

## VITA

**Name** Stephen Ludwig Thompson  
**Tenure Status** Tenured  
**Faculty Rank** Professor

### 1. Academic Degrees

Degree: Ph.D. Date of degree: 2002	Institution: Vanderbilt University Major: Education and Human Development
Degree: M.S. Date of degree: 1995	Institution: Florida State University Major: Science Education
Degree: B.S. Date of degree: 1988	Institution: Rio Grande College Major: Elementary Education

### 2. Professional Experience

Dates: 2018 to present Position: Professor Science Education	Institution: University of South Carolina
Dates: 2008 to 2018 Position: Associate Professor Science Education	Institution: University of South Carolina
Dates: 2002 to 2008 Position: Assistant Professor Science Education	Institution: University of South Carolina
Dates: 1998 to 2002 Position: Graduate Student	Institution: Vanderbilt University
Dates: 1989 to 1998 Position: Classroom Teacher	Institution: Duval County (FL) School District

### 3. Scholarship

#### Refereed Publications:

Thompson, S., & Emmer, E., (2019). Closing the Experience Gap: The Influence of an Immersed Methods Course in Science, *Journal of Science Teacher Education*, (30)3, 300-319, DOI: [10.1080/1046560X.2018.1562811](https://doi.org/10.1080/1046560X.2018.1562811).

Chen, H., Palmer, I. A., Chen, J., Chang, M., Thompson, S. L., Liu, F., Fu, Z. Q. (2018). Specific and Accurate Detection of the Citrus Greening Pathogen *Candidatus liberibacter* spp. Using Conventional PCR on Citrus Leaf Tissue Samples. *Journal of Visualized Experiments* (136), e57240, doi:10.3791/57240.

Lotter, C., Thompson, S., Dickenson, T., Smiley, W., Bilue, G., & Rea, M. (2017). The Impact of a Practice-Teaching Professional Development Model on Teachers' Inquiry Instruction and Inquiry Efficacy Beliefs. *International Journal of Science and Mathematics Education*. 1-19. <https://doi.org/10.1007/s10763-016-9779-x>

- Thompson, S., Lotter, C., Fan, X., & Taylor, L., (2016), Enhancing Elementary Pre-service Teachers' Conceptions of Plant Processes. *Journal of Science Teacher Education*, 27(4), 439-463, DOI 10.1007/s10972-016-9469-0.
- Lotter, C., Smiley, W., Thompson, S., & Dickenson, T., (2016). The impact of a professional development model on middle school teachers' efficacy and implementation of inquiry. *International Journal of Science Education*. 38:18, 2712-2741, DOI: 10.1080/09500693.2016.1259535
- Thompson, S. & Lotter, C., (2014). Conservation of Matter in the Life Sciences. *Science Scope* 38(2), 57-69.
- Thompson, S., (2014). Historical Plant Studies: Tools for Enhancing Students' Understanding of Photosynthesis. *Science Scope* 17(6), 43-53.
- Capobianco, B. & Thompson, S., (2013). Exploring the Use of Visual Data to Uncover Science Students' Conceptions of an Engineer and Engineering. In J. Pedersen & K. Finson (Eds), *Visual Data and Their Use in Science Education*. Charlotte: Information Age Publishing.
- Thompson, S., (2010). Enhancing Students' Understanding of Plant-Related Gas Processes. *Science Scope* 33(8), 20-26.
- Thompson, S. & Lyons, J., (2009). Engineering Outreach in Middle School: The Influence of a Long-Term, School-Based Collaboration. *International Journal of Engineering Education*, 25(3), 452-460.
- Fralick, B., Kearns, J., Thompson, S., & Lyons, J., (2009). How Middle Schoolers Draw Scientists and Engineers. *Journal of Science Education and Technology* 18(1), 60-74.
- Thompson, S., (2009). *South Carolina technical college partnerships* (Innovation and Reform in Teacher Preparation: AACTE's 5<sup>th</sup> Annual Day on the Hill, June 17-18, 2009). Washington, DC: 80-81 American Association of Colleges for Teacher Education.
- Thompson, S. & Zenger, J., (2009). Diverse Pathways in Teacher Preparation: South Carolina Technical to 4-year College Teacher Certification Initiative. *Teacher Education Journal of South Carolina* 9(1), 8-16.
- Maher, M., & Thompson, S., (2009). I Needed a Seventh Grader to Teach Me That: Science and Engineering Graduate Students' Experiences in a Middle School Classroom. *Teacher Education Journal of South Carolina* 9(1), 113-119.
- Thompson, S. & Lyons, J., (2008). Engineers in the Classroom: Their Influence on African-American Students' Perceptions of Engineering, *School Science and Mathematics*, 108(5), 197-210.
- Thompson, S., (2007b). Demonstrating Inquiry-Based Teaching Competencies in the Life Sciences: Part 2. *Journal of College Science Teaching*, 37(2), 63-65.
- Thompson, S., (2007a). Demonstrating Inquiry-Based Teaching Competencies in the Life Sciences: Part 1. *Journal of College Science Teaching*, 37(1), 48-50.
- Thompson, S., (2007). Inquiry in the Life Sciences: The Plant-in-a-Jar as a Catalyst for Learning. *Science Activities*, 43(4), 27-33.

