

FRANCES A. HAMILTON

frances.hamilton@uah.edu | 256-824-2973

DEGREES

Ed.D Assessment, Learning, and School Improvement Middle Tennessee State University, Murfreesboro, TN	2016
Ed. S. Curriculum and Instruction Middle Tennessee State University, Murfreesboro, TN	2013
M.A. Administration and Supervision Tennessee State University, Nashville, TN	2008
B.S. Education Athens State University, Athens, AL Areas of Concentration: Elementary Education and Early Childhood Education	1998

CERTIFICATIONS-STATE OF TENNESSEE

402 Elementary K-8 DOE 8/31/2032

497 PreK-4 DOE 8/31/2032

Highly Qualified in Middle School Science

ILL Administrator DOE 8/31/2029

RESEARCH INTERESTS

- Integration of Science with English Language Arts in primary grades
- Science literacy across grade levels
- Natural curiosities of young students in science
- Mentoring teachers through cognitive coaching
- Pre-service teachers' stages of lesson plan development

PUBLICATIONS AND PRESENTATIONS

PUBLICATIONS

Hamilton, F. A., & Austin, J. (in preparation). "Food Chains and Food Webs in Upper Elementary." *Science and Children*.

Hamilton, F.A., Smith, S. (in preparation). "Moon Phases and Eclipses Mini Unit." *Science and Children*.

Hamilton, F.A. (in preparation). "Exploring teacher candidates' knowledge about, and confidence levels in, creating lesson plans during internship."

Hamilton, F.A. (in preparation). "Exploring pre-service teachers' knowledge and confidence levels as they learn to write lesson plans."

Hamilton, F. A. (under revision) "From the Voices of Kindergarten Teachers: Factors That Impact Decisions about When and How to Teach Science." *School Science and Mathematics*.

Hamilton, F.A., Lampley, S., Skelley, D., Mahafza, H., Giles, A., & Hile, K. (book chapter proposal under review) "Modeling Belonging: Relationship-Centered Strategies in Teacher Education" in *Advancing the Educative Power of Student Belonging in Higher Education: Voices from College Classrooms*.

Hamilton, F.A., Skelley, D., & Lampley, S. (under review). Integrating Science with Language Arts Through Problem-Based Learning (PBL): Elementary Classroom Experiences. NSTA Book Press.

Hamilton, F.A., Jones, T., & Travis, A. (accepted). "Food Chains and Foods We Eat: We're Chewing on Food Chains!" *Science and Children*.

Hamilton, F. A., & Jones, B. (2026). Structures and Functions, Responses and Stimuli – Oh My! *Science and Children*, 63(2), 41–48. <https://doi.org/10.1080/00368148.2026.2620823>

Hamilton, F.A., & **Dyess, S. R.** (2026). Utilizing children's literature for relevant problem- solving contexts. *Mathematics Teacher: Learning and Teaching PK-12* (119) 5, 415-418. <https://doi.org/10.5951/MTLT.2025.0286>

Hamilton, F.A., & Lipham, K. (2025). Living and Nonliving Things: An Integrated Two-Day Lesson. *Science and Children*, 62(2), 75–81. <https://doi.org/10.1080/00368148.2025.2460233>

Hamilton, F. A., Skelley, D. L. (2023). Reading Ringside, 1925: Text Support for Teaching Evolution. Book chapter for *Exploring Science through Adolescent Literature*: Rowman and Littlefield. ISBN-13: 9781475866377.

