# CAROL C. WATERS, ED.D.

Assistant Professor, STEM Education University of Houston-Clear Lake 2700 Bay Area Blvd., Houston, TX 77058 watersc@uhcl.edu

# **EDUCATION**

Ed.D.	Curriculum & Instruction University of Houston-Clear Lake, Houston, TX Specializations: STEM and Science Education	2019
M.S.T.	Physics & Astronomy Rice University, Houston, TX Specializations: Physics, Astronomy, & Geology Education	2011
B.S.	Exercise & Health Sciences University of Houston-Clear Lake, Houston, TX Specializations: Exercise Physiology and Health Promotion	1998
<b>A.A.</b>	Social Sciences San Jacinto College, Pasadena, TX	1997
CERTIFICA	ATES AND LICENSURES	
STEM Teach	er National Certification: National Institute for STEM Education	2020
Texas Educar	tor Certification: Generalist 4-8	2003
PROFESSIO	ONAL EXPERIENCE	
HIGHER EDU	CATION	
	OF EDUCATION, THE UNIVERSITY OF HOUSTON—CLEAR LAKE, HOUSTON ant Professor, STEM Education	v, <i>TX</i> 2021 - Present
	OF EDUCATION, THE UNIVERSITY OF HOUSTON—CLEAR LAKE, HOUSTON ct Professor	v, <b>TX</b> 2020 - 2021
	OF EDUCATION, THE UNIVERSITY OF TEXAS AT ARLINGTON, ARLINGTON ct Professor	7, <b>TX</b> 2020 - 2021
SECONDARY I	EDUCATION	
PASADENA	A INDEPENDENT SCHOOL DISTRICT	
SCIEN	CE CAMPUS CONTENT COACH & CURRICULUM WRITER	2019 - 2021
Inter	MEDIATE SCIENCE EDUCATOR, MENTOR, & CURRICULUM WRITER	2001 - 2019
EDUCATION A	AND PUBLIC ENGAGEMENT	
LUNAR AN	D PLANETARY INSTITUTE, CLEAR LAKE	

**EDUCATION SPECIALIST** 

**SUMMER 2017** 

### **COURSES TAUGHT AT UHCL**

#### Graduate

EDCI 7431: Learning & Cognition in STEM Education

EDCI 7138: Curriculum Design in STEM

EDCI 7939: Doctoral Independent Study in Curriculum and Instruction

#### **Masters**

TCED 5130: Models of Teaching

TCED 5134: Intro to Models of Teaching

# <u>Undergraduate</u>

TCED 4303: Creating Positive Learning Environments EC-6

TCED 4322: Science Methods for EC-6

TCED 4391: Selected Topics in Teaching

# **COURSES TAUGHT AT OTHER UNIVERSITIES**

#### Graduate

EDUC 5314: Effective Classroom Instruction

SCED 5354: Water Properties, Distribution, The Water Cycle, & Weather

### SCHOLARLY PUBLICATIONS

Waters, C. C. (2024). Cultivating a STEM-driven school culture: A librarian's journey. *School Libraries Worldwide*, 29(2), 19-38. https://doi.org/10.29173/slw8780

Waters, C. C. (2022). Exploring effective practices of an elementary STEM block program. *Journal of Research in Science, Mathematics and Technology Education*, *5*(3), 195-225. https://doi.org/10.31756/jrsmte.532

Waters, C. C. & Orange, A. (2022). STEM-driven school culture: Pillars of a transformative STEM approach. *Journal of Pedagogical Research*, 6(2). 72-90. https://dx.doi.org/10.33902/JPR.202213550

Waters, C. C. (2018). *Exploring K-5 STEM educators' perceptions of a successful elementary school*. (Publication No. 0000-0001-9962-7679) [Doctoral dissertation, University of Houston-Clear Lake]. Texas Digital Library.

### **TECHNICAL REPORTS**

Peters, M., & Waters, C. (2024). *Program evaluation of the Island Style program:* 2023-2024. Galveston, TX: Artist Boat.

