#### Curriculum Vita

### **Sandy White Watson**

Associate Professor of Curriculum & Instruction, STEM Emphasis
University of Louisiana at Monroe
700 University Avenue
2-25 Walker Hall
Monroe, LA 71209
318-342-1300
swatson@ulm.edu

#### **EDUCATION**

Doctor of Education, Georgia Southern University, 2002 Curriculum & Instruction Mathematics, Science, Technology

Master of Education, Georgia Southern University, 1996 Science Education

Bachelor of Science, Western Kentucky University, 1983 Biology, Biophysics, Physics

#### **CERTIFICATES AND LICENSURES**

Georgia Teacher Certification Composite Science (7-12) (expired)

#### PROFESSIONAL EXPERIENCE

2021-Present <u>University of Louisiana Monroe, Monroe, LA</u> Associate Professor of Curriculum & Instruction, STEM Emphasis

2017-2021 <u>University of Houston-Clear Lake, Houston, TX</u> Associate Professor of STEM Education, EDCI/STEM Program

2012-2013 <u>University of Tennessee at Chattanooga, Chattanooga, TN</u>

Co-Director: UTeaChattanooga

Professor: Curriculum Studies (Emphasis in Math, Science and Technology)

2010-2012 <u>University of Tennessee at Chattanooga, Chattanooga, TN</u>

Co-Director: UTeaChattanooga

Associate Professor: Curriculum Studies (Emphasis in Math, Science and Technology)

2007-2012 <u>University of Tennessee at Chattanooga, Chattanooga, TN</u>
Associate Professor of Science Education

Absociate From Solonie Education

2002-2007 University of Tennessee at Chattanooga, Chattanooga, TN

Watson VITA, 2021

## **Assistant Professor of Science Education**

1992-2002 <u>Wayne County Board of Education</u>, Jesup, GA Wayne County High School Science Teacher

## **COURSES TAUGHT AT ULM**

## **Graduate**

CURR 5073	Assessment and Accountability
EDFN 5081	Foundations of Educational Research

## Undergraduate

CURR 1001	Navigating within a Culturally Pluralistic Society
CURR 3004	Middle and Secondary Methods II
CURR 4060	Residency 2 Practicum

## **COURSES TAUGHT AT UHCL**

### Graduate

TCED 5031	Curriculum Design, Development, Implementation
TCED 5323	Teaching Science in the EC-6 Classroom (Masters)
EDLS 7138	STEM Curriculum Design, Development, Implementation
EDCI 8939	Dissertation

## <u>Undergraduate</u>

TCED 1301	Introduction to the Teaching Profession
TCED 4322	Teaching Science in the EC-6 Classroom

## **COURSES TAUGHT AT UTC**

## **Graduate**

EDUC 513	Perspectives in Multiculturalism and Diversity
EDUC 590	Culminating Experience (Master's Thesis)

## Undergraduate

EDUC 201	Teaching in the United States
EDUC 311	Science Concepts and Processes
EDUC 312	Teaching Science in the Elementary Classroom
EDUC 401	Lab Safety
EDUC 433	Curriculum Design and Evaluation in the Secondary Classroom
EDUC 454	Secondary Science Methods and Materials
UTSM 2020	Classroom Interactions

### UTSM 4010 Project Based Instruction

#### **PUBLICATIONS**

#### Dissertation

Watson, S. (2001). The motivational stories of how women become scientists: A hermeneutic phenomenological inquiry. (Publication No. 3041649) [Doctoral Dissertation: Georgia Southern University]. ProQuest Dissertations and Theses Global.

#### **Edited Books**

Accepted and in progress: Watson, S., Wiliams-Duncan, O., Austin, S. & Bell, J. (2022). Conceptual Analyses of Curriculum Inquiry Methodologies. IGI Global.

### **Book Chapters**

Watson, S. (2021). Searching for the best-loved self. In C. Craig, D. McDonald, & G. Curtis (Eds.), *Best-loved self: Learning and leading in teaching and teacher education* (xxx–xxx) Palgrave Macmillan (in press).

Watson. S. (2021). Memoirs of a crazy-fun science teacher. In K. Vaidya (Ed.), *Teach STEM with a sense of humor: Why (and how to) be a funnier and more effective STEM teacher and laugh all the way to your classroom* (pp. XX-XX). Melbourne, Australia: Curious Academic Publishing (in press).

Watson, S. (2021). Resiliency and women: The journey to academic STEM leadership. In C.J. Craig, L. Turchi, & D.M. McDonald (Eds.), *Cross-disciplinary, Cross-institutional Collaboration in Teacher Education* (pp. 197-216). Robert Morris University: IGI Global Communications Publishing Co.

Kuhn, S., Watson, S. & Walters, T. (2014). Online homework and correlated success in university classes: A longitudinal study. In Kyei-Blankson, L. & Ntuli, E. (Eds.), *Practical Applications and Experiences in K-20 Blended Learning Environments*. Robert Morris University: IGI Global Communications Publishing Co.

Watson, S. (2010). Telementoring in Teacher Education. In Scigliano, D. (Ed.), *Telementoring in the K-12 Classroom: Online Communication Technologies for Learning* (pp. 148-172). Robert Morris University: IGI Global Communications Publishing Co. https://doi: 10.4018/978-1-61520-861

#### Refereed Journal Articles

### International

Watson, S., & Baker, S. (2021). Elementary school library collections: A content analysis of science trade books for science content, literacy, and critical literacy criteria. *Reading Horizons*: A *Journal of Literacy and Language Arts* (in press).

