). Experienced and novice teachers' concepts of spatial scale. *International Journal of Science Education*, 30(3), 409-429. [Journal acceptance rate=20%]
- Taylor, A., Jones, M.G., & Pearl, T.P. (2008). Bumpy, sticky, and shaky: Nanoscale science and the curriculum. *Science Scope*, 31(7), 28-35. [Journal acceptance rate=32%]
- Jones, M.G., Taylor, A., Minogue, J., Wiebe, E., & Carter, G. (2007). Understanding scale: Powers of ten. *Journal of Science Education and Technology*, 16(2), 191-202. [Journal acceptance rate=55%]
- Taylor, A. & Watson, S. (2000). The effect of traditional classroom assessment on science learning and understanding of the processes of science. *Journal of Elementary Science Education*, 12(1), 19-32. [Journal acceptance rate=21%]
- Furlough, V., Taylor, A., & Watson, S. (1997). Hands-in science. *Science Scope*, 20(7), 16-17. [Journal acceptance rate=32%]

Proceedings

- Taylor, A. & Jones, M. G. Fish gills to feathers: Factors that influence students' understandings of surface area to volume. Paper in Proceedings for the American Educational Research Association, Denver, CO., May 2010.
- Jones, M. G., Gardner, G., Taylor, A., Wiebe, E., Forrester, J. Conceptualizing magnification and scale: The roles of spatial visualization and logical thinking. Paper in Proceedings for the American Educational Research Association, Denver, CO., May, 2010.
- Taylor, A. & Jones, M. G. Applying science concepts: Factors that influence students' understandings of surface area to volume. Paper in Proceedings for the National Association of Research in Science Teaching, Philadelphia, PA., March, 2010.
- Jones, M. G. & Taylor, A. Scale, magnification and zooming: Logical thinking and spatial visualization. Paper in Proceedings for the National Association of Research in Science Teaching, Philadelphia, PA., March, 2010.
- Jones, G. and Taylor, A. Developing a sense of scale: Looking backward. Paper in Proceedings for American Education Research Association in San Diego, CA., April, 2009.

- Taylor, A. and Jones, G. Factors that influence students' and teachers' understandings of surface area to volume in science contexts. Paper in Proceedings for American Education Research Association in San Diego, CA., April, 2009.
- Forrester, J., Jones, G., Taylor, A., & Gardner, G. Linear estimation: Contexts and spatial abilities. Paper in Proceedings for National Association of Research in Science Teaching Annual International Conference, Garden Grove, CA, April 18, 2009.
- Jones, G. and Taylor, A. Reflections of scientists and engineers: Developing a sense of scale. Paper in Proceedings for National Association of Research in Science Teaching Annual International Conference, Garden Grove, CA, April 20, 2009.
- Taylor, A. and Jones, G. Students' and teachers' conceptions of surface area to volume in science contexts: What factors influence the understanding of the concept of scale? Paper in Proceedings for National Association of Research in Science Teaching Annual International Conference, Garden Grove, CA, April 20, 2009.
- Gardner, G., Jones, G., Taylor, A., Robertson, L., Forrester, J., & Krebs, D. Risk perception and the knowledge deficit model: Nanotechnology education. Paper in Proceedings for National Association of Research in Science Teaching Annual International Conference, Garden Grove, CA, April 18, 2009.
- Taylor, A. & Jones, G. (2008). Crossroads of science and mathematics: The intersection of scale and proportional reasoning. Paper in Proceedings for National Association for Research in Science Teaching, Baltimore, MD, March, 31, 2008.
- Jones, G., Taylor, A., Minogue, J., Broadwell, B., Wiebe, E., & Carter, G. The Efficacy of 'powers of ten': Concepts of size and scale. Paper in Proceedings for National Association for Research in Science Teaching, New Orleans, LA, April, 18, 2007.
- Taylor, A., Jones, G., Broadwell, B., & Oppewal, T. Coordinating science learning: Navigating tensions between scientists and science educators. Paper in Proceedings for National Association for Research in Science Teaching, New Orleans, LA, April, 18, 2007.