- Peters, M., & Waters, C. (2024). *Program evaluation of the Eco-Art Residency program:* 2023-2024. Galveston, TX: Artist Boat.
- Waters, C. (2024). Center for Faculty Development grant report: Improving your Mentor Network by attending National Association for Research in Science Teaching (NARST) Conference: 2024. Houston, TX: University of Houston-Clear Lake.
- Waters, C. (2024). Center for Educational Transformation grant report: YOU Belong in STEM: Transformative practices for your STEM Classroom: 2023. Houston, TX: University of Houston-Clear Lake.
- Waters, C. (2022). ee360 grant report: Using environmental education to increase pre-service teachers' self-efficacy of science and differentiation: 2021–2022. Washington, DC: Association of Fish & Wildlife Agencies.

### **GRANTS**

- Waters, C. & Wilhelm, C. (2024). Bay to Schools. Galveston Bay Estuary Program. Award Amount = \$107,937. (Research Personnel)
- Waters, C. (2023). Improving your mentoring network. Center for Faculty Development Fund Proposal. University of Houston-Clear Lake. Award Amount = \$1,000.
- Bolden-Gastile, T. & Waters, C. (2023). YOU belong in STEM: Transformative practices for your STEM classroom. Center for Educational Transformation Grant. University of Houston-Clear Lake. Award Amount = \$1,581.01. (Co-Principal Investigator)
- Waters, C. (2021-2022). Using environmental education to increase pre-service teachers' self-efficacy of science and differentiation. Association of Fish & Wildlife Agencies. Award Amount = \$2,991.00 (Principal Investigator)

### **PRESENTATIONS**

# **INTERNATIONAL CONFERENCES**

- Wilem, C. & Waters, C. (2024, November). Bay to Schools: Building bridges between formal and nonformal education. North American Association for Environmental Educators Conference. Workshop. Pittsburgh, PA.
- **Waters, C.** (2024, March). Integrated STEM in elementary schools: Critical aspects to consider. National Association for Research in Science Teaching International Conference. Paper session. Denver, CO.

- **Waters, C.** & Curtis, M. (2024, March). The STEM continuum: Understanding female perceptions. National Association for Research in Science Teaching International Conference. Paper session. Denver, CO.
- **Waters, C.** (2024, March). Perceptions of a librarian: A case study examining the role of a librarian's journey cultivating a STEM-driven school culture. National Association for Research in Science Teaching International Conference. Invited panelists for the Basu Symposium. Denver, CO.
- **Waters, C**. (2024, January). STEM in elementary: Exploring effective practices. Association for Science Teacher Education International Conference. Paper session. New Orleans, Louisiana.
- Curtis, M. & Waters, C. (2024). GIS aces: GIS active classroom exploration for science. Association for Science Teacher Education International Conference. Workshop. New Orleans, Louisiana.
- Waters, C. & Peters, M. (2024, January). Fostering teachers' and students' climate change awareness. Association for Science Teacher Education International Conference. Paper session. New Orleans, Louisiana.
- Waters, C. & Peters, M. (2023, April). Cultivating climate change awareness: Increasing knowledge and changing attitudes. National Association for Research in Science Teaching International Conference. Paper session. Chicago, IL.
- Curtis, M., & Waters, C. (2023, April). Female perceptions of STEM: Reflecting on why they matter. National Association for Research in Science Teaching International Conference. Paper session. Chicago, IL.
- Curtis, M., Waters, C., & Sparks, D. (2023, January). Females in higher education: A comparison of perspectives and mainstream definitions of STEM. Association for Science Teacher Education International Conference. Paper session. Salt Lake City, UT.

#### NATIONAL CONFERENCES

- Peters, M., Waters, C., & Corrales, A. (2023, April). Climate change: Increasing knowledge and changing attitudes. Paper presented at the annual meeting of the American Educational Research Association (AERA), Chicago, IL.
- Waters, C. & Curtis, M. (2022, March). To STEM or not to STEM: Exploring Female Perceptions on STEM. National Science Teaching Association National Conference. Houston, TX.
- Waters, C. & Garelli, R. (2022, March). Effective discourse strategies for creating inclusive classrooms. National Science Teaching Association National Conference. Houston, TX.
- Waters, C. (2018, March). STEM: A defining situation. National Science Teachers Association National Conference. Atlanta, GA.