- Watson, S.W., Shan, X., George, B.T., Peters, M. (2021). Alignment of select elementary science curricula to the next generation science standards via the EQuIP rubric. *Curriculum Perspectives*. <a href="https://doi.org/10.1007/s41297-021-00131-x">https://doi.org/10.1007/s41297-021-00131-x</a>
- Watson, S., Dubrovskiy, A. & Peters, M. (2020). Addressing undergraduate chemistry II students' misconceptions of pH with a collaborative computer pH simulation. *Chemistry Education Research and Practice*. https://doi.org/10.1039/C9RP00235A
- Watson, S. & Williams-Duncan, O. (2020). School administrators' perceptions of parental STEM awareness, strategies to promote STEM awareness, and student STEM preparation. *Research in Science and Technology Education*. https://doi.org/10.1080/02635143.2020.1774747
- Watson, S., Cothern, T. & Peters, M. (2020). School administrators' perceptions of STEM awareness and resources. *AASA Journal of Scholarship and Practice*, 17(3), 19-40.
- George, B., Watson, S., & Peters, M. (2020). The Impact of Participating in a STEM Academy on Girls' STEM Attitudes and Self-efficacy. *International Journal of Science Education*, 24(4). https://ejrsme.icrsme.com/article/view/20231
- Watson, S., Unruh, J. & Weiser, B. (2020). A comparison of expert vs. novice delivery of STEAM-based instruction on the academic achievement of kindergarten students. *Journal of Elementary Education*, 30(1), 1-22.
- Shaner, A., Watson, S., Buxner, S. & Bakerman, M. (2018). ExMASS: A viable model for authentic student-scientist research partnerships. *Acta Astronautica* <a href="https://doi.org/10.1016/j.actaastro.2018.07.031">https://doi.org/10.1016/j.actaastro.2018.07.031</a>
- Watson, S. & Miller, T. (2013). LGBT Oppression: A Freirean approach to transformation: *Multicultural Education*, 19(4), 2-7.
- Watson, S., Miller, T., Davis, L., Carter, P (2010). Teachers' perceptions of the effective teacher. *Research in the Schools*, 17(2), 11-22.
- Watson, S. (2010, March). Biology and physics via the Internet: A study of Hiroshima and Nagasaki. *Conference paper published by the Society for Information Technology and Teacher Education, USA:* <a href="http://site.aace.org/">http://site.aace.org/</a>
- Miller, T., Watson, S. & Rutledge, V. (2008). Message tees and hidden curriculum. *Education Research and Perspectives*, 34(2), pp. 91-103.
- Watson, S. (2007). Boys, masculinity and school violence: Reaping what we sow. *Gender and Education*, 19(6).
- Watson, S. (2007). Hiroshima and Nagasaki: The atomic bombings and the resultant biological effects of radiation. *Japan Inservice/Preservice Teacher Module*. Available: <a href="http://68.60.199.117/pas/beta/">http://68.60.199.117/pas/beta/</a>

Sandefur, S., Watson, S., & Johnston, L. (2007): Literacy development, science curriculum, and the adolescent English language learner: Modifying instruction for the English-only classroom. *Multicultural Education*, 14(3).

Watson, S. (2007). Science on a shoestring: Obtaining free and inexpensive science teaching materials. *Society for Advancement of Chicanos and Native Americans in Science News*, September.

Watson, S. (2006). Virtual mentoring in higher education: Teacher education and cyber-connections. *International Journal of Teaching and Learning in Higher Education*, 18(3).

Watson, S. & Johnston, L. (2006). Tolerance in teacher education: Restructuring the curriculum. *Multicultural Education*, 13(3). THIS ARTICLE IS ALSO PUBLISHED IN: Schultz, F. (Ed.). (2006). *Annual Editions: Education 07/08*. Akron, OH: McGraw-Hill.

Watson, S., Miller, T., Rutledge, V., & Johnston, L. (2006): Professional development school graduate performance: Perceptions of principals. *The Teacher Educator*, 42(2), pp. 77-86.

Watson, S. (2002). 2002: The motivational stories of how women become scientists: Dissertation results. Paper presented at *Pathways to Change: An International Conference on Transforming Math and Science Education in the K16 Continuum* Washington D.C.

Rea, D., Millican, K., & Watson, S. (2000) The serious benefits of fun in the classroom. *The Middle School Journal*, *31*(4), pp. 23-28.

#### National

Watson, S. (2021). The 5E lesson plan and culturally responsive pedagogy/curricula. *The Science Teacher* (in press).

Watson, S. (2019). Virtual chemistry: Using the PhET pH scale simulation and the 5E model to enhance students' pH understanding. *The Science Teacher*, 25-30.

Watson, S. (2012). Science, language and power: Describing shifting relationships. In J. Settlage & A. Johnston (Eds.), *Proceedings of the Science Education at the Crossroads Conference* (pp.70-71). Providence, RI. [Available online at <a href="http://www.sciedxroads.org/proceedings2012.html">http://www.sciedxroads.org/proceedings2012.html</a>]

Watson, S. (2011). School of Education to UTeach: A difficult journey. In J. Settlage, A. Johnston, S. Dotger & R. Ceglie (Eds.), *Proceedings of the Science Education at the Crossroads Conference*. San Antonio, TX. (Available online at www. Sciedxroads.org/proceddings2011.html).

Watson, S. & Miller, T. (2009). Classification and the dichotomous key: Tools for identification. *The Science Teacher*, 76(3), pp. 50-54.

Watson, S. (2009) Teaching Science Investigation with Discovery Bottles. *Science and Children*, 45(9).

Watson, S. and Morris, J. (2009): University as Walmart: Consumerism in Academia. Paper presented at The Society for Values in Higher Education Annual Fellows Meeting (and published on SVHE web site): Elmhurst College, Elmhurst, IL Available: <a href="http://www.svhe.org/content/papers-and-abstracts">http://www.svhe.org/content/papers-and-abstracts</a>

Watson, S. & Johnston, L. (2007). Assistive Technology in the Inclusive Science Classroom. *The Science Teacher*, 30(6).