Thompson, S., Collins, A., Metzgar, V., Joeston, M., & Shepherd, V., (2002). Exploring Graduate-Level Scientists Participation in a Sustained K-12 Teaching Collaboration. *School Science and Mathematics* 102(6) 254-265.

Online Publications:

Thompson, S., Harbour, K., & White, B., (2019). Promising Practices in Elementary Teacher Preparation Across South Carolina, *The South Carolina Teacher Education Advancement Consortium*, 1-19. Available at [https://sc-teacher.org/wp-content/uploads/2019/10/FieldExp\\_WP\\_10.14.pdf](https://sc-teacher.org/wp-content/uploads/2019/10/FieldExp_WP_10.14.pdf).

Thompson, S., Franklin, S., & Diggs, N., (2018). *Side-by-Side Teaching: Learning To Teach Elementary Science in Authentic Classroom Settings*. National Association for Professional Development Schools (NAPDS) website. Available at <https://napds.org/stories-from-the-field/side-side-teaching-learning-teach-elementary-science-authentic-classroom-settings/>.

#### **4. Grant Activity**

Roy, G., & Thompson, S., (co-PI), U.S. Department of Education Division of Teacher Quality grant proposal, *University of South Carolina – Transition to Teaching Residency (UofSC-T3)*, (2019), \$4,996,336.00, 5 years, funded.

Thompson, S., & Fu, Z., (PI), South Carolina Commission on Higher Education: Instruction and Teacher Quality, *Enhancing Middle Grades Science Teachers' Knowledge of Plant Processes, Structures, and Functions Through Engagement in Plant Sciences Research*, (2017), \$172,257.50, 1.5 years, funded.

Thompson, S., Miller, B., & Ely, B. (PI), South Carolina Commission on Higher Education: Instruction and Teacher Quality, *Nature-Based Inquiry Utilizing a STEAM Approach*, (2015), \$121,606.00, 1.5 years, funded.

Thompson, S., Lotter, C., & Ely, B. (PI), South Carolina Department of Education, *STEP (Science Teaching Enhancement Project) into the New Science Standards*, (2013), \$640,302.00, 3 years, funded.

Thompson, S., & Ely, B. (PI), South Carolina Commission on Higher Education, *Expanding Nature-Based Inquiry Opportunities in Elementary Science Education*, (2012), \$234,743.00, 2 years, funded.

Ely, B., & Thompson, S., (co-PI), South Carolina Commission on Higher Education, *Creating an Early Childhood Nature-Based Inquiry Model*, (2011), \$49,391.00, 1 year, funded.

Lotter, C., Thompson, S., & Ely, B., (co-PI), South Carolina Department of Education, Mathematics and Science Partnerships Program, *SIMPLE, Science Inquiry through Modeling Pedagogy, Content Learning, and Evaluation*, (2010), \$903,080.00, 3 years, funded.

Ely, B., & Thompson, S., (co-PI), South Carolina Commission on Higher Education, *Creating an Early Childhood Nature-Based Inquiry Model*, (2009), \$84,882.00, 3 years, funded.

Thompson, S., (PI), Richland School District One, *Richland School District One Professional Development Project*, (2008), \$76,039.00, 1 year funded.

Thompson, S., (PI), United States Department of Education, *Diverse Pathways in Teacher Preparation Seed Grant Initiative Supplement*, (2008), \$50,000.00, 1 year, funded.

Feldon, D., Maher, M., Timmerman, B., Lyons, J., & Thompson, S., (co-PI), National Science Foundation Division of Research and Evaluation on Education in Science and Engineering (REESE), *Effects of Inquiry-Based Teaching Experiences on Graduate Students' Research Skill Development*, (2006), \$705,327.00, 3 years, funded.

Lyons, J., Thompson, S., Ebert, C., & Sawyer, R., (co-PI) National Science Foundation Division of Graduate Education, *Graduate Teaching Fellows Enhancing STEM Education in South Carolina Schools*, (2004), \$1,999,990.00, 5 years, funded.

Kuhs, T., Thompson, S., Dickey, E., & Zenger, J., (PI\*), U.S. Department of Education Division of Teacher Quality grant proposal, *Diverse Pathways in Teacher Preparation: A Collaborative Approach for South Carolina 2- and 4-Year Colleges*, (2004), \$4,700,000.00, 6 years, funded.