- Shupla, C., **Waters, C**., & Grout, J. (2016, July). Heating things up: Using CER with seasonal data. National Science Teachers Association STEM Forum & Expo. Denver, CO.
- Shupla, C., **Waters**, C., & Grout, J. (2016, July). Looking at light: Analyzing reflectance spectra. National Science Teachers Association STEM Forum & Expo. Denver, CO.
- Lopez, T., Hickman, D., Russell, G., & Waters, C. (2014, April). National Excellence in Urban Schools Transformation Symposium. National Center for Urban School Transformation. San Diego, CA.

### REGIONAL/MULTI-STATE CONFERENCES

- Waters, C. & Curtis, M. (2024, October). A data visualization experience (ADVizE) for preservice teachers: Applications in EC-6 science and social studies methods courses.
  Southwest Association of Science Teacher Educators Regional Conference. Denton, TX.
- Waters, C. & Curtis, M. (2024, February). Listening to female's voice: A reflection of the perceptions of STEM. Southwest Educational Research Association Annual Meeting. San Antonio, TX.
- **Waters, C.** (2023, October). Thinking through design solutions on engineering systems. Southwest Association for Science Teacher Education Regional Conference. Paper session. Houston, TX.
- **Curtis, M.D.** & Waters, C. (2023, October). Hack the map! Equipping science teachers to develop personalized instructional resources. Southwest Region Association for Science Teacher Education Regional Meeting. Houston, TX.
- Waters, C. (2022, October). Pre-service science teachers gone WILD: Differentiating instruction. Southwest Association for Science Teacher Education Regional Conference. Paper session. San Marcos, TX.
- Curtis, M. & Waters, C. (2022, October). GeoInquiries: An online GIS activity bridging STEM and social studies in elementary schools. Southwest Association for Science Teacher Education Regional Conference. Workshop. San Marcos, TX.
- Peters, M. & Waters, C. (2022, October). Turning the T.I.D.E. on climate change: Exploring the impact of an environmental education program. Southwest Association for Science Teacher Education Regional Conference. Paper presentation. San Marcos, TX.
- **Waters, C.** (2022, February). Impact of school leadership on developing a STEM-driven school culture. Southwest Educational Research Association Regional Conference. Paper presentation. New Orleans, LA.
- Curtis, M. & Waters, C. (2022, February). GeoInquiries: An online GIS activity bridging STEM and social studies in elementary schools. Southwest Educational Research Association Regional Conference. Paper presentation. New Orleans, LA.
- **Waters, C.** (2021, February). Foundations of a successful STEM school. Southwest Educational Research Association Virtual Conference. Paper presentation.

- Curtis, M. & Waters, C. (2021, February). The 2020 STEMulus is here! Cross-curricular teaching STEM and social studies education. Southwest Educational Research Association Virtual Conference. Paper presentation.
- Shupla, C., **Waters**, C., & Colston, W. (2016, October). Moon mania: Modeling lunar phases. National Science Teachers Association Area Conference. Minneapolis, MN.
- Shupla, C., **Waters**, C., & Colston, W. (2016, October). Seasons in the Sun. National Science Teachers Association Area Conference. Minneapolis, MN.