Accepted for publication

- Jones, G., Taylor, A., Forrester, J. (expected publication 2011). Developing a scientist: A retrospective look. *International Journal of Science Education*. [Journal acceptance rate=20%]
- Jones, G., Paechter, M., Yen, C., Gardner, G., Taylor, A., Tretter, T., & Stelzer, J. Teachers' concepts of spatial scale: An international comparison. *Journal of Research in Science Teaching*, [Journal acceptance rate=12.5%]

Under consideration

- Taylor, A. & Jones, G. Students' and teachers' conceptions of surface area to volume in science contexts: What factors influence the understanding of scale? *Research in Science Education*. [Journal acceptance rate=21%]

- Jones, G., Taylor, A., Forrester, J., Gardner, G., Robertson, L. Accuracy of measurement estimation in students with visual impairments. *Journal of Science Education and Technology*. [Journal acceptance rate=55%]
- Jones, G., Taylor, A., Gardner, G., Forrester, J. Accuracy of measurement estimation: Context, units, and logical thinking. *School Science and Mathematics*.
- Krebs, D., Jones, G., Forrester, J., Gardner, G., & Taylor, A. Social justice for students with visual impairment. *Journal of Special Education*. [Journal acceptance rate=30%]

Publications (or performances, exhibits, artistic works, productions or writings) not listed in the refereed category (e.g., abstracts, book reviews)

Taylor, A. (2010, March). Wanted: More science! *Kidsville news: New Hanover's fun family educational resource*.

Jones, M.G., Taylor, A., & Falvo, M. (2010). Peak into NSTA Press: What is scale? NSTA Reports, 21(7), 28-29. (from the book *Extreme Science*).

Jones, M.G., Taylor, A., & Falvo, M. (2009). Oops, I did it again. NSTA Reports, 21(2), 24. (from the book *Extreme Science*.)

Jones, M. G., Falvo, M., Taylor, A., & Broadwell, B. (2007). Build a virus. *The Science Reflector*, 36(2), <http://www.ncsta.org/reflector/archives/summer07/activity.html>

PRESENTATIONS

Jones, M.G., Paechter, M., Gardner, G., Yen, I., Taylor, A., & Tretter, T. Teachers' concepts of spatial scale: An intercultural comparison between Austrian, Taiwanese, and the United States. Paper presented at the International Society of the Learning Sciences annual meeting, Chicago, IL., July, 2010.

Taylor, A. & Jones, M. G. Fish gills to feathers: Factors that influence students' understandings of surface area to volume. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO., May, 2010.

Taylor, A. & Jones, M. G. Applying science concepts: Factors that influence students' understandings of surface area to volume. Paper presented at the annual meeting of the National Association of Research in Science Teaching, Philadelphia, PA., March, 2010.

Jones, M. G. & Taylor, A. Scale, magnification and zooming: Logical thinking and spatial visualization. Paper presented at the annual meeting of the National Association of Research in Science Teaching, Philadelphia, PA., March, 2010.