Hamilton, F. A., Welch, K. (2022). Water in Our World: Working on a Pollution Solution. *Science and Children* (59) 4, 66-69. <https://www.nsta.org/science-and-children/science-and-children-marchapril-2022/working-pollution-solution>

Hamilton, F. A., Skelley, D. (2022). Creating Integrated Science and Language Arts Centers: Considering Ocean Literacy and the 5E Instructional Model. *Current: The Journal of Marine Education* (36) 1, 11-12. DOI: <http://doi.org/10.5334/cjme.67>

Hamilton, F. A., Hile, K. (2022). On Your Mark, Get Set, Explore! Promoting Outdoor Exploration for Early Learners Across Settings. *Journal of Outdoor and Environmental Education*. <https://doi.org/10.1007/s42322-022-00112-2>

Hamilton, F. A., Skelley, D., Hile, K. (2021). A Whole New World: PreK-12 Teachers' Perceptions of Instruction during a Pandemic. *Journal of Curriculum, Teaching, Learning and Leadership in Education* (6) 1. <https://digitalcommons.unomaha.edu/ctlle/vol6/iss1/2>

Hamilton, F.A., Hile, K., Skelley, D., Roller, S., & Lampley, S. (2021). Exploring Students' Perceptions of Collaboration and Critical Thinking Skills Following an Escape Room Experience. *The Journal of Campus Activities Practice & Scholarship* (3) 1, 5-16. <https://files.eric.ed.gov/fulltext/EJ1330751.pdf>

Hamilton, F.A. (2019). Factors That Impact Kindergarten Teachers' Decisions about Engaging Students' Natural Curiosities in Science Presented at Mid-South Educational Research Association Conference in New Orleans, LA. Paper proceedings.

Hamilton, F. A. (2007). The Evolution of a Teacher's Teaching of Evolution, https://gsa.confex.com/gsa/2007SE/finalprogram/abstract_119288.htm (Accession No. 119288) Paper in Proceedings of The Geological Society of America 56th annual meeting Southeastern Section, Savannah, GA

Crews, L., Gibson, M. & **Hamilton, F. A.** (2007). Infusion of Integrated Earth and Planetary Science Activities Into Middle School Curricula: A Selection of the Best Practices from the IMEGS Program, https://gsa.confex.com/gsa/2007SE/finalprogram/abstract_119140.htm (Accession no. 119140) Presentation from The Geological Society of America 56th annual meeting of Southeastern Section, Savannah, GA

PRESENTATIONS

Hamilton, F.A., & Lampley, S.A. (April, 2026). Over the Moon About Observable Patterns in Space. Presenting at the *National Science Teachers Association Conference* in Anaheim, CA.

Hamilton, F.A. (April, 2026). Living and Nonliving Things: An Integrated Two-Day Lesson. Invited presenter at the *National Science Teachers Association Conference* in Anaheim, CA.

Hamilton, F. A. & Lampley, S. A. (March, 2025). Integrating Science and Language Arts for Classroom Teachers and Higher Ed: Chewing on Ideas with Food Chains. Presented at *National Science Teachers Association Conference* in Philadelphia, PA.

Hamilton, F. A. (March, 2025). Integration Station: I'm Going to Eat You! Invited presenter at *National Science Teachers Association Conference* in Philadelphia, PA.

Hamilton, F. A. & Lampley, S. A. (March, 2024). Sense-making in the garden: Pairing science and literacy to help students make sense of their natural world. Presented at *National Science Teachers Association Conference* in Denver, CO.

Hamilton, F. A. (March, 2024). Integration Station: Exploring SEEDS in Science and Language Arts. Invited presenter at *National Science Teachers Association Conference* in Denver, CO.

Hamilton, F. A. (March, 2023). Integration Station: Exploring SEEDS in Science and Language Arts. Invited presenter at *National Science Teachers Association Conference* in Atlanta, GA.

Hamilton, F. A. (2022). Water in Our World: Working on a Pollution Solution. Invited presenter at *National Science Teachers Association Conference* in Chicago, IL.

Hamilton, F. A. (2022). Changes in Pre-service Teachers Knowledge and Confidence Levels when Learning to Write Lesson Plans. Presentation at the *8th International Conference on Education* in virtual setting.

Hamilton, F. A. (2021). Water in Our World: Working on a Pollution Solution. Presented at *Tennessee Science Teachers Association Conference* in Murfreesboro, TN.