Watson, S. (2006). Science on a Shoestring: Obtaining Free and Inexpensive Science Teaching Materials. *Science Scope*, 30(6).

Watson, S. & Johnston, L. (2004). Teaching Science to the Visually Impaired. *The Science Teacher*, 71(6).

Watson, S. (2004). Opening the Doorway to Science for English Language Learners: Practical Strategies. *The Science Teacher*, 71(2).

### Non-refereed Conference Repository

International/National

Craig, C., McDonald, D. M., Auzenne-Curl, C., Curtis, G., Davis, T., Divoll, K., Evans, P., Gauna, L., Kiekel, J., Manuel, M., McAlister-Shields, L., Newsum, J., Pohl, B., Turchi, L., Watson, S., & Williams-Duncan, O. (2021, April). *Collective and collaborative understanding of leadership within a knowledge community*. American Educational Research Association Paper Repository.

### Non-refereed Journal Articles

Watson, S. & Rutledge, V. (2006). *Online Course Delivery and Student Satisfaction* (ERIC Document Reproduction Service No. ED490363).

Watson, S. (2006). *Culminating Experience: Empirical and Action Research* (ERIC Document Reproduction Service No. ED490414).

Watson, S. (2006). *Professional Development School and Student Teachers: Perceptions of Preparedness* (ERIC Document Reproduction Service No. ED490362).

Watson, S., Smith, Z., & Driver, J. (2006). *Alcohol, Sex and Illegal Activities: An Analysis of Selected Facebook Photos in Fifty States* (ERIC Document Reproduction Service No. ED493049).

#### CONFERENCE PRESENTATIONS

## **International**

Williams-Duncan, O., & Watson, S. (2021). An overview of phase 3 research about the exploration of the moon and asteroids by secondary students (ExMASS) program. *Joint NASA Exploration Science Forum and European Lunar Symposium*. July 20, 2021: virtual.

Craig, C., McDonald, D. M., Auzenne-Curl, C., Curtis, G., Davis, T., Divoll, K., Evans, P., Gauna, L., Kiekel, J., Manuel, M., McAlister-Shields, L., Newsum, J., Pohl, B., Turchi, L., Watson, S., & Williams-Duncan, O. (2021, April). Collective and collaborative understanding of leadership within a knowledge community. Paper presented at the *American Educational Research Association*, Virtual.

George, B. & Watson, S. (2020). The impact of participating in a STEM academy on girls' STEM self-efficacy. *American Educational Research Association International Conference*, Virtual.

Watson, S., Cothern, T. & Peters, M. (2020). School administrators' perceptions of STEM awareness and resources. *American Educational Research Association International Conference*, Virtual.

Shane, A., Watson, S., Buxner, S. & Bakerman, M. (2018). ExMASS: Four years of authentic scientific research by high school students. *The 2018 NASA Exploration Science Forum, Solar System Exploration Research Virtual Institute*. NASA Ames Research Center, Moffett Field, CA.

Watson, S. (2005). Women scientists. *American Educational Research Association International Conference*, Montreal, Canada.

### <u>National</u>

McDonald, D., Craig, C., Watson, S., Auzenne, C., Pohl, B., Williams-Duncan, O., Curtis, G., Divoll, K. (2021, June). *Two books, two tales: Looking back at leadership development and moving forward with our best-loved selves*. Session accepted for presentation at the virtual Invisible College.

Williams-Duncan, O., Watson, S., Smith, A., & Rasheedy, Y. (2021, October). Cultivating Student Engagement in STEM: Phase 3 Research Exploring Scientist Advisor and Student Team Relationships in the 2020-2021 Exploration of the Moon and Asteroids by Secondary Students (ExMASS) Program. *American Association for Teaching and Curriculum*, Albuquerque, NM.

McDonald, D. M., Craig, C., Pohl, B., Sack, J., Watson, S., Cooper, J., Williams-Duncan, O. & Gauna, L. (2021, October). Muses that amuse: Inspirational stories of teachers' best-loved selves. *American Association for Teaching and Curriculum*, Albuquerque, NM.

- McDonald, D. M., Craig, C., Pohl, B., Sack, J., Watson, S., Cooper, J., Williams-Duncan, O. & Gauna, L. (2021, October). Crossing disciplines and institutions: Proliferating and pro-liberating possibilities in learning to lead through collaboration. *American Association for Teaching and Curriculum*, Albuquerque, NM.
- Watson, S., Williams-Duncan, O. & Peters, M.L. (2020, July 27-30). School administrators' awareness of parental STEM knowledge, strategies to promote STEM knowledge, and student STEM preparation [Conference Session]. Paper presented at the *National Science Teaching Association STEM20: Virtual Conference*, https://www.nsta.org/stem20-virtual-event
- McDonald, D., Crawford, C., Watson, S., Shulsky, D. & Baker, S. (2019, October) Leadership lessons learned: The liminal space between limitations and victory laps. *American Association for Teaching and Curriculum Conference*, Birmingham, Alabama.
- Watson, S. & Kuhn, S. (2012). Customized web homework: Why? How? To what effect? Advantages? Disadvantages? *National Council of Teachers of Mathematics Conference*, Hartford, CT.
- Watson, S. (2012, May). UTeach Co-Directors' Panel Session. *University of TX, UTeach Annual Conference*, Austin, TX.
- Watson, S. &. Kuhn, S. (2011, May). UTeach Engineering An Integral part of UTeaChattanooga. *University of TX, UTeach Annual Conference*, Austin, TX.
- Watson, S. & Kuhn, S. (2011, May). Recruitment strategies for UTeach replication sites. *University of TX UTeach Annual Conference*, Austin, TX.
- Watson, S., Miller, T., & Carter, P. (2010, September). Teachers' perceptions of effective teaching. *Ethnographic and Qualitative Research Conference*, Cedarville University, OH.
- Watson, S. (2010). Physics and biology via the Internet: A study of Hiroshima and Nagasaki. *Society for Information Technology and Teacher Education*, San Diego, CA
- Watson, S. & Morris, B.J. (2009). University as Wal Mart: Consumerism in academia. *Society for Values in Higher Education*, Chicago, IL
- Watson, S. (2008). Teaching about Japan: Japan in-service/pre-service teacher module. *Asian Studies Conference*, Hilton Head Island, SC.
- Watson, S., Rutledge, V. & Johnston, L. (2007). PDS: A Partnership of Success: *Coalition of Urban and Metropolitan Universities Conference*, Towson, MD.
- Watson, S., Rutledge, V. & Johnston, L. (2007). Perceptions of teacher performance: PDS vs. non-PDS. *Holmes Conference*, San Antonio, TX.