- Jones, M.G., Taylor, A., Robertson, L., Gardner, G., Thurmond, B., Robert, S. Extreme science: Scales from nano to galactic. Paper presented at the National Science Teachers Association, Philadelphia, PA., March 2010.
- Jones, G. & Taylor, A. Developing a sense of scale: Looking backward. Paper presented at American Education Research Association in San Diego, CA., April, 2009.
- Taylor, A. & Jones, G. Factors that influence students' and teachers' understandings of surface area to volume in science contexts. Paper presented at American Education Research Association in San Diego, CA., April 15, 2009.
- Jones, G. & Taylor, A. Reflections of scientists and engineers: Developing a sense of scale. Paper presented at the National Association of Research in Science Teaching Annual International Conference, Garden Grove, CA, April 20, 2009.
- Taylor, A. & Jones, G. Students' and teachers' conceptions of surface area to volume in science contexts: What factors influence the understanding of the concept of scale? Paper presented at the National Association of Research in Science Teaching Annual International Conference, Garden Grove, CA, April 20, 2009.
- Gardner, G., Jones, G., Taylor, A., Robertson, L., Forrester, J., & Krebs, D. Risk perception and the knowledge deficit model: Nanotechnology Education. Paper presented at the National Association of Research in Science Teaching Annual International Conference, Garden Grove, CA, April 18, 2009.
- Forrester, J., Jones, G., Taylor, A., & Gardner, G. Linear Estimation: Contexts and Spatial abilities. Paper presented at the National Association of Research in Science Teaching Annual International Conference, Garden Grove, CA, April 18, 2009.
- Jones, G. & Taylor, A. Learning about scale: A retrospective look. Paper presented at the annual meeting of the School Science and Math Association on November 13, 2008 in Raleigh, NC.
- Gardner, G., Jones, A., Taylor, A., Forrester, J., Krebs, D., & Robertson, L. Nanotechnology in undergraduate education: Preparing future developers, applicators, and communicators of nanoscience. Paper presented at the annual meeting of the School Science and Math Association on November 13, 2008 in Raleigh, NC.
- Taylor, A. & Jones, G. What factors influence the understanding of a concept of scale? Paper presented at the annual meeting of the School Science and Math Association on November 14, 2008 in Raleigh, NC.
- Gardner, G., Jones, A., Taylor, A., Forrester, J., Krebs, D., & Robertson, L. Nanotechnology in undergraduate education. Paper presented at the National Science Teachers Association Annual Meeting, Charlotte, NC, October, 30, 2008.
- Jones, G., Forrester, J., Krebs, D., Taylor, A., Gardner, G., Robertson, L., & Falvo, M. Extreme Science: Size and scale. Paper presented at the National Science Teachers' Association Regional Conference, Charlotte, NC, October 30, 2008.

- Forrester, J., Jones, M.G., Taylor, A., & Gardner, G. (2008). Accuracy of linear estimation: Contexts and spatial abilities. Paper presented at the Mid-Atlantic Association of Science Teacher Education Annual Meeting, Lake Lure, NC.
- Jones, M.G. & Taylor, A. (2008). Developing a sense of scale: Looking backward. Paper presented at the Mid-Atlantic Association of Science Teacher Education Annual Meeting, Lake Lure, NC.
- Forrester, J., Jones, M.G., & Taylor, A. Experiences, relationships, and identity formation: Factors Influencing a scientists' career choice. Paper presented at National Association for Research in Science Teaching in Baltimore, MD, April 1, 2008.
- Jones, M. G., Tretter, T., Taylor, A., Oppewal, T. Novice and experienced teachers' concepts of scale. Paper presented at the National Association of Research in Science Teaching Annual International Conference, Baltimore, MD, March, 31, 2008.
- Taylor, A. & Jones, M.G. Crossroads of science and mathematics: The intersection of scale and proportional reasoning. Paper presented at National Association for Research in Science Teaching in Baltimore, MD, March 31, 2008.
- Jones, M.G., Taylor, A., Forrester, J., Falvo, M., Krebs, D., Robertson, L., & Gardner, G. Monsters to mice: Size and scale across the sciences. Workshop presented at the National Science Teachers Association Annual Meeting. Boston, Mass., March 29, 2008.
- Forrester, J., Jones, M.G., & Taylor, A. Experiences, relationships, and identity Formation: Factors influencing a scientists' career choice. Paper presented at American Education Research Association in New York City, NY, March, 25, 2008.
- Jones, M. G., Taylor, A. Understanding scale: Teachers' trajectory of knowledge. Paper presented at the American Educational Research Association Annual Meeting. New York, NY, March 26, 2008.
- Taylor, A. & Jones, M. G. Students' understanding of surface area to volume relationships. Paper presented at American Education Research Association in New York City, NY, March, 25, 2008.
- Jones, M. G., Tretter, T., Taylor, A., Oppewal, T. (2008). Novice and experienced teachers' concepts of size and scale: Accuracy, Boundaries, and experiences. Paper presented at the Hawaii International Conference on Education. Honolulu, HI.
- Jones, M.G., Falvo, M., and Taylor, A. Nanoscale Science: Activities for grades 6-12. NSTA Symposium at Area Conference on Science Education in Birmingham, AL, December 7, 2007.