Hamilton, F.A. (2020). From the Voices of Kindergarten Teachers: Factors That Impact Decisions about Teaching Science. Presented at *Mid-South Educational Research Association Conference* in virtual setting.

Hamilton, F. A. (2020). Needing "energy" to integrate science and language arts instruction? We're chewing on food chains and webs! Presented at the *Tennessee Science Teachers Association Conference* in virtual setting.

Hamilton, F. & Lampley, S. (2020). Needing "energy" to integrate science and language arts instruction? We're chewing on food chains and webs! Accepted for presentation at the *National Science Teachers Association Conference* in Boston, MA. Cancelled due to Covid-19.

Hamilton, F.A. (2019). Engaging the natural curiosities of children in the primary grades with science: What does the research say, and what are some effective strategies for teachers. Presented at the *National Association for the Education of Young Children Conference* in Nashville, TN.

Hamilton, F.A. (2019). Factors that impact kindergarten teachers' decisions about engaging students' natural curiosities in science. Presented at *Mid-South Educational Research Association Conference* in New Orleans, LA.

Hamilton, F.A. (2018). LEAP into language arts and science integration.

- Presented at *Alabama Literacy Association Conference* in Birmingham, AL.
- Hamilton, F.A.** (2018). LEAP into science and language arts instruction integration. Presented at *Alabama Science Teachers Association Conference* in Tuscaloosa, AL.
- Hamilton, F.A.** (2018). Improve science and language arts instruction through integration: We “shell” do just that! Presented at *Mid-South Reading and Writing Conference* in Birmingham, AL.
- Hamilton, F.A.** (2018). Improving science and language arts instruction through notebooking? We “shell” do just that! Presentation at National Science Teachers Association Conference, Atlanta, GA.
- Hamilton, F.A.** (2017). Integrating science with language arts: We “shell” do just that! Presented at *Alabama Reading Association Conference* in Birmingham, AL.
- Hamilton, F.** & Lampley, S. (2017). STEM-ulating students' natural curiosities through literature. Presented at the *National Science Teachers Association's STEM Forum* in Orlando, FL.
- Lampley, S. & **Hamilton, F.** (2017). Science practices using science, literature, and Yes, even diapers! Presented at the *National Science Teachers Association Conference* in Los Angeles, CA.
- Lampley, S. & **Hamilton, F.** (2017). The scientist's twist: Exploring science practices through questioning. Presented at the *Alabama Science Teachers Association Conference* in Birmingham, AL.
- Hamilton, F.A.** (2016). *Engaging the Natural Curiosities of Children in the Early Years*. Presentation at National Science Teachers Association Conference, Nashville, TN.
- Hamilton, F.A.**, Livingston, K., & Thompson, C. (2012). *Sea Shells*. Presentation at Tennessee Science Teachers Association Conference, Murfreesboro, TN.
- Hamilton, F.A.** & Anderson, T. (2012). *Bumping Up Beach Box: Secrets of a Sea Star and Parts of a Wave Foldables*. Presentation at Tennessee Science Teachers Association Conference, Murfreesboro, TN.
- Hamilton, F.A.**, Thompson, C. (2011). *Beach Box*. Presentation at Tennessee Science Teachers Association Conference, Murfreesboro, TN.
- Hamilton, F.A.** (2010). *Foldables*. Presentation at Tennessee Educators of Aquatic and Marine Science Spring Conference, Gatlinburg, TN.
- Hamilton, F.A.** (2010). *Interactive (and I do mean interactive) Notebooks*. Presentation at Lincoln County In-Service, Fayetteville, TN.
- Hamilton, F.A.** & Royle, P. (2009). *Teaching Evolution*. Invited speaker. Presentation at the 2008 (118th) annual meeting of the Tennessee Academy of Science, Nashville, TN.
- Byrne, B., Crews, L., & **Hamilton, F.A.**, et. al. (2008). *Tennessee Earth Science Teachers Lost in Space? We'll Help You Find Your Way*. Presentation at Tennessee Science Teachers Association Conference, Nashville, TN.
- Hamilton, F.A.** (2008). *Ocean Currents*. Presentation at Tennessee Science Teachers Association Conference, Nashville, TN.
- Hamilton, F.A.**, & Thompson, C. (2008). *Mini-Beach Box: Ocean Science for Grades K-8*. Presentation at Tennessee Science Teachers Association Conference, Nashville, TN.
- Hamilton, F.A.** (2008). *Caves!* Presentation at Tennessee Educators of Aquatic and Marine Science Spring Conference.