#### STATE AND LOCAL CONFERENCES

- Curtis, M. & Waters, C. (2024, December). GeoInquires: Using GIS to Increase Girls' Sense of Belonging. Texas Women & Girls in STEM Summit. Virtual.
- Waters, C. & Curtis, M. (2023, December). Women in STEM: Should their perceptions be considered? Texas Women & Girls in STEM Summit. Virtual.
- **Waters, C.** (2023, November). Are you up for the challenge? Conference for the Advancement of Science Teaching. Houston, TX.
- Deslaurier, L., Pinto, L., & Waters, C. (2023, November). Hands-on learning with engineering design challenges. Conference for the Advancement of Science Teaching. Houston, TX.
- Deslaurier, L., Hopkins, A., & Waters, C. (2023, November). Unlocking the magic of scientific literacy. Conference for the Advancement of Science Teaching. Houston, TX.
- Duncan, O. & Waters, C. (2023, November). TSELA presents: Raising the recruitment bar—retention strategies for highly qualified science leaders. Conference for the Advancement of Science Teaching. Houston, TX.
- **Waters**, C. (2022, March). Is a STEM-driven school culture good for all elementary students? UHCL Greater Houston Area STEM Conference. Houston, TX.
- Waters, C. (2022, March). Women in STEM. UHCL Greater Houston Area STEM Conference. Houston, TX.
- Waters, C. (2021, March). Leadership and culture: Fostering a STEM-driven growth mindset. UHCL Greater Houston Area Virtual STEM Conference. Houston, TX.
- Curtis, M. & Waters, C. (2021, March). STEMming future social studies education. UHCL Greater Houston Area Virtual STEM Conference. Houston, TX.
- **Waters, C.** (2020, February). Creating a successful STEM elementary school. Texas STEM Conference. Austin, TX.
- **Waters, C.** (2019, June). Key Components of a successful STEM elementary school. Texas Association of Teacher Educators Conference. Austin, TX.
- Curtis, M. & Waters, C. (2019, June). STEMmulating Interest in Social Studies Education. Texas Association of Teacher Educators Conference. Austin, TX.
- Waters, C. (2019, March). Exploring a Successful STEM Elementary School. UHCL Greater Houston Area STEM Conference. Houston, TX.

- Shupla, C. & Waters, C. (2015, February). Looking at the Light Spectra in the Science Classroom. Texas STEM Conference. Galveston, TX
- Shupla, C., **Waters, C.**, & Grout J. (2013, November). TESTA Presents-Components of the Universe. Conference of Association of Science Teachers. Houston, TX
- Waters, C., Grout, J., & Ruggeri, A. (2013, November). I Feel the Earth Move Under my Feet. Conference of Association of Science Teachers. Houston, TX
- **Waters, C.** (2011, July). Geophysical investigation of an abandoned cemetery. Prairie View A&M University. Prairie View, TX.
- Waters, C. & Grout, J. (2009, November). Plate Tectonics. Conference of Association of Science Teachers. Houston, TX

# WORKSHOPS/IN-SERVICE PRESENTATIONS

- **Waters,** C. & Gastile, T. (2023, November). YOU belong in STEM workshop for preservice teachers. UHCL Student Teacher Development.
- Weiser, B. & Waters, C. (2022, March). Aquatic WILD. Houston, TX. UHCL Student Teacher Development.
- Weiser, B. & Waters, C. (2021, October). Aquatic WILD. Houston, TX. UHCL Student Teacher Development.

### K-12 TEACHER TRAINING WORKSHOPS CONDUCTED

- Waters, C. & Yoes, H. (2020). Earth Story backward planning. Fall Regional Convening. Pasadena, TX.
- Yoes, H. & Waters, C. (2020). Calibrating Playing with Forces. Fall Regional Convening. Pasadena, TX.
- Waters, C. & Price, L. (2019). Writing in science. Spring Regional Convening. Pasadena, TX.
- **Waters, C.** & Shupla, C. (2017). Lunar Exploration Summer Intern Program. Lunar and Planetary Institute. Clear Lake, TX.
- Waters, C. (2017). Quintile reports. Thompson Intermediate. Houston, TX.
- **Waters, C**. (2016). Heating things up: Using CER with seasonal data. Pasadena ISD Science Focus. Pasadena, TX.
- Waters, C. & Martinez, P. (2016). Motion Graphs. Pasadena ISD Science Focus. Pasadena, TX.
- Shupla, C. & Waters, C. (2015). Moon Mania: Lunar Phases. Lunar and Planetary Institute. Clear Lake, TX.
- Shupla, C. & Waters, C. (2015). Let's Talk Tides. Lunar and Planetary Institute. Clear Lake, TX.