Watson, S., Rutledge, V., & Johnston, L. (2006). Professional Development Schools. *Teachers for a New Era Conference*, Philadelphia, PA.

Watson, S. (2005). Teaching science to students with special needs. *National Science Teachers Association National Convention*, Dallas, TX.

Watson, S., Rutledge, V., & Driver, J. (2005). ESL Summer Institute results. *Holmes Conference*, Philadelphia, PA.

Watson, S. & Rutledge, V. (2005). Urban impact. *Holmes Conference*, Philadelphia, PA.

Watson, S. & Rutledge, V. (2004). The changing landscape of teacher preparation: Exploring the Professional Development School. *National Science Teachers Association National Convention*, Atlanta, GA.

Watson, S. (2004). ESL students and success in science: Teaching practices and strategies. *National Youth-at-Risk Conference*, Savannah, GA.

Watson, S., Rutledge, V. & Johnston, L. (2004). NCATE, NCLB, and PDS: A formula for measuring success. *The Maryland Professional Development School Network's Second National Professional Development School Conference*, Baltimore, MD.

Watson, S. & Millican, K. (2001). Girls just wanna have fun: Motivating girls in science with serious fun. *JCT Conference on Curriculum Theory and Classroom Practices*, Bergamo Conference Center, Dayton, OH.

Watson, S. (2000). Spaces of hope: The work of Bryan Deever. *JCT Conference on Curriculum Theory and Classroom Practices*, Bergamo Conference Center, Dayton, OH.

### Regional/Multistate

Watson, S., Bartsch, R., Kelling, A., Beavers, E., & Shan, G. (2019, April). Benefits of introspection and self-reflection in a course on effective teaching practices. *Innovative Teaching and Learning Symposium*, University of Houston.

Watson, S. (2019, February). Texas school Administrators' perceptions of parental STEM awareness. *SERA*, San Antonio, TX.

Watson, S., & Weiser, B. (2018, February). A comparison of expert vs. novice delivery of STEAM-based instruction on the academic achievement of kindergarten students. *SERA*, New Orleans, LA.

Watson, S. (2012). Science, language and power: Describing shifting relationships. *Science Education at the Crossroads Conference*, Providence, RI.

Watson, S., Miller, T., & Carter, P. (2011). Teacher perceptions of quality instruction: A longitudinal investigation of middle schools within a district. *Educational Research: Innovations in Pennsylvania, Delaware and New Jersey*, Philadelphia, PA.

Watson, S. (2011). Education to UTeach: A new beginning. *Science Education at the Crossroads Conference*, San Antonio, TX.

Watson, S., Rutledge, V., & Driver, J. (2004). UTC's ELL Summer Institute. *South East Teachers of English to Students of Other Languages Conference*, Nashville, TN.

Watson, S. (2002). Let's eliminate the stereotypical male scientist: Strategies to motivate girls in science: *National Science Teachers Association Regional Conference*, Louisville, KY.

Watson, S. & Millican, K. (2001). Fun with physics and physical science. *National Science Teachers Association Southeastern Area Conference*, Memphis, TN.

#### State

Watson, S., & Cothern, T. (2019). Texas school administrators' perceptions of STEM awareness and resources. *Greater Houston Area STEM Conference*, University of Houston-Clear Lake, March 2.

Watson, S. & Kuhn, S. (2011). UTeaChattanooga. *Tennessee Mathematical Association of Two-Year Colleges*. Dyersburg State Community College, Dyersburg, TN.

Watson, S. & Johnston, L. (2004). Teaching science to students with disabilities: Practical strategies. *Alabama Department of Education 2004 Mega Conference*, Mobile, AL.

Watson, S. & Johnston, L. (2005). Science and special needs students: A winning combination. *Alabama Dept. of Education Megaconference*, Mobile, AL.

Watson, S. & Millican, K. (1999). From balancing birds to the electric flea circus: Motivating students in science. *Georgia Science Teachers Association Regional Conference*, Atlanta, GA.

## Non-refereed Conference Proceedings (UHCL)

Watson, S. (2020). First Generation College Students and Persistence. First Generation College Student Group at UHCL.

Watson, S., Bartsch, R., Kelling, A., Beavers, E., & Shan, G. (2019). ACUE Active Learning. *UHCL Faculty Development Center Conference*, UHCL.

Watson, S. (2018). Problem based learning. UHCL Faculty Development Center STEM Research Colloquium, UHCL.

Watson, S. (2018). School administrators' perceptions of STEM awareness. *UHCL Faculty Development Conference*, UHCL.
Other

Watson, S. (2002). *The motivational stories of how women become scientists: A hermeneutic, phenomenological inquiry*. [Doctoral dissertation, Georgia Southern University]. Retrieved from <a href="http://www.il.proquest.com">http://www.il.proquest.com</a>

### **GRANTS (UTC, UHCL, ULM)**

#### External

Watson, S. & Hanks, A (2021). National Science Foundation: Improving Undergraduate STEM Education: Education and Human Resources (IUSE: HER): tULM Pedagogical STEM Education Program (ULM P-STEP). \$300,000.00 (in progress).