Chattanooga, TN.

Cox, B., Franks, R., & **Hamilton, F.A.** (2007). *IMEGS: Expanding Knowledge, Exercising Skills, Enhancing Confidence*
Poster presentation at National Marine Educators Association Conference, Portland, Maine.

Hamilton, F.A. & Livingston, K. (2007). A Watered-Down Topographic Map Grades 6-8. Presentation at Tennessee Educators of Aquatic and Marine Science Conference, Brandon Springs, TN.

Hamilton, F.A. (2007). Teaching Water Science Using Tubs. Presentation at Tennessee Educators of Aquatic and Marine Science Spring Conference, Brandon Springs, TN.

Forrester, T., **Hamilton, F.A.**, & Thompson, C. (2007). Beach Box: Ocean Science for Grades K-8. Presentation at Tennessee Science Teachers Association Conference, Nashville, TN.

Hamilton, F.A. (2006). Aquatic Science in a Tub Grades 6-8. Presentation at Tennessee Educators of Aquatic and Marine Science Conference, Gatlinburg, TN.

Hamilton, F.A. & McClain, L. (2006). Tennessee under the Sea 4-8. Presentation at Tennessee Science Teachers Association Conference, Nashville, TN.

GRANTS

Hile, K.A., **Hamilton, F.A.**, & Skelley, D.L. (2022, not funded). *Exploring quality indicators of a nationally recognized preschool program*. QSR Early Researchers Grant, funding \$25,000 over two years.

Hamilton, F. A. (2021, approved with stipend for student). 2021 Program for Research and Creative Experiences for Undergraduates. *Exploring Knowledge of and Confidence Levels of Pre-Admission Teacher Preparation Program Students (PTPPs) and Teacher Candidates in Internships (TCIs) During Lesson Plan Writing*.

Hamilton, F. A. (2020, not funded). 2020 Program for Research and Creative Experiences for Undergraduates Application. *Exploring Knowledge of and Confidence Levels of Pre-Admission Teacher Preparation Program Students (PTPPs) and Teacher Candidates in Internships (TCIs) During Lesson Plan Writing*.

Hamilton, F. A. (2019, not funded). UAH New Faculty Grant. *Exploring Pre-service Teachers' Knowledge and Confidence Levels as They Learn to Write Lesson Plans*-\$10,000.

Hamilton, F. A. (2018, not funded). UAH New Faculty Grant. *Integrating STEAM with Language Arts: The Effects on Instruction and Student Learning*. \$10,000.

Hamilton, F. A. (2018, not funded). Honda Grant. *Reading and Writing with STEM*. \$53,487.

Hamilton, F. A. (2018, not funded). State Farm Education Grant. *Using Science to Drive Language Arts Instruction: Effective Strategies the "Insure" Student Learning*. \$11,364.

Hamilton, F.A. NMEA Conference Scholarship Award (2012). National Marine Educators Association. Funded: \$500

Hamilton, F.A. TEA Space Grant (2009). Tennessee Educators Association Space Grant. Funded: \$1000

Hamilton, F.A. NMEA Conference Scholarship Award (2007). National Marine Educators Association. Funded: \$500

Hamilton, F.A. TEAMS Mini Grant (2007). Tennessee Educators of Aquatic and Marine Science. Funded: \$100

Hamilton, F.A. TEAMS Mini Grant (2006). Tennessee Educators of Aquatic and Marine Science. Funded: \$100