\* Became PI in Year 3

Lyons, J. & Thompson, S., (co-PI), South Carolina Commission on Higher Education, Centers of Excellence Program grant titled, *Center for Engineering and Computing Education*, (2003), \$750,000.00, 5 years, funded.

Thompson, S., & Ponci, F., (co-PI), *Implementation of Problem-Based Teaching Strategies to Improve Student learning in ECLT 222: Systems and Signals*. Bridges for Engineering Education Seed Grant Program, (2003), \$8,000.00, funded.

#### Other Initiatives:

Thompson, S., & Miller, B., (PI), National Park Service, *Development of Interdisciplinary Curriculum-Based Lesson Plans for Grades K-8 at Congaree National Park*, (2016), \$36,233.00, 1.5 years, funded.

Thompson, S., (2015-16) *STEAM (Science, Technology, Engineering, Arts and Mathematics) Professional Development Initiative at Killian Elementary School*, \$11,476.00, 1 year, funded.

Thompson, S. (PI). National Park Service, *Congaree National Park Curriculum Development*, (2014), \$2,499.00, 2 months, funded.

Thompson, S., (PI), & Miller, B., (2014-15) *STEAM (Science, Technology, Engineering, Arts and Mathematics) Professional Development Initiative at Killian Elementary School*, \$20,537.00, 1 year, funded.

Thompson, S., (PI), & Miller, B., (2013-14) *STEAM (Science, Technology, Engineering, Arts and Mathematics) Professional Development Initiative at Killian Elementary School*, (2013-14), \$20,537.00, 1 year, funded.

Thompson, S., (PI), *USC STEM After-School STEM Initiative at WA Perry*, (2012-13), \$16,264.00, 1 year, funded.

Thompson, S., (PI), *USC STEM After-School STEM Initiative at WA Perry*, (2011-12), \$50,622.00, 1 year, funded.

Thompson, S., (PI), *USC STEM After-School STEM Initiative at WA Perry*, (2010-11), \$30,000.00, 1 year, funded.

Thompson, S., (PI), University of South Carolina Research Incentive Grant titled, *Expansion of a Nature-Based Inquiry Model of Teacher Professional Development*, (2010), \$2,301.00, funded.

## **5. National and International Presentations**

Thompson, S., Jackson-Jones, Z., Jones, A., & Smalls, K., (2020). *Learning to Teach Elementary Science in Virtual Spaces*. Presentation at the PDS SERV Annual Conference, October 24<sup>th</sup>, virtual.

Thompson, S., & Jackson-Jones, Z., (2019). *Learning to Teach Elementary Science Through Practice-Based Pedagogy*. Presented at the National Association for Professional Development Schools (NAPDS) 2019 Annual Conference, March 13th, Newark, NJ.

Thompson, S. (2019). *Practice-based Approaches to Elementary Science Teacher Preparation*. Presented at the Association for Science Teacher Education (ASTE) 2019 Annual Conference, January 4th, Savannah, Georgia.

Thompson, S., & Diggs, N., (2018). *Closing the Experience Gap: An Immersed Science Methods Courses Model*. Presented at the National Association for Professional Development Schools (NAPDS) 2018 Annual Conference, March 16th, Jacksonville, Florida.

Thompson, S. (2018). *Closing the Experience Gap: Embedding Science Methods Coursework within the Elementary Science Classroom Setting*. Presented at the Association for Science Teacher Education (ASTE) 2018 Annual Conference, January 5th, Baltimore, Maryland.

Thompson, S. (2017). *Tracing Changes in Middle School Teachers' Conceptions of Plant Processes as a Result of a Modeling-based Professional Development Experience*. Presented at the Association for Science Teacher Education (ASTE) 2017 Annual Conference, January 13th, Des Moines, Iowa.

Thompson, S. (2016). *ASTE Session: Activities and Strategies for Teaching Difficult-to-Understand Plant Processes*. Presented at the National Science Teachers Association (NSTA) 2016 Annual Conference, April 1st, Nashville, Tennessee.

Thompson, S. (2015). *Modeling in Life Science: Examining Middle School Teachers' Conceptions of Plant Processes*. Presented at the Association for Science Teacher Education (ASTE) 2015 Annual Conference, January 9th, Portland, Oregon.

Lotter, C., Thompson, S., Dickenson, T., & Morgan, G., (2014). *Middle School Science Teachers' Efficacy and Implementation of Inquiry: Impact of an Inquiry Professional Development Program*. Presented at the Association for Science Teacher Education (ASTE) 2014 Annual Conference, January 18th, San Antonio, TX.

Thompson, S., (2014). *Teaching Plant Processes Using a Wholeness Approach*, Experiential Session at the Association for Science Teacher Education (ASTE) 2014 Annual Conference, January 15<sup>th</sup>, San Antonio, TX.