Taylor, A., Jones, M.G., Broadwell, B., & Oppewal, T., Coordinating science learning: Navigating tensions between scientists and science educators. Paper presented at National Association for Research in Science Teaching, New Orleans, LA, April, 17, 2007.

Jones, M.G., Taylor, A., Broadwell, B. and Minogue, J. Understanding scale: Powers of ten. Paper presented at National Association for Research in Science Teaching, New Orleans, LA, April, 18, 2007.

King, A., Jones, M.G., Broadwell, B., and Taylor, A. Visually impaired students understanding of scale. Poster presented at National Association for Research in Science Teaching, New Orleans, LA, April 16, 2007.

Jones, M.G., Falvo, M., Kubasko, D., Taylor, A., & Forrester, J. Presentation of Scale Activities workshop at National Science Teachers Association, St. Louis, MO, March 30, 2007.

Jones, M.G., Taylor, A., Broadwell, B. and Minogue, J. Understanding scale: Powers of ten. Paper presented at Association for Science Teacher Education, Clearwater FL, January 5, 2007.

Jones, M. G., Kubasko, D. Taylor, A., & Oppewal, T., Nanoscience Presentation at National Science Teachers Association, Anaheim, CA, April, 2006.

State Presentations

Jones, G., Taylor, A., Falvo, M. Modeling phenomena at the extremes of science. Presentation at North Carolina Science Teachers Association, Greensboro, NC, November 11, 2010.

Reid-Griffin, A., Taylor A., Slaten, K. Science, math, and technology: Learning and living. Presentation at North Carolina Science Teachers Association, Greensboro, NC, November 11, 2010.

Jones, G. Taylor. A., Falvo, M., Gardner, G. Science at the nanoscale. Presentation at North Carolina Science Teachers' Association Regional Conference, Greensboro, NC, November, 2009.

Jones, M.G. and Taylor, A. Poster presentation of *TOSS: Trajectory of science scholars project for the Friday Institute National Advisory Board*, Friday Institute Discovery Classroom on February 13, 2007.

Jones, M.G., Taylor, A., Krebs, D. Meet a Scientist Event at Morehead Planetarium, Chapel Hill, N.C., November 17, 2007.

Jones, M.G., Falvo, M., Kubasko, D., Taylor, A., Forrester, J., Gardener, G., Krebs, D., and Robertson, L. *Nanoscale Science (6-12)*. Presentation at North Carolina Science Teachers Association, Greensboro, NC, November 15, 2007.

Jones, M.G., Taylor, A., Scott, J., Nifong, J. Japanese lesson study with Science Teachers. Presentation at North Carolina Science Teachers Association, Greensboro, NC, November 9, 2006.

Jones, M.G., Falvo, M., Kubasko, D., Taylor, A., Forrester, J., & King, A. *Nanotechnology Activities for the Classroom*. Presentation at North Carolina Science Teachers Association, Greensboro, NC, November 9, 2006.

Jones, M. G., Taylor, A. & King, A. Nano Family Science Day Presentation at Morehead Planetarium, University of North Carolina, Chapel Hill, NC, July 2006.

Jones, M.G., Taylor, A., Broadwell, B. Presentation of Scale Grant Research at an Open House for the William and Ida Friday Institute for Educational Innovation, Fall 2005.

Jones, M. G., Falvo, M., Kubasko, D. Taylor, A., Oppewal, T., & Broadwell, B. *Nanoscience Presentation* at North Carolina Science Teachers Association Conference, Greensboro, NC November, 2005.

Watson, S. & Taylor, A. Presentation on Vertebrates Activities for Elementary Science Teachers at North Carolina Science Teachers Association Conference, Greensboro NC, November, 1998.