Hamilton, F.A. NREA Mini Grant (2002). National Rural Electric Cooperatives Association. Funded: \$500

EDUCATIONAL EXPERIENCE

Associate Professor
University of Alabama in Huntsville

2024-present

- EDC 311/511: Instructional Strategies
- ED 607: Education Leader as Evaluator
- ED 309/609 Classroom and Behavior Management
- ED 665: Differentiating Elementary Literacy (Reading and Writing) Instruction
- EDL 602: Collaborative Educational Leadership

Assistant Professor of Elementary Education**2017-2024**

University of Alabama in Huntsville

- ED 309/609 Classroom and Behavior Management (2023-present)
- EDC 311/511: Instructional Strategies (2017-current)
- ED 607: Education Leader as Evaluator (2017-current)
- ED 665: Differentiating Elementary Literacy (Reading and Writing) Instruction (2018-current)
- ED 371/671: Teaching Elementary Language Arts (2017-current)
- ED 410 Foundations Educator as Evaluator (2019)
- ED 402 Special Topics in Education (2017)
- ED 493: Elementary Internship (2018)

Coordinator of Field and Clinical Experiences**2014-2017**

University of Alabama in Huntsville

- Securing placements for students for field experiences and internships
- Supervising the internship portion of the teacher prep program
- Educating and coordinating edTPA process with interns and supervising teachers
- Evaluating program and placements with survey data collection

Lecturer**2014-2016**

Department of Curriculum and Instruction, University of Alabama in Huntsville

ED 371: Teaching Language Arts in the Elementary Classroom (Spring 2015, Spring 2016)
 ED 493: Elementary Internship (Spring 2016, Fall 2016)
 ED 309: Classroom Behavior and Management (Fall 2015)
 ED 532: Space Orientation for Teachers (Summer 2015, 2016, Fall 2015, 2016)
 SPA 532: Space Orientation for Educators (Summer 2015, Fall 2015, 2016)

Science Consultant**2013-2018**

Tennessee State Department of Education

- Trained kindergarten teachers on the new state science standards
- Led 12 science teachers in writing user guides for science units
- Member of the writing team for the new Tennessee State Science Standards
- Gave final approval on TCAP (state achievement tests) items, Biology and Chemistry end of course (EOC) items
- Created user guides for Institute for Learning units after they were purchased by the state department upon my recommendation
- Answered questions about science teaching from TNCore site
- Reviewed MSP (Mathematics and Science Partnership) Grants

Assistant Principal-Curriculum**2012-2014**

Ralph Askins Elementary School, Fayetteville, TN

- Mentored teachers and modeled lessons
- Provided professional development on Common Core English Language Arts/Literacy and Math, science standards (science for system)
- Reading Response to Intervention Team Leader
- Led curriculum mapping for ELA, including phonics instruction and reading strategies, math, science, and social studies
- Collaborated with both reading specialists to identify areas of student needs, specific instructional

strategies, and analysis of assessment data collected

- Collaborated with the district-wide reading consultant, specifically making her aware of school areas to strengthen in reading instruction and formulating an action plan
- Reviewed lesson plans in grades Pre-K-4
- Conducted teacher evaluations
- Testing Coordinator for benchmark testing and data analysis (school and system)
- An annex was added to the school (2013) in which I was the administrator maintaining the building, including monitoring instruction and discipline issues

Instructional Coach

2010-2012

Ralph Askins Elementary School, Fayetteville, TN

- Curriculum mapping of all subjects for Pre-K through grade 3
- Provided system-wide professional development on Common Core ELA and math, and science
- Mentored teachers through teacher evaluation process
- School Improvement Plan Chair-over the whole school (Pre-K-4)
- Testing Coordinator for building (TCAP, CRA, and benchmark), analyzed data

Middle School Science Teacher

2009-2010

Highland Rim Elementary School

- Planned instruction and analyzed data for grades 7-8

Middle School Science Teacher

2003-2009

Blanche School, Taft, TN

- Chair for the School Improvement Plan-over the whole school (Pre-K-8)
- Planned instruction, and analyzed data, as well as organized annual Rocket Day, bridge building competition, and science fair (also organized county science fair two years)
- Science Department Chair
- Assistant volleyball coach, academic team founder and coach, and LEO club sponsor.