- Shupla, C. & Waters, C. (2015). Topography and Satellite Images. Lunar and Planetary Institute. Clear Lake, TX.
- Shupla, C. & Waters, C. (2015). Seasons. Lunar and Planetary Institute. Clear Lake, TX.
- Shupla, C. & Waters, C. (2015). Characteristics of the Universe. Lunar and Planetary Institute. Clear Lake, TX.
- Shupla, C. & Waters, C. (2015). Characteristics of the Universe: Stars and Galaxies. Harris County Department of Education Science Center. 1-Day training for 8<sup>th</sup> grade science teachers provided by the Lunar and Planetary Institute and Harris County Department of Education. Houston, TX.
- Shupla, C. & Waters, C. (2015). Moon Mania: Lunar Phases and Tides. Harris County Department of Education Science Center. 1-Day training for 8<sup>th</sup> grade science teachers provided by the Lunar and Planetary Institute and Harris County Department of Education. Houston, TX.
- Waters, C. (2015). Moon Mania: Lunar Phases. Pasadena ISD Science Focus. San Jacinto Intermediate.
- Waters, C. (2015). Discovering Plate Boundaries. Beverly Hills Intermediate. Houston, TX.
- **Waters, C.** & Shupla, C. (2014). Plate Tectonics. Harris County Department of Education Science Center. 1-Day training for 8<sup>th</sup> grade science teachers provided by the Lunar and Planetary Institute and Harris County Department of Education. Houston, TX.
- **Waters, C.** (2013). Digital Scrapbooking for Students. Thompson Intermediate. Houston, TX.
- Waters, C. (2012). Wacky Word Walls that Work. Thompson Intermediate. Houston, TX.
- Waters, C. (2010). CAST Potpourri Sharing Session for Science. Pasadena ISD. Pasadena, TX

#### INVITED GUEST SPEAKER

- **Waters, C.** (2024, April). Are you up for the Challenge? The University of Houston-Clear Lake. Invited by the UHCL STEP Program, Dean Joan Pedro, and Dr. Mary Curtis.
- Waters, C. (2024, April). USA Professional Development UHCL Superstar LinkedIn Training. The University of Houston-Clear Lake. Invited by Lisa Hudson.
- **Waters, C.** (2020). Data-driven differentiation. The University of Texas Arlington. Invited by Dr. Mary Curtis and Brenda Harris.
- **Waters, C.** (2019). STEM and project-based learning. The University of Houston-Clear Lake. Invited by Dr. Sandy Watson.
- **Waters, C.** (2019). UHCL Common Reader Program. Big Reveal and Student Panel. Invited by Dr. Anne Gessler.

https://www.uhclthesignal.com/wordpress/2019/05/13/common-reader-program-reveals-new-book-for-2019-2020/

**Waters, C.** (2018). The Super S's: Inspiring and motivating girls in the Social Sciences and STEM. Texas Council for Social Studies. Pasadena, TX. Invited by Dr. Anita Lewis and Sandy Curtis.

**Waters, C**. (2015). STEM Seminar: How can intermediate school females be inspired & motivated to pursue a STEM career? University of Houston-Clear Lake. Invited by Dr. Sue Brown.

# AWARDS AND ACCOMPLISHMENTS

UHCL LinkedIn Superstar	2024
Early Career Faculty Award, UHCL Center for Faculty Development	2024
NSTA Professional Learning in Science Education Committee Nomination	2023
JASON Learning Argonaut Alumni Spotlight	2023
Jhumki Basu Fellow, National Association for Research in Science Teachin	g 2023
Outstanding Masters Alumnus Award, Rice University	2022
Teacher of the Year, Rice University Athletics	2019
Shining Stars Distinguished Educator Award, Pasadena ISD	2018
JASON Teacher Argonaut for Pasadena ISD	2015
Space Camp Educator for Pasadena ISD	2010
National Middle School Aerospace Scholars (NaMAS) Mentor	2007
National Middle School Aerospace Scholar	2005-2006