Lotter, C., Thompson, S., Dickenson, T., & Morgan, G., (2013). *Impact of a Professional Development Program on Middle School Teachers' Inquiry Teaching Efficacy*. Paper Presented at the National Association for Research in Science Teaching (NARST) 2013 Annual Conference, April 7<sup>th</sup>, Puerto Rico.

Thompson, S., (2013). *Elementary Preservice Teachers' Understanding of Interrelated Processes and Functions* (Syllabus Sharing), Presented at the Association for Science Teacher Education (ASTE) 2013 Annual Conference, January 11th, Charleston, SC.

Thompson, S., (2013). *Teaching Plant Processes Using a Wholeness Approach*, Experiential Session at the Association for Science Teacher Education (ASTE) 2013 Annual Conference, January 12<sup>th</sup>, Charleston, SC.

Thompson, S., Ichi-ito, S., Lueke, S. & Grimm, J. (2012), *What's in the Air?*, Presentation at the National Science Teachers Association (NSTA) Annual Conference, March 31<sup>st</sup>, Indianapolis, IN.

Thompson, S., (2012). *Impacting Middle Level Science Teachers' Understanding of Inter-Related Plant Processes*. Paper Presented at the Association for Science Teacher Education (ASTE) 2012 Annual Conference, January 6th, Clearwater, FL.

Lyons, J., Thompson, S., & Creighton, S., (2011). *GK-12 Engineering Fellows Change Student Perceptions: Science Fellows, Not So Much*, Presentation at the American Society for Engineering Education (ASEE) annual conference, Vancouver, British Columbia. Proceedings available at <http://www.asee.org/conferences/v2search.cfm>

Thompson, S., Diggs, N., Hicks, S., & Hudson, Z., (2011). *Making a PDS/University Science Collaboration Work: A Model for University Faculty Working in Public School Settings*, Presentation at the National Association of Professional Development Schools (NAPDS) annual conference, March 11<sup>th</sup>, New Orleans, LA.

Thompson, S., & Lotter, C., (2011). *Elementary Preservice Teachers' Understanding of Plant-Related Processes and Functions*, Paper Presented at the Association for Science Teacher Education (ASTE) 2011 Annual Conference, January 21st, Minneapolis, MN.

Thompson, S., Watson, J., & Lyons, J., (2010). *Measuring Change in Engineering and Science Graduate Students' Teaching Efficacy as a Result of Participation in a GK-12 Project*, Presentation at the American Society for Engineering Education (ASEE) Annual Conference, Louisville, KY. Proceedings available at <http://www.asee.org/conferences/v2search.cfm> .

Eakes, K., Hyatt, J., Thompson, S., and Zenger, J., (2008). *South Carolina's Diverse Pathways in Teacher Preparation Program*, Presentation at the Future Educators Association (FEA) Annual Conference, Chattanooga, TN.

Gilmore, J., Dickenson, T., Thompson, S., Zenger, J., (2008). *Supporting Transfer Students in Education: Evaluation of a Program for Recruiting and Retaining Teachers from Diverse Backgrounds*, Presentation at the American Educational Research Association (AERA) Annual Conference, New York, NY.

Thompson, S., & Lyons, J., (2007). Comparison of Outcomes for Engineering and Science GK-12 Fellows. *Proceedings of the American Society for Engineering Education (ASEE)*. Available from <http://www.asee.org/conferences/v2search.cfm> .

Lyons, J. & Thompson, S., (2007). GK-12 Engineering Workshop for Science and Math Teachers. *Proceedings of the American Society for Engineering Education (ASEE)*. Available from <http://www.asee.org/conferences/v2search.cfm>.

Thompson, S., (2007). *Comparing Life and Earth Science Concepts Held by Elementary Preservice Teachers and Third Graders*. Paper Presented at the American Educational Research Association (AERA) annual conference, Chicago, Illinois.

Thompson, S., (2007). *Examining Change in Third Graders' Understandings of Important Life and Earth Science Concepts as a Result of an Extended Inquiry-Based Plant Investigation*. Paper Presented at the Association for Science Teacher Education (ASTE) annual conference, Clearwater, Florida.

Thompson, S., (2007). *The NSES Plant-in-a-jar as a Catalyst for Learning*. Paper Presented at the Association for Science Teacher Education (ASTE) annual conference, Clearwater, Florida.

Thompson, S. and Lyons, J., (2006). *Investigating the Long Term Impact of an Engineering Based GK-12 Program on Students' Perceptions of Engineering*. Published Conference Proceedings from the American Society for Engineering Education (ASEE) Annual Conference, Portland, Oregon. Available on-line at <http://www.asee.org/about/events/conferences/search.cfm>.

Caicedo, A., Lyons, J., and Thompson, S., (2006). *Investigating Outcomes for GK-12 Teacher Partners and GK-12 Summer Institute Participants*. Published Conference Proceedings from the American Society for Engineering Education (ASEE) Annual Conference, Chicago, Illinois. Available on-line at <http://www.asee.org/about/events/conferences/search.cfm>.