Sixth Grade Teacher

1999-2003

Blanche School, Taft, TN

- Planned and taught ELA, Math, Science
- Trained in Gateway English Language Arts
- Trained in Reading Renaissance

Family Child Care Provider

1994-1996

Department of Defense, Redstone Arsenal, AL

- Cared for children ages 6 months-12 years
- Monthly training on childhood development ages 6 mos-12 years

Preschool Teacher

1991-1992

Department of Defense, Augsburg, Germany

- Preschool in my home, supervised by the Department of Defense Family Child Care Program
- Recognized as "Provider of the Quarter" twice. There were 50 FCC providers at the time and I was selected for the award because of the learning experiences I integrated into my program, including taking students to a German hospital, fire station, grocery store, library, etc. I had four groups of six children that came weekly
- Attended Association for Young Children in Europe Conference in Mannheim, Germany in 1991, 1992
- Trained in nutrition, safety, CPR/first aid, child abuse identification, and more.

RELATED EXPERIENCE

TDOE Science Summer Training Facilitator

Summer 2018

Tennessee State Department of Education

- Trained kindergarten teachers regarding the implementation of the new state science standards

Draft Review Team Leader for the State on Next Generation Science Standards

2011– 2014

Tennessee State Department of Education

- Collected data from state-wide surveys and compiled reports, along with Science Coordinator at the Tennessee Department of Education and submitted reports to Achieve. Traveled to California to meet with Achieve representatives.

Program Director

2006-2014

Tennessee Educators of Aquatic and Marine Science

- Planned annual spring conference (location, lodging, food, workshop presenters, etc.) and planned TEAMS sessions at annual Tennessee Science Teachers Association (TSTA) conference
- Scheduled 120 sessions with presenters from all over the world during our 2010 NMEA national conference in Gatlinburg
- Middle Tennessee representative from 2002-2005

Common Core Coach in Literacy-Science

2013-2014

TNCore/TN State Department

- Trained middle school science teachers across the state on common core state standards in science literacy

TCAP Item Reviewer for Pearson

2011-2014

TCAP Item Reviewer for McGraw Hill

2004

- Reviewed for TCAP (state achievement test) and MAAS (for students with accommodations) science grades 3-8

Quality Assurance Review Team Member

2011-2012

AdvancEd/Southern Association of Colleges and Schools

- AdvancEd (SACS) visits to schools in Tennessee. Reviewed mainly the Teaching and Learning component, but also data analysis and others

Contributor

2011-2012

Tennessee Curriculum Center (web site)

- Located and submitted resources for middle school science

Science Representative

2007-2008

Project Citizen Curriculum for Tennessee Department of Education

- Provided information and feedback regarding science aspects of the curriculum as it was designed and written

Master Teacher

2006

UTMartin IMEGS

- Took information given to participants by the professors and instructed how to use the information in the classroom, including teaching strategies, and integration of curriculum

Participant

2006-2009

Lincoln County Schools "So You Want to Be an Administrator" Program

- Enrolled in a three-year administrators' program through central office (hiring, budgets, payroll, much more)

AWARDS

Nominated for UAH University Distinguished Teaching Award

2023

National Association of GeoScience Teachers

Tennessee Outstanding Earth Science Teacher	2009
Tennessee Science Teachers Association Teacher of the Year Grades 5-8	2008
Blanche School Teacher of the Year	2004-2005
Lincoln County Middle School Teacher of the Year	2004-2005
Lincoln County Distinguished Classroom Educator (all grades)	2004-2005
Oceans Alive (took 3 students to sea-one of 8 teachers selected nation-wide)	2004
Sea Scholar (one of 13 chosen nation-wide to go to sea)	2000
One of 25 selected to travel to Biloxi, Mississippi for water studies	2000
Provider of the Quarter (for preschool program in Augsburg, Germany)	1991, 1992

SERVICE

Lunch and Learn Presentation for CESHS Faculty and Staff 2026

“What Is the Impact of Feedback from Professors to Teacher Candidates During Field Experience Teaching?”