Invited Presentations

Taylor, A. *Integrating Science: Size and Scale*. Presented research and activities to EDN students⁷ of Dr. Catherine Nesbit, UNCW, April, 19, 2010.

Taylor, A. *Integrating Science: Size and Scale*. Presented research and activities to EDN students⁷ of Dr. Catherine Nesbit, Jacksonville, NC, April, 7, 2010.

Taught a class session online about current issues in science education for the graduate level course Curriculum (EDN 530) taught by Dr. Brad Walker, March 2009.

Jones, M.G., Falvo, M., & Taylor, A. *NSTA Book Signing for Nanoscale Science*. National Science Teachers Association, Boston, MA, March 29, 2008.

Jones, M.G., Falvo, M., & Taylor, A. *NSTA Book Signing for Nanoscale Science*. National Science Teachers Association, Charlotte, NC, October 30, 2008.

Jones, M.G., Falvo, M., Taylor, A. *Nanoscience and the Future*. Web Seminar for National Science Teacher Association on January 15, 2008.

Taylor, A. Presented Dissertation topic: *Students' and teachers' conceptions of surface area to volume in science contexts: What factors influence the understanding of the concept of scale?* Mathematics and Science Education Research Symposium, Friday Institute for Educational Innovation, December 12, 2007.

Jones, M.G., Falvo, M., Taylor, A. Learning about science at the nanoscale. Web Seminar for National Science Teacher Association on December 18, 2007.

Jones, M.G., Falvo, M., & Taylor, A. NSTA goes "Behind the Books" to talk to authors of *Nanoscale Science*. Podcast recorded in August 2007.

Jones, M.G., Falvo, M., & Taylor, A. NSTA Book Signing for *Nanoscale Science*. National Science Teachers Association, Birmingham, AL, December 8, 2007.

Taylor, A. Presenter for a mathematics education course "Geometric Thinking." Scale and Measurement in the Science Classroom. North Carolina State University, October 24, 2007.

Jones, M.G., Falvo, M., & Taylor, A. NSTA goes "Behind the Books" to talk to authors of *Nanoscale Science*. Podcast recorded in August 2007.

Jones, M.G., Falvo, M., & Taylor, A. NSTA Book Signing for *Nanoscale Science*. National Science Teachers Association, St. Louis, MO, March 31, 2007.

OTHER PRESENTATIONS AND MEDIA

Jones, M.G., Falvo, M., & Taylor, A. NSTA Book Signing for *Nanoscale Science*. National Science Teachers Association, Charlotte, NC, October 30, 2008

Jones, M.G., Falvo, M., & Taylor, A. NSTA Book Signing for *Nanoscale Science*. National Science Teachers Association, Boston, MA, March 29, 2008

Jones, M.G., Falvo, M., Taylor, A. Nanoscience and the Future. Web Seminar for National Science Teacher Association on January 15, 2008.

Jones, M. G., Falvo, M., Taylor, A., & Broadwell, B. (2007). Build a virus. *The Science Reflector*, 36(2), <http://www.ncsta.org/reflector/archives/summer07/activity.html>.

Jones, M.G., Falvo, M., Taylor, A. Learning about Science at the Nanoscale. Web Seminar for National Science Teacher Association on December 18, 2007.

Taylor, A. Presented Dissertation topic: *Students' and Teachers' Conceptions of Surface Area to Volume in Science Contexts: What Factors Influence the Understanding of the Concept of Scale?* during the Mathematics and Science Education Research Symposium, Friday Institute for Educational Innovation, December 12, 2007.

Jones, M.G., Falvo, M., & Taylor, A. NSTA Book Signing for *Nanoscale Science*. National Science Teachers Association, Birmingham, AL, December 8, 2007.

Jones, M.G., Falvo, M., & Taylor, A. NSTA goes "Behind the Books" to talk to authors of *Nanoscale Science*. Podcast recorded in August 2007.

Jones, M.G., Falvo, M., & Taylor, A. NSTA Book Signing for *Nanoscale Science*. National Science Teachers Association, St. Louis, MO, March 31, 2007.