Diggs, N., Rosati, J., & Thompson, S., (2006). *Implementation of a New Professional Development School Model*, Presentation at the National Association of Professional Development Schools (NAPDS) Annual Conference, Orlando, Florida.

Thompson, S., (2006). *Examining Change in Underrepresented Students' Perceptions of Engineering as a Result of a GK-12 Collaboration*. Paper Presented at the Association for Science Teacher Education annual conference (ASTE), Portland, Oregon.

Thompson, S. and Lyons, J., (2005). *A Study Examining Change in Underrepresented Student Views of Engineering as a Result of Working with Engineers in the Elementary Classroom*. Published Conference Proceedings from the American Society for Engineering Education (ASEE) Annual Conference. Portland, Oregon. Available on-line at <http://www.asee.org/about/events/conferences/search.cfm>.

Lyons, J., Fisher, S., and Thompson, S., (2005). *Effects of Participating in a GK-12 Program on the Graduate Students' Programs of Study*. Published Conference Proceedings from the American Society for Engineering Education (ASEE) Annual Conference, Portland, Oregon. Available on-line at <http://www.asee.org/about/events/conferences/search.cfm>.

Thompson, S. & Hawkins, D., (2005). *Building Bridges: Teacher and Engineer Collaborations in a PDS Network*. Presentation at the National Association of Professional Development Schools (NAPDS) Annual Conference, Orlando, Florida.

Thompson, S., & Pelt, J., (2005). *Measuring the Influence of Engineer and Elementary Science Teacher Collaborations Using the Draw an Engineer Instrument*. Paper presented at the Association for the Education of Teachers of Science (AETS) Annual Conference, Colorado Springs, Colorado.

Thompson S. & Ponci F., (2004). *Implementation of Problem-Based Learning in an Undergraduate Engineering Course*. Paper Presented at the National Association for Research in Science Teaching (NARST) annual conference, Vancouver, British Columbia.

Thompson, S., (2004). *Natural History and the Nature of Science in Elementary Science Instruction*. Paper presented at the Association for the Education of Teachers of Science (AETS) Annual Conference, Nashville, Tennessee.

Thompson, S., (2003). *Middle Grades Science Teachers' Beliefs and Practices Related to Inquiry: Development of an Inquiry Framework from the Ground up*. Paper presented at the American Educational Research Association (AERA) Annual Conference, Chicago, Illinois.

Thompson, S., (2003). *The Influence of a GK-12 Collaboration on Science Teachers' Inquiry Perceptions and Practices*. Paper presented at the Association of Educators of Teachers of Science (AETS) Annual Conference, St. Louis, Missouri.

Thompson, S., Collins, A., Metzgar, V., Joeston, M., & Shepherd, V. (2002). *Examining the Influence of a School-Based Collaboration Involving Scientists and Science Teachers*. Paper presented at the Association of Educators of Teachers of Science (AETS) Annual Conference, Charlotte, North Carolina.

#### State and Regional Presentations

Adgeron, A., Baker, M., Curcio, R., Guest, J., Roy., G., Thompson, S., D'Amico, L., West, H., (2020). *Reinterpreting Rural Teacher Education Within the Context of Virtual Spaces*. Presentation at the Southeastern Education Regional Vision for Education Annual Conference Annual Conference, October 24<sup>th</sup>, virtual.

Thompson, S., Jackson-Jones, Z., Diggs, N. (2019). *Practice-Based Approaches for Learning to Teach Elementary Science*, Professional Development School Conference South East Regional Vision for Education (SERVE) Conference, October 26th, Atlanta, GA.

Thompson, S., Diggs, N., et al., (2017). *Closing the Experience Gap: Preservice Teachers Discuss the Influence of an Elementary Science Methods Course Embedded Within the Classroom Setting*, South Carolina Professional Development School Conference, February 10th, Myrtle Beach, SC.

Thompson, S., Foster, J., et al., (2017). *Closing the Experience Gap: Inservice Teachers Discuss the Influence of an Elementary Science Methods Course Embedded Within the Classroom Setting*, South Carolina Professional Development School Conference, February 10th, Myrtle Beach, SC.

Thompson, S. (2016). *Making Plant Processes Interesting and Understandable for Students*. Presentation at the South Carolina Science Council Annual Conference, November 4<sup>th</sup>, Columbia, SC.

Lotter, C., & Thompson, S. (2015). *Modeling and Argumentation in the New Science Standards*. Presentation at the South Carolina STEM Share Fair, March 7<sup>th</sup>, Columbia, SC.

Thompson, S. (2014). *Active Strategies for Helping Students Understand Plant Processes*. Presentation at the South Carolina Science Council Annual Conference, October 30<sup>th</sup>, Myrtle Beach, SC.