# **SERVICE**

# **Service within the Institution**

# **University of Houston-Clear Lake**

FSSC Environmental Health and Safety Subcommittee	2024
MAT Program Coordinator	2023 - present
Teacher Education Advisory Committee (TEAC)	2023 - present
STEM Initiative Coordinator	2023 - present

EDCI Admissions Committee	2023 - present
EDCI Executive Committee	2022 - present
Mossman Dissertation Award Committee	2022 - 2023
Minnie Piper Teaching Award Committee	2023
STEM Conference Exhibitor Subcommittee Chair	2022
UHCL Elections Committee	2022 - 2023
STEM Conference Steering Committee	2021 - 2022
EDCI Comps Review Committee	2021 - present
7-12 Composite Science Committee	2021 - present
Middle School Pipeline Committee	2021 - present
UHCL EduSmart Admin Manager	2021 - present
EDCI Advisory Committee	2015 - 2020

#### **Dissertation Committee Content Member**

Kacie Cooper. (2024). A study of factors that affect the mathematics teaching efficacy of early childhood educators.

Kelly Ray Duff. (2023). The impact of teacher fidelity in implementing the Sheltered Instruction Observation Protocol (SIOP) on student achievement in science and on levels of English language acquisition.

### **Service to the Profession**

### **International Professional Organizations**

National Association of Research in Science Teaching (NARST) Social Media, Website and Communications Committee. (2025).

National Association of Research in Science Teaching (NARST) Equity and Ethics Committee Volunteer. (2024-present).

National Association of Research in Science Teaching (NARST) Equity and Ethics Jhumki Basu Scholar Award Sub-Committee Volunteer. (2024-present).

Strand 6 – Science Learning in Informal Contexts. (2024). *National Association of Research in Science Teaching (NARST)* Annual International Conference, Washington, DC, March 23-26, 2025. (Proposal reviewer.)

Strand 3 – Science Teaching – Primary School (Grades preK-6): Characteristics and Strategies. (2023). *National Association of Research in Science Teaching (NARST)* Annual International Conference, Denver, Colorado, March 17-20, 2024. (Proposal reviewer.)

STEM Education Thread. (2023). Association of Science Teacher Education (ASTE) International Conference. New Orleans, Louisiana, January 10-13, 2024. (Proposal reviewer.)

Strand 3 – Science Teaching – Primary School (Grades preK-6): Characteristics and Strategies. (2022). *National Association of Research in Science Teaching (NARST)* Annual International Conference, Chicago, IL, April 18-21, 2023. (Proposal reviewer.)

STEM Education Thread. (2022). Association of Science Teacher Education (ASTE) International Conference. Salt Lake City, Utah, January 11-14, 2023. (Proposal reviewer.)

STEM Education Strand. (2022). Association for Science Teacher Education (ASTE) International Conference. Chicago, IL, January 11-14, 2023. (Proposal reviewer.)

Journal of Pedagogical Research. (2021). Peer-reviewed international scientific journal that publishes articles on any area of education. (Reviewer)

Strand 3 – Science Teaching – Primary School (Grades preK-6): Characteristics and Strategies. (2021). *National Association of Research in Science Teaching (NARST)* Annual International Conference, Vancouver, Canada, March 27-30, 2022. (Proposal reviewer.)

Strand 4 – Science Teaching – Middle and High School (Grades 5-12): Characteristics and Strategies. (2021). *National Association of Research in Science Teaching (NARST)* Annual International Conference, Vancouver, Canada, March 27-30, 2022. (Proposal reviewer.)

Strand 7 – Pre-service Science Teacher Education. (2021). *National Association of Research in Science Teaching (NARST)* Annual International Conference, Vancouver, Canada, March 27-30, 2022. (Proposal reviewer.)

### **National Professional Organizations**

Assessment Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

Biology Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

Chemistry Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

General Science Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

Leadership Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

Life Science Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

Literacy Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

Physical Science Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

Sensemaking Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

STEM Strand. (2024). National Science Teaching Association (NSTA) National Conference, Philidelphia, PA. March 26-29, 2025. (Proposal reviewer.)

School Science and Mathematics. (2024). Peer-reviewed international journal that publishes research on issues, concerns, and lessons within and between the disciplines of science and mathematics in the classroom.