Watson, S. & Williams-Duncan, O. (2021). National Science Foundation: Discovery Research PreK-12: STEM-Conference Experiences for Secondary Students (STEM-CESS). \$100,000 (in progress).

Watson, S. & UTeach Institute (2019). *UTeach Replication at UHCL*. The Powell Foundation, \$300,000.00.

Watson, S. (2019). *Urban gardening: Texas native prairie grassland* (for Parkwood Elementary School in Deer Park, ISD), \$4,335.77.

Watson, S. (2018). *Problem based learning in early childhood: Its effects on student learning and engagement.* The Crowder Foundation, \$3,000. (Funding cancelled.)

Hays, S., Watson, S. & Wigal, C. (2013). U.S.-Chile IRES: Intraspecific variation and genetic mechanisms of animal sociality. National Science Foundation, \$249,801.

Hays, S., Watson, S. & Wigal, C. (2012). *The Chile – Chattanooga Connection: Improving STEM Education for K-12 and University Students*. The Community Foundation of Chattanooga, \$15,000.

Buchanan, S., Watson, S., Wigal, C., & Kuhn, S. (2012). *Examining gendered interactions in STEM*. Crisp, \$10,000.

Miles, P., Shaw, G. & Watson, S. (2012). The integration of science, education, and religious views with implications for STEM education. Crisp, \$9,997.

Watson, S. & Kuhn, S. (2011). *Robert Noyce Scholars*. National Science Foundation, \$1.2 M. (No. DUE-1132284).

Kuhn, S. & Watson, S. (2011). Center for STEM education at UTC. *Congressional Earmark*, \$770,000.

Watson, S., Kuhn, S., Tennessee Higher Education Commission, Tennessee State Board of Education (2010). *UTeach implementation at UTC*. Race to The Top, \$1.74 M.

Watson, S. & Johnston, L. (2006). *Assistive technology in science*. Tennessee Higher Education Commission, \$64,500.00.

Watson, S. (2003). *New College Teachers' Workshop travel funds*. Society for Values in Higher Education Annual Fellows Meeting: Farmington, Maine, \$3,000.00.

#### **UHCL** Internal

Watson, S. (2018). Evaluation of primary level science trade books. (FRSF), \$1,016.00.

Watson, S. (2005). The exploration of center-based science learning environments by pre-service elementary teachers. UTC Instructional Excellence Grant, \$1,000.00.

Watson, S. (2005). AERA conference travel. UTC Faculty Development, \$1,000.00.

Watson, S. (2004). *Pre-service teachers and hands-on-science*. UTC Instructional Excellence Grant, \$5,000.00.

#### <u>ULM Dissertation Committee Member</u>

Broussard, A. (2021)

Herren, D. (2021)

Douglas, L. (2021)

Adams, C. (2021)

Cannon, J.P. (2021)

Walton, J. (2021)

Griswold, E. (2021)

George, K. (2021)

Patterson, T. (external: 2021)

Houston, S. (external: 2021)

Smith, A. (external: 2021)

Gruber, S. (external: 2021)

Gatson, Z. (external: 2020)

Fangyi Liao (2021)

#### **ULM Dissertation Major Professor**

Shannon Jackson (2021)

Shanice Major Williams (2021)

Caitlin Dalton (2021)

Helen Coyle (2021)

ShaMyra MiChon Williams (2021)

#### **UHCL** Dissertation Chair

George, B. T. (2019). STEM Academy: A case study of girls' STEM self-efficacy. Martinez, J. (2020). Analyzing the characteristics of elementary STEM school-wide programs.

Shaukat, F. (2020). The relationship between scientific literacy and science self-efficacy in undergraduates.

Verhofstad, S. (2020). Examining the influence of social capital on early college and traditional high school underrepresented students enrolled in college courses.

#### **UHCL** Dissertation Co-Chair

Lenamon, M. (2019). The Effect of Science Course Choice on Future Elementary Educators Attitudes and Beliefs Towards the Learning of and Teaching of Science: Information for Teacher Education Programs.

#### **UHCL** Dissertation Committee Member

Tonya Patterson (2020)

Stephanie Houston (2020)

Moya, David (2020)

Stephen Gruber (2020)

Waters, Carol (2019)

Ashley Smith (2020)

Roble, Gelyn (2020)

Molen, Angela (2020)

Jeremy Unruh (2019)

#### **UTC Dissertation Committee Member**

Robbs-Turner, C. (2008). Romine, X. (2010).

## UTC Masters' Capstone Projects Chaired

Wheeler, E. (2010). Effectiveness of professional development provided by the UTC Challenger Center to middle grades teachers.

Bowen, W. (2005) Chronic disruptive students in public schools: Forty-five years on downhill slide.

Bufkin, A. (2005). Balanced literacy and state testing.

Goad, A. (2005) Discussion as measure of achievement: The gender variable.

Green, M. (2005). Might students increase their understanding of the poem "Paul Revere's Ride" through role playing or creative dramatics?

Hampton, A. (2005). *Integration of software in a beginning Latin class: A case study.* 

Henderson, J. (2005). Attitudes and knowledge of current events in a social studies classroom.

Hicks, M. (2005). Effects of purposeful writing activities on handwriting.

Howard, L. (2005). Effects of various review methods on test scores of science students.

King, J. (2005). The relationship between student achievement and parental involvement.

Littlejohn, W. (2005). Disciplinary actions before and after dress code enforcement. LoCicero, D. (2005). American symbols and significant American presidents.

McGirl, B. (2005). Does teaching using hands-on activities positively influence middle school girls' attitudes toward physics?