Lotter, C. & Thompson, S. (2014). *STEP into the New Science Standards with Argumentation and Modeling Strategies*. Presentation at the South Carolina Science Council Annual Conference, October 30<sup>th</sup>, Myrtle Beach, SC.



- Miller, B. & Thompson, S. (2014). *STEAM as a Curricular Approach*. Presentation at the South Carolina Science Council Annual Conference, October 30<sup>th</sup>, Myrtle Beach, SC.
- Thompson, S. & Lotter, C. (2013). *Connections between Assessment and Practice: How to Avoid a Return to Drill and Kill*. Presentation at the Moving from Standards to Practice: Leading Tomorrow's Mathematics and Science Education in South Carolina, February 25<sup>th</sup>, Clemson, SC.
- Thompson, S., (2011). *Impact of an Instructional Intervention on Elementary Preservice Teachers' Plant Process Conceptions*. Presentation at the Southeastern Association of Science Teacher Educators (SASTE) Annual Conference, October 15<sup>th</sup>, 2011, Athens, GA.
- Thompson, S., (2010). *Elementary Preservice Teachers' Understanding of Interrelated Plant Functions and Processes*. Presentation at the Southeastern Association of Science Teacher Educators (SASTE) Annual Conference, October 9<sup>th</sup>, 2010, Decatur, GA.
- Thompson, S., (2010). *Measuring Change in Engineering and Science Graduate Students' Teaching Efficacy as a Result of Participation in a GK-12 Project*. Presentation at the Southeastern Association of Science Teacher Educators (SASTE) Annual Conference, October 9<sup>th</sup>, 2010, Decatur, GA.
- Foster, D., Elmore, D., & Thompson, S. (2010). *Diverse Pathways in Teacher Education*, South Carolina Technical Educators Association Annual Conference, February 19, 2010, Myrtle Beach, South Carolina.
- Thompson, S., (2009). *Mungo Undergraduate Teaching Award Panel Presentation*, Center for Teaching Excellence at the University of South Carolina, October 1, 2009, Columbia, SC.
- Thompson, S., (2009). Presentation to the Midlands Education and Business Alliance, Business Matters Seminar, *Diverse Pathways in Teacher Preparation*, February 13, 2009, Columbia, SC.
- Thompson, S., (2008). Presentation to the South Carolina Technical College Chief Academic Officers titled, *Diverse Pathways in Teacher Preparation Seed Grant Initiative*, Columbia, SC.
- Thompson, S., (2008), *Elementary Preservice Teachers' Plant-Related Misconceptions*, Presentation at the Southeast Association of Science Teacher Educators (SASTE) Annual Conference, Columbia, SC.
- Thompson, S., (2008). Presentation to the South Carolina Technical College Presidents titled, *Diverse Pathways in Teacher Preparation Seed Grant Initiative*, Columbia, SC.
- Elmore, D., Zenger, J., & Thompson, S., (2008). *Be a Hero in Your Hometown: A Case Study for Building a Seamless Transfer Teacher Education Program for South Carolina*, Presentation at the South Carolina Education & Business Summit, Greenville SC.
- Elmore, D., Perkins, R., Zenger, J., & Thompson, S., (2008). Presentation to the South Carolina State Department of Education titled, *Diverse Pathways in Teacher Preparation: A Collaborative Approach for Two- and Four-Year Colleges*.
- Gilmore, J., Dickenson, T., Thompson, S., & Zenger, J., (2008). *Supporting Transfer Students in Education: Evaluation of a Program for Recruiting and Retaining Teachers from Diverse*

*Backgrounds*, Presentation at the University of South Carolina American Educational Research Association Showcase.

Thompson, S., (2006). *Using the NSES Plant-an-a-jar Assessment to Teach about Inquiry and the History and Nature of Science*. Paper presented at the South Carolina Science Council Annual Conference, Myrtle Beach, South Carolina.

Thompson, S., (2005). *Teaching about Plant Function and Scientific inquiry in an Elementary Classroom*. Paper presented at the South Carolina Science Council Annual Conference, Myrtle Beach, South Carolina.

Thompson, S., (2004). *Observation as Inquiry: Using the NSES Plant-an-a-jar Assessment to Teach about Inquiry and the Nature of Science*. Paper presented at the South Carolina Science Council Annual Conference, Myrtle Beach, South Carolina.

#### Invited Presentations:

Thompson, S., (2017). *Making Climate Change Understandable*. Presentation at Congaree National Park (United States Park Service), June 1st, Hopkins, SC.

Thompson, S., (2016). *Making Meaningful and Manageable Internships*. Presentation at the Provost's Undergraduate Summit for Faculty, May 10th, Columbia, SC.

Thompson, S., (2015). *Modeling and Argumentation in the New Science Standards*. Presentation at the Aiken Technical College STEM Symposium, January 16th, Aiken, SC.