School Science and Mathematics. (2023). Peer-reviewed international journal that publishes research on issues, concerns, and lessons within and between the disciplines of science and mathematics in the classroom.

Connected Science Learning. (2022). National Science Teaching Association's peer-reviewed practitioner journal for highlighting STEM education experiences that bridge the gap between inschool and out-of-school settings. (Reviewer.)

JASON Learning. (2021). Teacher Advisory Council Member.

Journal of STEM Education: Innovations and Research. (2022). Peer-reviewed journal that aims to promote high-quality education at all levels in science, mathematics, engineering, and technology through articles that provide information that is well-founded in STEM content. (Reviewer)

*Journal of STEM Education: Innovations and Research.* (2021). Peer-reviewed journal that aims to promote high-quality education at all levels in science, mathematics, engineering, and technology through articles that provide information that is well-founded in STEM content. (Reviewer)

Science Scope. (2022). National Science Teaching Association (NSTA)'s peer-reviewed practitioner journal for middle level and junior high school science teachers. (Reviewer)

### **Regional/Multi-State Professional Organizations**

Southwest Educational Research Association (SERA) Board Member-at-Large. (2023-2025).

2024 Texas Women and Girls in STEM Summit (virtual) Session Facilitator. (2024, December). Texas Girls Collaborative Project.

Texas Girls Collaborative Project Champions Board Member. (2024).

Division IV – Teacher & Teacher Education. (2023). *Southwest Educational Research Association (SERA) Annual Meeting*, Arlington, TX, Feb. 2024. (Division VI Discussant)

Division IV – Teacher & Teacher Education. (2023). *Southwest Educational Research Association (SERA) Annual Meeting*, Arlington, TX, Feb. 2024. (Reviewed submitted proposals)

Division VI – Graduate Student Seminars for Work in Progress. (2023). *Southwest Educational Research Association (SERA) Annual Meeting*, San Antonio, TX, Feb. 2023. (Division VI Discussant)

Division VI – Graduate Student Seminars for Work in Progress. (2022). *Southwest Educational Research Association (SERA) Annual Meeting*, New Orleans, LA, Feb. 2022. (Division VI Discussant)

Division I – Educational Administration Policy, Leadership, & Program Evaluation. (2021). *Southwest Educational Research Association (SERA) Annual Meeting*, New Orleans, LA, Feb. 23-25, 2022. (Reviewed submitted proposals)

Division II – Instruction, Learning & Cognition. (2021). *Southwest Educational Research Association (SERA) Annual Meeting*, New Orleans, LA, Feb. 23-25, 2022. (Reviewed submitted proposals)

Division I – Educational Administration Policy, Leadership, & Program Evaluation. (2020). *Southwest Educational Research Association (SERA) Annual Meeting*, Virtual Conference, Feb. 2021. (Reviewed submitted proposals)

Division II – Instruction, Learning & Cognition. (2020). *Southwest Educational Research Association (SERA) Annual Meeting*, Virtual Conference, Feb. 2021. (Reviewed submitted proposals)

# **Service to K-12 Education (National)**

JASON Learning Design Thinking: Houston Expedition Planning Team 2023 - 2024

# Service to K-12 Education (State/Local)

Houston Science and Engineering Fair Judge 2023

CCISD Science Judge 2022 – present

UHCL STEM Liaison to Pasadena ISD – K-12 STEAM Fairs 2021 – present

### PROFESSIONAL AND ACADEMIC MEMBERSHIPS

Association for Science Teacher Education (ASTE)

National Association for Research in Science Teaching (NARST)

National Science Teachers Association (NSTA)

Southwest Association for Science Teacher Educators (SW-ASTE)

Southwest Educational Research Association (SERA)

Science Teachers Association of Texas (STAT)

Texas Academy of Science (TAS)

Texas Association of Environmental Educators (TAEE)

Texas Association of Biology Teachers (TABT)

Texas Council of Elementary Science Grades K-8 (TCES)

Texas Council of Social Studies (TXCSS)

Texas Science Education Leadership Association (TSELA)