Alabama State Department of Education Science Textbook Review Committee 2024

Reviewed textbooks and online programs for state adoption (not completed)

Developed Instructional Leadership Masters of Education program for UAH College of Education 2022-2024

- Created objectives and aligned standards for program and courses
- Created syllabi and schedules for courses
- Created assignments and rubrics for courses
- Created field experience activities/expectations for program
- Created comp exams for program
- Created recruitment materials and made recruitment presentations
- Created miscellaneous course documents (alignment guides, etc.)

Power Play Scholarship Award Selection Committee Member

One of 8 committee members from the seven-state region who selects scholarship awardees.

February-April 2020
February-April 2021
February-April 2022
February-April 2023
February-April 2024
February-April 2025
March-April 2026

Journal of Outdoor and Environmental Education Reviewer 2024

- OEEJ-D-23-00078 titled “Implementing Education for Sustainability in Preschool: Teaching Strategies and Learning Environments” for the Journal of Outdoor and Environmental Education

Science Scope Reviewer 2026

- 2026-Feb-SCOPE-R-2205 titled “Parachutes and Paracaidas: Engaging Families in Physical Science Inquiry”

NSTA Conference Proposal Reviewer Anaheim 2026

- 10 Reviews: Certificate for 200 minutes

Science Scope Reviewer 2025

- 2025-Oct-SCOPE-R-2186 titled “Bridging Science and Technology: Enhancing Secondary Earth & Space Education with NASA Resources”
- 2025-Jan-SCOPE-R-2127.R1 titled "From Climate Hazard Data to Adaptation Solution Design: A Lesson Guide to Empower Students to Analyze, Interpret,

and Address Local Climate Hazards"

- 2025-Jan-SCOPE-R-2127 titled "From Climate Hazard Data to Adaptation Solution Design: A Lesson Guide to Empower Students to Analyze, Interpret, and Address Local Climate Hazards"

The Compass (National Honor Society for Earth Sciences) Reviewer

2024

- The History of the Tennessee Earth Science Teachers (TEST)
- The journey to inquiry in Tennessee: how to get there from anywhere? Lessons learned over 25 years.

Science Scope Reviewer

- 2024-Jan-SCOPE- LttE-2031.R2 titled "Exploring the Intersections of Engineering and Technology: Tinkercad in the Middle School Classroom"
- 2024-Jan-SCOPE- LttE-2031.R1 titled "Exploring the Intersections of Engineering and Technology: Tinkercad in the Middle School Classroom"
- 2024-Jan-SCOPE- LttE-2031. titled "Exploring the Intersections of STEM: Tinkercad in the Middle School Classroom"

NSTA Conference Proposal Reviewer Kansas City

2023

- 4 Reviews: Certificate for 80 minutes
- Adding an Innovations Class to Your Elementary School
- Incorporating the Engineering Design Process in the Elementary Grades
Elementary Instruction: Now STREAMing
- Creating a Sustainably Integrated Pedagogy using STEM, Social Studies, ELA

Science Scope Reviewer

2023

- 2023-Apr-SCOPE-F-1951 titled "Going Paperless: How Digital Science Notebooks Are Changing the Future of Science Education and Language Learning"

Science Scope Reviewer

2022

- 2022-Feb-SCOPE-F-1864.R1 titled "How to Scaffold Explanations and Arguments: Supporting Students as They Make Sense of Phenomena"
- 2022-May-SCOPE-F-1881 titled "What is in our air? An inquiry lab exploring sources of air pollution in your community"
- 2022-May-SCOPE-F-1881 R1 titled "What is in our air? An inquiry lab exploring sources of air pollution in your community"