Thompson, S., (2015). *Active Strategies for Helping Students Understand Plant Processes*. Presentation at the Aiken Technical College STEM Symposium, January 16th, Aiken, SC.

Thompson, S., (2014). *A Framework for K-12 Climate Education*. Presented at the Climate Friendly Parks Workshop, Cowpens National Battlefield Park, December 3<sup>rd</sup>, Virtual.

Thompson, S., (2014). *A Framework for K-12 Climate Education*. Presented at the Climate Friendly Parks Workshop, Congaree National Park, September 10th, Columbia, SC.

Thompson, S., (2014). *Science and Engineering Practices: Understanding Students' Perceptions of Engineers and How to Positively Inform Them*. Presented at the Environmental Education Association of South Carolina 2014 Annual Conference, June 13th, Charleston, SC.

Thompson, S. (2012), *USC College of Education Collaboration with Guinyard Elementary*. 2012 South Carolina School Improvement Council Annual Meeting, March 24th, Columbia.

Thompson, S. (2011), *Waiting for Superman: Searching for Heroes in Education*, Panel Discussion Sponsored by the University of South Carolina Community Service Programs.

Thompson, S. & Svec, M., (2008), *Graduate Student Forum: The Initial Job Search*, Invited Presentation at the Southeast Association of Science Teacher Educators (SASTE) Annual Conference, Columbia, SC.

Zenger, J., Yarbrough, W., Thompson, S., & Moody, L. (2006). *Pathways to Recruiting and Supporting a More Diversified Teaching Force*. Presentation at the United States Department of

Education, Teacher Quality Enhancement Grants Program, Project Directors' Meeting, Albuquerque, New Mexico.

Lyons, J., Ebert, C., Sawyer, R., Thompson, S., & Addison, V., (2006). *Graduate Teaching Fellows Enhancing STEM Education in South Carolina Schools*. Presentation at the National Science Foundation Director's Site Visit, Columbia, South Carolina.

Zenger, J., & Thompson, S., (2005). *Inquiry-based Teaching- Theoretical Perspectives*. Presentation at the Diverse Pathways Teacher Quality Conference, Columbia, South Carolina.

Thompson, S., (2005). *Cross-Institutional Collaboration*. Presentation at the National Network for Educational Renewal Annual Conference, Myrtle Beach, South Carolina.

Thompson, S., & Virtue, D., (2005). *Inquiry in Middle/High School: Making Connections Explicit*. Presentation at the University of South Carolina Inquiry Expo.

Thompson, S., & Svec, M., (2003). *Graduate Student Forum on Getting That First University Job*. Presentation at the Southeast Association for the Education of Teachers of Science (SAETS) Annual Conference, Greenville, South Carolina.

#### Technical Reports:

Thompson, S. (2019). Department of Defense Education Activity, *Richland Two Military Connected STEM Mindset Annual Project Report*.

Thompson, S., (2016). Council for the Accreditation of Educator preparation (CAEP), *University of South Carolina Elementary Education Bachelor of Arts Accreditation Response to Conditions Report*.

Thompson, S., & Petrulis, R., (2016). South Carolina Commission on Higher Education: Instruction and Teacher Quality, *Nature-Based Inquiry Utilizing a STEAM Approach Final Project Report*.

Thompson, S., & Lewis, A., (2016), South Carolina Department of Education, *STEP (Science Teaching Enhancement Project) into the New Science Standards Final Project Report*.

Thompson, S., (2014). Council for the Accreditation of Educator preparation (CAEP), *University of South Carolina Elementary Education Bachelor of Arts Accreditation Report*.

Ely, B., & Thompson, S., (2014), South Carolina Commission on Higher Education, *Expanding Nature-Based Inquiry Opportunities in Elementary Science Education Final Project Report*.

Ely, B., & Thompson, S., (2013), South Carolina Commission on Higher Education, *Creating an Early Childhood Nature-Based Inquiry Model Final Project Report*.

Lotter, C., Thompson, S., & Dickenson, T., (2013), South Carolina Department of Education, Mathematics and Science Partnerships Program, *SIMPLE, Science Inquiry through Modeling Pedagogy, Content Learning, and Evaluation Final Project*.

Ely, B., & Thompson, S., (2012), South Carolina Commission on Higher Education, *Creating an Early Childhood Nature-Based Inquiry Model Final Project Report*.

Thompson, S. & Zenger, J., (2010). United States Department of Education, Division of Teacher Quality, 2010 Final Project report for Award # P336B040014 titled, *Diverse Pathways in Teacher Preparation: A Collaborative Approach for South Carolina 2- and 4-year Colleges*.

Donnelly, A., Vogler, K., & Thompson, S., (2009). Report to the National Council for Accreditation of Teacher Education titled, *Elementary Education Baccalaureate Accreditation Report*.