PROFESSIONAL ORGANIZATIONS

American Educational Research Association (since 2006)

Association for Science Teacher Education (since 2007)

North Carolina Science Teachers Association (since 1995)

National Association for Research in Science Teaching (since 2005)

National Science Teachers Association (since 1995)

School Science and Mathematics Association (since 2006)

PROFESSIONAL SERVICE

Event Leader for Write it Build it! Event for *Science Olympiad* at UNCW, North Carolina, Spring 2011.

Assistant at Junior Seahawk Academy Family Learning Day, September 25, 2010 in conjunction with the North Carolina Science Festival.

Assistant at Junior Seahawks Summer Camp at Watson School of Education, UNCW, June 21-25, 2010.

Coordinated a carnivorous plant hike and water quality testing activity at Carolina Beach State Park for the Junior Seahawks (Summer 2010, 2011)

Event Leader for Bio-Processes Event for *Science Olympiad* at UNCW, North Carolina, Spring 2010.

Manuscript Reviewer, *Science Education*, 2010-present

Manuscript Reviewer, *Journal of Science Teaching*, 2009-present

Manuscript Reviewer, *International Journal of Science Education*, 2009- present

Assistant at Junior Seahawk Academy Family Learning Day, October 17, 2010.

Assistant at Junior Seahawks Summer Camp at Watson School of Education, UNCW, June 15-19, 2009.

Co-presenter of Nanoscale activities for teachers and students at *Nanodays* at North Carolina State University, Raleigh NC, April 4, 2008.

Presenter for a mathematics education course “Geometric Thinking.” Scale and Measurement in the Science Classroom. North Carolina State University, October 24, 2007.

Presenter at the *Fall Carnival of Math and Science* at Stough Elementary, Raleigh, North Carolina, October 4, 2007.

Co-Instructor for elementary, middle, and high school science teachers in a Math Science Partnership Grant with Durham County Public Schools Staff Development, 2007-2008.

Reviewer for Strand 10 Curriculum, Evaluation and Assessment for National Association for Research in Science Teaching

Instructor and Camp Manager for *Zoom into Science Summer Camp* for Middle School Students at The William and Ida Friday Institute for Educational Innovation, North Carolina State University, June 2007.

Co-presenter of Nanoscale activities for teachers and students at *Nanodays* at North Carolina State University, Raleigh NC, April 20, 2007.

Co-Event Leader for Metric Mastery Event for *Science Olympiad* in North Carolina, Spring 2007.

Curriculum Review for an international science textbook series in collaboration with Dr. John Penick, North Carolina State University, Raleigh NC, Fall 2006.

Presentation of nanotechnology activities for pre-service science teachers at the Science Education Student Organization, North Carolina State University, Raleigh NC, Fall 2006.

Co-instructor for mentoring biology teachers for *Innovations* Staff Development, Durham County Staff Development Center, 2006-2007.

Participated in discussion about advantages and disadvantages of nanotechnology (*Nano Café*), in Durham, NC, Fall 2006.

Hosted International Visitors at William and Ida Friday Institute for Educational Innovation, Fall 2006.

Instructor for *Monsters to Mice Summer Camp* for middle school students, Morehead Planetarium, University of North Carolina, Chapel Hill, NC, June 2006.

Conducted study at *Maze Days* (Activity Camp for Visually Impaired Students), University of North Carolina, Chapel Hill, NC, Spring 2006.

Science Fair Judge at Lacy Elementary, Raleigh, NC, Spring 2006.

Member of Teacher of the Year Committee for Wake County Public School System, 2005-2006.

Co-Advisor for *Japanese Lesson Study Collaboration* with middle school science teachers (Durham Innovations), Durham County Staff Development Center, 2005-2006.

Taught one class on nanotechnology for a Technology Education class, North Carolina State University, Raleigh NC, 2006.

Instructor in science summer camp for middle school girls associated with *Girls on Track*, North Carolina State University, Raleigh NC, 2005.

Organized and instructed vertebrate workshop for middle grade science teachers, East Carolina University, Greenville, NC, 1997.