Moore, K. (2005). Evaluating the effect visiting a local artist's studio has on learning and retention rates of high school art students.

Pickett, A. (2005). Computer based programs and the struggling reader: An action-based research project.

Pons, R. (2005). Parental involvement and academic motivation: Educators' perceptions.

Raines, K. (2005). Teachers' opinions of standardized tests.

Scates, V. (2005). Managing student behavior is necessary for academic success.

Tuttle, A. (2005). *Using TPR and stories to teach Kindergarteners French.* 

Ward, L. (2005). *Literacy instruction for emergent learners*.

Whitfield, S. (2005). Parental involvement and student success in urban middle schools.

#### **HONORS**

2021	Awarded Chase Professorship in Teacher Education Endowment: ULM.
2021	Full Graduate Faculty Member: ULM
2020	Elected to Faculty Senate: UHCL
2019	Go to Eleven Award: UHCL Faculty Development Center.
2018	Go to Eleven Award, UHCL Faculty Development Center.
2018	NASA Emerging Star Award, NASA MUREP MEI.
2013	Ten Year Service Award, UTC.
2012	Promoted to Professor, UTC.
2011	Distinguished Rating on Administrator Goals, UTC College of
	Arts and Science.

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2011	Odyssey Supernova Award Nominee, UTC.
2010	Exceeds Expectations EDO Rating, UTC.
2010	UTC Lady Mocs Basketball Team Academic Coach.
2010	Outstanding Teaching/Advising Award, College of Education, UTC.
2009-2010	Alpha Society President, UTC
2009	Exceeds Expectations EDO Rating, UTC.
2008	Five Year Service Award, UTC.
2007	Elected to Council of Scholars, UTC.
2007	Institutional Representative for American Association of Colleges for
	Teacher Education (AACTE).
2007	Outstanding Research and Scholarship Award, UTC.
2007	Received Tenure and Promotion to Associate Professor, UTC.
2006	Exceeds Expectations EDO Rating.
2006-2008	Alpha Society Vice President, UTC.
2005	Exceeds Expectations EDO Rating, UTC.
2006	Elected to Alpha Society (UTC).
2006	Elizabeth Dalton Award (outstanding accomplishments in all three areas
	of research, service, and teaching, College of Education, UTC).
2005	Teaching, Learning, and Technology Faculty Fellow, UTC.
2005	Education About Asia, Faculty Fellow, UTC.
2005	Awarded UC Foundation Professorship, UTC.
2004	Nominated for Tennessee Science Educator of the Year, Higher
	Education Division, UTC.
2003	Nominated for Tennessee Science Educator of the Year, Higher
	Education Division, UTC.
2002	Wayne County High School Teacher of the Year, runner up.
2001	Wayne County High School Teacher of the Year, runner up.

## **SERVICE**

## Service Within the Institution

## University of Louisiana at Monroe

2021-present	Member, SOE Assessment Committee
2021-present	Full Graduate Faculty Member
2021	Session Chair for Educators Rising
2021	Session Chair for Greater Houston Area STEM
	Conference
2021	Taught two two-hour classes at WarhawksU Summer
	Camp

## University of Houston-Clear Lake

2019-present	Chair, COE Scholarly Research Sub-Committee
2018-present	Member, International Education Awards Committee.
2017-2020	Alternate Member, Academic Honesty Committee.
2020-present	Faculty Senate (elected)

2020-present	Faculty Senate: Faculty Governance Ad Hoc Committee
2020-present	Faculty Senate: University Life Ad Hoc Committee

## **UHCL College of Education**

2020	Director, Kids U Science.
2020	EDLS Doctoral Program Admissions Committee
2019-2020	Chair, COE Research and Scholarly Activities Sub-
	Committee
2019-2020	Chair, EDCI Doctoral Admissions Committee.
2018	Writer, TCED Program Report.
2018-2019	Chair, CAEP Standard Five Committee.
2019-2020	Member, CAEP Standard Five Committee.
2019	Presenter, UHCL Doctoral Reception.
2017-2020	Chair, UTeach Planning Committee.
2017-2020	Member, EDCI STEM Committee.
2017-present	Member, Faculty Academy.
2017	Attendee, STEM Retreat.
2017-2018	Liaison, Parkwood Elementary.
2017-2018	Attendee, UTeach Conference.
2017-present	Attendee, Kickoff Luncheon.
2017-present	Attendee & Presenter, STEM Luncheon.
2017-present	Attendee, C&I Potluck Luncheon.
2017-present	Attendee, End of Semester Luncheon.
2018-2020	Volunteer, Greater Houston Area STEM Conference.
2018	Recruiter, Alief National STEM Day.
2018	Attendee, Grant Proposers' Luncheon.
2018	Attendee, EDCI Doctoral Spring Dinner.
2018-present	Attendee, Teacher Induction Ceremony.
2018-present	Attendee, Faculty Awards Ceremony.
2018-present	Participant, UHCL Open House.
2019	Attendee, UHCL Graduation.
2019	Attendee, Project Wet training.
2019-present	Proctor, Doctoral Comp. Exams.

# University of Tennessee at Chattanooga

2002-2003	Member, UTC Technology Task Force Committee.
2002-2006	Professor-in-Residence, 21st Century Academy.
2003-2004	Member, New Faculty Search Committee.
2003-2004	Member, Tennessee State Board of Ed. Ad-Hoc
	Committee on Middle Grades Licensure.
2003-2013	Member, Graduate Faculty.
2003-2004	Professor-in-Residence, Red Bank High School.
2003-2004	Professor-in-Residence, Red Bank Middle School.
2003-2013	Faculty Advisor, NSTA, Student Chapter
2004-2005	Chair, NCATE Standard Five.
2004-2005	Member, UTC Classroom Technology Committee.