Thompson, S. & Zenger, J., (2009). Report to the South Carolina State Superintendent of Education titled, *Creation of Regional Technical to 4-year College Teacher Certification Pathways in South Carolina: A Collaborative Approach for Two- and Four-Year Colleges*

Thompson, S. & Zenger, J., (2009). United States Department of Education, Division of Teacher Quality, 2008 Annual Project Report for Award #, P336B040014 titled, *Diverse Pathways in Teacher Preparation: A Collaborative Approach for South Carolina 2- and 4-year Colleges*.

Lyons, J., & Thompson, S., (2009). South Carolina Commission on Higher Education, Centers of Excellence, *Center for Engineering and Computing Education Final Report*.

Thompson, S. & Zenger, J., (2008). United States Department of Education, Division of Teacher Quality, 2008 Annual Project Report for Award #, P336B040014 titled, *Diverse Pathways in Teacher Preparation: A Collaborative Approach for South Carolina 2- and 4-year Colleges*.

Lyons, J., & Thompson, S., (2007). South Carolina Commission on Higher Education, Centers of Excellence, *Fiscal Year 2006-2007 Center for Engineering and Computing Education Annual Project Report*.

Lyons, J., & Thompson, S., (2006). National Science Foundation, *Graduate Teaching Fellows Enhancing STEM Education in South Carolina Schools Annual Project Report*.

Lyons, J., & Thompson, S., (2006). South Carolina Commission on Higher Education, Centers of Excellence, *Fiscal Year 2005-2006 Center for Engineering and Computing Education Final Report*.

Lyons, J., & Thompson, S., (2005). National Science Foundation, *Graduate Teaching Fellows Enhancing STEM Education in South Carolina Schools Annual Project Report*.

Thompson, S., (2002) Evaluation of Tennessee Higher Education Commission Eisenhower Project titled, *Understanding Life: Strengthening Middle and High School Teachers' Background in Molecular Biology*.

#### Awards:

*University of South Carolina Exemplary Professional Development School Award to Killian Elementary School, University Liaison (2020)*

*University of South Carolina Presidential Coin of Achievement (2020)*

*USC Michael J. Mungo Undergraduate Teaching Award (2009)*

*USC College of Education Leonard Maiden Spirit of Service Award (2008)*

USC Office of Student Affairs *Recognition of Teaching Excellence* (2012, 2011, 2007, 2006, 2005, 2003)

USC Outstanding *Freshman Advocate Award* (2004)

USC *South Tower Academic Award for Teaching Excellence* (2004)

Honors:

The Dick and Tunkey Riley *What WorksSC Award for Excellence* (2012), Enhancing Diverse Pathways in Teacher Preparation, Semi-Finalist.

Association of Public Land-Grant Universities *W.K. Kellogg Foundation Engagement and Outreach Award* (2011), Enhancing Diverse Pathways in Teacher Preparation, University of South Carolina, Nominee.

Association of Public Land-Grant Universities *W.K. Kellogg Foundation Engagement and Outreach Award* (2010), Diverse Pathways in Teacher Preparation, University of South Carolina, Nominee.

Best Conference Paper (2010), *Measuring Change in Engineering and Science Graduate Students' Teaching Efficacy as a Result of Participation in a GK-12 Project*, American Society for Engineering Education (ASEE) Annual Conference, Nominee.

Reviewer:

*Journal of Science Teacher Education* (2015-present)

*International Journal of Engineering Education* (2009-present)

*Journal of Science Education and Technology* (2009-present)

*Urban Education* (2008)

Review Panels:

*Association for Science Teacher Education*, 2015-2018 Professional Development Committee Member

*Association for Science Teacher Education*, 2012-2014 Awards Committee Member

*Association for Science Teacher Education*, 2002-Present Conference Proposal Reviewer

*National Association for Research in Science Teaching*, Strand 1 (Science Learning, Understanding and Conceptual Change) and 7 (Pre-service Science Teacher Education), 2011.

*Investing in Innovation Grant Review Panel* - United States Department of Education, 2010.

*National Evaluation Series (NES) National Benchmark Conference* - Pearson Publishing, June, 2010, St. Louis, Missouri - Consultant

*Association for Science Teacher Education* - Southeast Conference Proposal Review Committee Chair 2008

*American Society for Engineering Education Annual Conference*, Emerging Trends Division, February, 2008/2007

*National Association for Research in Science Teaching*, Strand 2 Learning: Classroom Contexts, August, 2004.

*National Science Foundation*, Research on Learning and Education Program (ROLE) program, August 2 and 3, 2004.

*Palmetto Achievement Challenge Test (PACT) Test item analysis*, Science Assessment, June 2003.

*Alabama Power Foundation Inc.*, Educational Grant Program Reviewer, 2001/2002.

Current Professional Association Memberships:

National Association of Research in Science Teaching (NARST)

Association for Science Teacher Education (ASTE)

National Science Teachers Association (NSTA)