Presenter for Madison City Schools

Integrating Science with Language Arts: Seeds, Worms, Ducks, and More
Water In Our World: Working on a Pollution Solution

Summer 2022

Summer 2022

NSTA Conference Proposal Reviewer, Chicago

2022

- Teaching Science as Sensemaking
- Science + Engineering + Math=Parachute STEM Activity
- RAM (Rubric for Assessing Modeling)

Science Scope Reviewer

2021

- ID 2021-Jan-SCOPE-IT-1766.R2 titled "Utilizing Technology to DiALoG Classroom Speaking and Listening"
- ID 2021-Jan-SCOPE-IT-1766.R1 titled "Utilizing Technology to DiALoG Classroom Speaking and Listening"
- ID 2021-Jan-SCOPE-F-1761 titled "Sustaining Change After the Workshop: Strategies for the Individual Teacher to Make All PD Opportunities Impactful on Their Instructional Practice"

Science Scope Reviewer	2020
ID 2020-Apr-SCOPE-TT-1701 titled "Generating STEM solutions to a real-world problem: Challenges and promises"	
Science Scope Reviewer	2019
- ID 2019-Dec-SCOPE-F-1667 titled "Performance Assessments for NGSS-Lessons from the [blinded] Project" - ID 2019-Aug-SCOPE-CL-1635 titled "Egg Drop 2.0" - ID 2019-Mar-SCOPE-F-1575.R1 titled "Arts-Integration to Explore Climate Change" - ID 2019-Jan-SCOPE-IT-1558 titled "Sphero Robots and the Periodic Table"	
Science Scope Reviewer	2018
ID 2018-Nov-SCOPE-F-1538 titled "Searching for Oil: Concepts, methods and societal issues involved with petroleum exploration"	
Science Scope Reviewer	2018
- Reviewed manuscript ID 2018-Jul-SCOPE-F-1475.R1 entitled "How to Design a Performance Task" - Reviewed manuscript ID 2018-Jul-SCOPE-F-1475.R2 entitled "How to Design a Performance Task" - Reviewed manuscript ID 2018-Jul-SCOPE-F-1475.R3 entitled "How to Design a Performance Task"	
The Journal of General Education Reviewer	2018
Reviewed manuscript JGE-D-18-00022, titled "Academic Specialization, Double Majoring, and the Threat to Breadth in Academic Knowledge"	
Kappa Delta Pi Psi Pi Chapter Sponsor	2018-present
National Science Teachers Association	2017
Conference Proposals Reviewer for 2018 National Conference in Atlanta	
edTPA Professional Training for COE Faculty	2017
Careers Class Speaker at Sparkman High School	2016
Science Literacy Demystified Workshop for UAH Students	2016
Speaker, J.O. Johnson High School Teacher Summit	2015
Science Fair Judge Hazel Green Elementary	2015- 2017
Science Fair Judge Challenge Elementary	2019-2020
Tennessee Education Association	
- Representative Assembly - Representative	2000-2003 2005, 2007-2009
Kappa Delta Pi-Rho Gamma Chapter	
- Historian - President (ACE Award Winner)	2000 1999

MEMBERSHIPS

Kappa Delta Pi (KDP)	Enrolled 1999
Tennessee Educators of Aquatic and Marine Science (TEAMS)	2000
Tennessee Earth Science Teachers (TEST)	2001
Tennessee Science Teachers Association (TSTA)	1999
National Marine Educators Association (NMEA)	2005
National Science Teachers Association (NSTA)	2005
Tennessee Academy of Science (TAS)	2008
Geological Society of America (GSA)	2007
Association of Teacher Educations (ATE)	
Alabama Reading Association (ARA)	2017
Alabama Science Teachers Association (ASTA)	2017
National Association for the Education of Young Children (NAEYC)	2019
Mid-South Educational Research Association (MSERA)	2019