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2004-2005	Member, UTC Athletics Committee.
2004-2006	Member, NCATE Steering Committee.
2004-2005	Professor-in-Residence, Ooltewah Middle School.
2004-2007	Member, UTC Curriculum Committee.
2005-2006	Professor-in-Residence, Chattanooga School for the Arts
	and Sciences.
2006-2013	Member, UTC Honors Court.
2006-2007	Chair, New Faculty Search Committee.
2006-2007	Member, UTC Student Conduct Board.
2006-2007	PDS Professor, Brainerd High School/Dalewood Middle
2000 2007	School.
2006-2007	Member, UTC Academic Standards Committee.
2006-2007	Member, UTC Conduct Committee.
2006-2010	Member, UTC Graduate Studies Division Research
2000 2010	Committee.
2007-2010	PDS Professor, Chattanooga School for the Arts and
2007-2010	Sciences.
2007	Attendee, Project Wet Training.
2007	Attendee, Project Wet Training.  Attendee, Project Wild Training.
2007	Attendee, Tennessee Tech. STEM Meeting.
2007	Chair, NCATE Diversity Standard.
2009	Professor-in-Residence, UTC Challenger Center.
2009	Attendee, Live Text Training, David Lipscomb College.
2009-2013	Member, STEM Working Committee.
2009-2013	Member, UTeach Interview Committee.
2009	Attendee, AIMS Task Force Training.
2009-2019	Member, General Education Restructure Committee.
2009-2019	Participant, Operation Move-In.
2010	Attendee, UTeach Co-Directors Training, UT, Austin.
2010	<del>-</del>
2010	Attendee, Banner Training, UTC. Attendee, IRIS Training, UTC.
	Chair, UTeach Advisory Council.
2010-2013	•
2010-2013	Chair, UTeach Steering Committee.
2010-2013	Member, College-wide Task Force Committee.
2010	Attendee, NCATE SPA Training, University of Northern Arizona.
2010	
2010	Marshall, UTC Graduation, spring and fall.
2010-2013	Member, Council of Academic Department Heads.
2011	Attendee, NCATE NCTM Training.
2011	Attendee, Undergraduate Research Training, UC, Berkley.
2011	Member, HCDOE/University Round Table, Benwood
2011	Foundation.
2011	Attendee, AERA UTeach Research & Vanderbilt
2011	Education Reception, New Orleans, LA.
2011	Faculty Sponsor, UC Berkley Undergraduate Research
2011	Conference, Berkley, CA.
2011	Attendee, TaskStream Training.
2011	Attendee, AACTE Leadership Training, Seattle, WA.

2011	Member, Volkswagon Interview Team.
2011-2012	Member, Conflict Resolution Committee.
2011-2012	Member, Budget and Economic Status Committee.
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2012-2013	Member, Grade Appeals Committee.
2012-1013	Member, Scholarships Committee.
2012	Attendee, Sharepoint Training
2012	Grader, CAPS.
2012	Attendee, STAR Conference, San Jose, CA.
2012	Attendee, Gender, Sexual Orientation, and Workplace
	Issues
2012	Attendee, Google Docs Training
2013	Writer, SPA Report (science), resulted in SPA
	accreditation.
2013	Presenter, NCATE Poster Session, UTC.

## Service to the Profession

University of Louisiana at Monroe

## **International Professional Organizations**

2020-2021	Infiniscope National Board Member, Arizona State
2020-2021	University
2019-present	Reviewer, Association for Science Teacher Education.
2019-present	Editorial Review Board Member for ASTE CITE journal
2019-present	ASTE Equity Committee: appointed member
2019-present	Reviewer, Journal of Research on Technology in
	Education.
2018-present	Review Board Member, Gender and Education.
2018-present	Member, American Educational Research Association.
2017-present	Reviewer, International Journal for Teaching and
	Learning in Higher Education.
2017-present	Reviewer, Early Childhood Education.
2017-present	Reviewer, The Science Teacher.
2017-present	Editorial Review Board Member, International Journal of
	Science Education.
2021-present	Reviewer, The Electronic Journal of Research in Science
2017	and Mathematics Education.
2017- present	Member, National Science Teachers Association.
2021-present	Appointed to serve three-year term on Association for
2021	Science Teacher Education's (ASTE) equity committee
2021-present	ASTE Awards Committee: elected member.
2020-present	CITE journal science editorial review board member
2017-present	Reviewer, International Journal for Teaching and
	Learning in Higher Education.
2021-present	Member, American Association for Teaching and
	Curriculum

## University of Houston-Clear Lake

2017- 2021	Member, National Science Teachers Association.
2020 - 2021	Infiniscope Advisory Board Member: Arizona State
	University
2021-2021	Appointed to serve three-year term on Association for
	Science Teacher Education's (ASTE) equity committee
2021-2021	ASTE Awards Committee
2020-2021	CITE journal science editorial review board member

## National Professional Organizations

2017-present	Member, National Science Teachers Association.
2021-present	Appointed to serve three-year term on Association for
_	Science Teacher Education's (ASTE) equity committee
2021-present	ASTE Awards Committee
2020-present	CITE journal science editorial review board member
2021-present	Member, American Association of Teaching and
•	Curriculum

## Regional/State Professional Organizations

2021	Greater Houston Area STEM Conference facilitator
2017-2021	Reviewer and presenter, Southwest Educational Research
	Association.
2017-2021	Reviewer and presenter, Southwest Educational Research
	Association.
2017-2021	Session Facilitator, Southwest Educational Research
	Association.
2018-2019	Reviewer, Texas 21st Century Community Learning
	Centers, Cycle 10, Year 1.

## University of Houston-Clear Lake

# <u>International Professional Organizations</u>

2019-2021	Reviewer, Association for Science Teacher Education.
2019-2021	Editorial Review Board Member for ASTE CITE journal
2019-2021	ASTE Equity Committee: appointed member
2019-2021	Reviewer, Journal of Research on Technology in
	Education.
2018-2021	Review Board Member, Gender and Education.
2018-2021	Member, American Educational Research Association.
2017-2021	Reviewer, International Journal for Teaching and
	Learning in Higher Education.
2017-2021	Reviewer, Early Childhood Education.
2017-2021	Reviewer, The Science Teacher.

2017-2021 Editorial Review Board Member, *International Journal of* 

Science Education.

2018-2021 Member, American Educational Research Association.

## National Professional Organizations

2018-2021 Member, UTeach STEM Educators' Association

**Executive Board** 

### University of Tennessee at Chattanooga

2006 Attendee, NCATE Standards 1& 2 Training, Washington,

DC.

2006 Attendee, NSTA Conference and NCATE Training,

Anaheim, CA.

2010 Reviewer, Robert Noyce Scholarships, Washington DC.

### Regional/State Professional Organizations

Association.

2017-present Session Facilitator, Southwest Educational Research

Association.

2018-2019 Reviewer, Texas 21st Century Community Learning

Centers, Cycle 10, Year 1.

#### University of Tennessee at Chattanooga

2006-2007	Member, Teacher Quality Task Force, TN State Board of
	Education.
2006-2007	Science Supervisor, Alternate Certification
2007	Attendee, Tennessee's Next Generation Tools for
	Teaching Standards-Based Science Training.
2007	Attendee, Teachers for a New Era Training, Chicago.
2010	Member, TN STEM Innovation Network.
2011-2013	Executive Member, STEM Leadership Council, Middle
	Tennessee State University.

#### Workshops/In-service Presentations

### University of Tennessee at Chattanooga

Watson, S. & Kuhn, S. (2012). UTeaChattanooga: Why a replication at UTC? Chattanooga Community Foundation, Chattanooga, TN

Watson, S. (2011). UTeaChattanooga. Chattanooga State Technical College education department, Chattanooga, TN.

Watson, S. (2011). UTeaChattanooga, UTC Math Colloquium, Chattanooga, TN.

Watson, S. (2011). UTeaChattanooga, Chattanooga State Technical College science and mathematics departments, Chattanooga, TN.

Watson, S. (2009). Science teachers achieving real success (STARS) workshop: Teaching science through inquiry, Challenger Center, UTC, Chattanooga, TN.

Cowan, K. & Watson, S. (2008). Differentiating reading across the curriculum. THEC workshop, Nashville, TN.

Watson, S. (2008). Diversity and equity in education. ESL Summer Institute, UTC, Chattanooga, TN.

Watson, S. (2007). Diversity and equity in education. ESL Summer Institute, UTC, Chattanooga, TN.

Watson, S. (2007). Hands-on science for teachers of grades 3-5. Hamilton County Board of Education, Chattanooga State Technical School, Chattanooga, TN.

Watson, S. (2007). Multiculturalism and diversity. ESL Summer Institute, UTC, Chattanooga, TN.

Watson, S. (2007). Differentiation in science workshop. UTC, Chattanooga, TN.

Watson, S. (2007). The special needs of ESL students. Dalewood/Brainerd PDS students, UTC, Chattanooga, TN.

Watson, S. (2006). Teaching science to special needs students. Special Education Summer Institute, UTC, Chattanooga, TN.

Watson, S. (2006). Diversity and equity in education. ESL Summer Institute, UTC, Chattanooga, TN.

Watson, S. (2006). Utilizing dispositions in the secondary classroom: Organization and advanced planning. Student teacher meeting, University of TN at Chattanooga, Chattanooga, TN.

Watson, S. (2006). ESL Issues. Dalewood PDS students, UTC, Chattanooga, TN.

Watson, S. (2006). ESL Issues. 21st Century Academy PDS students, UTC, Chattanooga, TN.

Watson, S. (2006). Teaching, learning, and technology: Virtual mentoring. UTC faculty presentation, Chattanooga, TN.

Watson, S. (2005). Teaching English Language Learners. Normal Park PDS 1 Group, Chattanooga, TN.

Watson, S. (2005). Teaching English Language Learners. CSLA PDS 1 Group, Chattanooga, TN.

Watson, S. (2005). Classroom management in the secondary school. Student teachers' meeting: University of TN at Chattanooga, Chattanooga, TN.

Watson, S. (2003). Science and literacy strategies for ESL teachers. Hamilton County Board of Education Professional Development Workshop, Chattanooga, TN.

Watson, S. (2003). ESL and science. University of TN at Chattanooga, Chattanooga, TN.

University of Houston-Clear Lake

Watson, S (2020). First generation college students and perseverance. UHCL, Houston, TX.

Watson, S. (2018). Problem-based learning. UHCL Faculty Development Center Conference, UHCL, Houston, TX.

Watson, S. (2019). Writing workshop. TCED 4322 students. UHCL, Houston, Texas.

#### Service to the Community

2021	Teacher, WarhawksU summer camps
2020	Judge, Science and Engineering Fair of Houston
2019	Teacher, Upward Bound: Marshall High School, Chemistry and Biology.
2019	Judge, Science and Engineering Fair of Houston.
2018	Judge, Brookside Intermediate Science Fair.
2017	Judge, TAFTE Competition. UHCL

## PROFESSIONAL AND ACADEMIC MEMBERSHIPS

National Science Teaching Association (NSTA).

American Educational Research Association (AERA).

Southwestern Educational Research Association (SERA).

Association for Science Teacher Education (ASTE).

Association of Teacher Educators (ATE).

American Association of University Professors (AAUP).

American Association of Teaching and Curriculum (AATC).

### PROFESSIONAL DEVELOPMENT

AERA: Introduction to Qualitative Meta-Synthesis Methods: Achieving STEM Equity and Inclusion through Syntheses. 5/20/21. 3 hours.