TCU VITA

1. NAME

Molly Hand Weinburgh

2. CONTACT INFORMATION

TCU Box 297900 m.weinburgh@tcu.edu
Fort Worth, TX 76129 817.257.6115

3. ACADEMIC BACKGROUND

3A. Education

Ph.D.	Emory University	Educational studies; emphasis in science education
M.A.T.	Emory University	Educational studies; emphasis in biology
B.A.	Agnes Scott College	Biology (with teaching certification)

3B. Professional Certifications

Diploma of Advanced Study in Teaching – 1991
Georgia Teaching Certification (Biology T-5) – 1980 [expired]
Georgia Teaching Certification (Biology/Science T-4) – 1974 [expired]

3C. Present Rank

Piper Professor: College of Education

3D. Year of Appointment

2018	Andrews Chair of Research in Mathematics & Science Education
2015	Affiliate faculty, Women and Gender Studies
2009	Professor
2006	Director, Andrews Institute of Mathematics & Science Education (95% CoE/5% CoSE)
2006	William and Betty Adams Chair of Education
2002	Associate Professor (College of Education/College of Science & Engineering)

3E. Year of Last Promotion

2009 promoted to Professor at TCU

3F. Previous Appointments

2012- 2020	Research Associate, Botanic Research Institute of Texas
2001- 2002	Associate Professor: Graduate Faculty. Department of Early Childhood Education, Georgia State University
1996- 2001	Assistant Professor: Graduate Faculty. Department of Early Childhood Education Georgia State University
1993-1996	Assistant Professor: Clinical. Department of Middle/Secondary Education and Instructional Technology, Georgia State University
1991-1993	Instructor: Clinical. Department of Middle/Secondary Education and Instructional Technology, Georgia State University
1979-1991	Teacher. Marist School, Atlanta, GA
1977-1979	Teacher. Babb Jr. High, Clayton Co., GA
1974-1977	Teacher. Cedar Grove High School, DeKalb Co., GA

3G. Formal Continuing Education

Bridges, TCU 2018, 2019
Code of Conduct, TCU 2018, 2019, 2020, 2021, 2022
Human Subjects Training, TCU, 2012, 2017, 2018. 2021
Common Rule Changes, Cooks Children's Hospital, 2017, 2018, 2020
Human Subjects Training, Cooks Children's Hospital, 2016, 2018, 2020, 2022
EEOC Training, TCU, 2014
FCOI, National Institute of Health, 2015

Child Abuse & Prevention, Alliance for Children, TCU, 2012, 2015, 2018, 2019, 2020, 2021
Peer Review Training, TCU Human Resources, 2011

3H. Honors and Awards

2022 Nomination for Science Teacher Association of Texas Skoog Cup College Faculty
2020 Award for Outstanding Long-Term Service to ASTE
2018 Andrews Chair of Mathematics & Science Education
2017 Nominated ASTE Mentor Award
2016 Exemplary Faculty Practices Award – Consortium of State Organizations of Texas Teacher Education
2015 Piper Professor Award – Awarded by the state of Texas
2011 American Association for the Advancement of Science (AAAS) Fellow
2011 Chancellor's Award for Distinguished Achievement as a Creative Teacher and Scholar
2011 Nomination for Most Inspiring Professor (selected by TCU students)
2011 *Science and Children* received a Distinguished Achievement Award from the Association of Educational Publishers in the category "one-theme issue" for Sept. 2011's "Maps and Models."
2008 Dean's Outstanding Research Award for College of Education
2007 Nomination for the Chancellor's Distinguished Achievement as a Creative Teacher and Scholar.
2007 Nomination for Most Inspiring Professor (selected by TCU students)
2006 William L. & Betty F. Adams Chair of Education
2006 Director, Andrews Institute of Mathematics, Science & Technology Education
2000 Woman of the Year-American Biographical Institute
2000 Phi Beta Delta Honor Society for International Scholars (March 2000 induction)
2000 International Who's Who of Professional and Business Women (nominated by Dr. Beth Farokhi)
2000 Who's Who among America's Teachers (nominated by Sherry Pattillo, class '99)
1999 John Shrum for Excellence in Science Teacher Education, Southeastern Association of Educators of Teachers of Science (nominated by David Kumar, Florida Atlantic)
1999 Chancellor's Award for Professional Development
1999 Summer Professional Development in Ghana, West Africa recipient. July-August
1999 Nominated for National Association of Research in Science Teaching (NARST) Early Career Research Award (nominated by Ann Stucke, North Georgia College)
1998 Nominated for American Association of University Women (AAUW) Emerging Scholar (nominated by Beth Farokhi, Georgia State University)
1993 Distinguished Paper Award, Georgia Educational Research Association
1992 Distinguished Paper Award, Georgia Educational Research Association
1991 Outstanding Student Paper Award, Georgia Educational Research Association

4. TEACHING

4A. Courses Taught

A. Courses taught at Texas Christian University

A.1 Undergraduate

EDUC 20013	Science for Elementary Education
EDUC 30013	Creative Thinking and Problem Solving: Science
EDUC 30014	Science & Mathematical Thinking: Methods of Science
EDSE 30323	Secondary Science Methods
EDMS 40533	Senior Seminar: Science
EDSE 40533	Senior Seminar: Science
EDUC 40870	Directed Study
EDUC 40966	Supervision of Student Teachers
BIOL 10003	Contemporary Issues in Biology
BIOL 10003	Honors: Contemporary Issues in Biology
UNLF 10211	Introduction to University Life

A.2 Graduate

EDSC 60033	Academic Language in Science
EDSC 60053	Internship in Informal Settings
EDSC 60333	Theory and Pedagogy in Science Teaching
EDSC 60810	Research Seminar: Teacher Continuum

EDSC 60810	Research Seminar: Topics in Science Education
EDUC 60980	Internship in Teaching
EDSC 70013	Colloquia in the Profession of Science Education
EDSC 70033	Scientific Inquiries and Nature of Science
EDSC 70053	History and Philosophy of Science
EDUC 70870	Advanced Directed Study
EDUC 70903	Treaties
EDUC 70943	Apprenticeship in Teaching
EDUC 70960	Apprenticeship in Research
EDUC 70980	Thesis I
EDUC 70990	Thesis II
EDUC 90980	Dissertation I
EDUC 90990	Dissertation II

B. Courses taught at Georgia State University

B.1 Undergraduate

ECE 3603	Elementary Science Methods
GEO 4920	Elementary Science Education Partners: Geology
BIO 4920	Elementary Science Education Partners: Biology
CHE 4920	Elementary Science Education Partners: Chemistry
PERS 2002	Freshman Learning Community Perspectives
EDSC 447	Middle School Methods in Science
EDSC 329	Middle School Concepts and Issues in Science
EDSC 309	Middle School Issues in Biology
EDSC 457	Secondary School Methods in Science
EDCI 465	Opening School Experience
EDCI 470	Supervision of Student Teachers

B.2 Graduate

ECE 9850	Research Seminar
ECE 9810	Directed Reading
ECE 9000	Research Apprenticeship
ECE 9080	Dissertation I
ECE 9090	Dissertation II
EDSC 7120	Middle School Concepts and Issues in Science

4B. Courses Developed at TCU

EDSC 70013	Colloquia in the Profession of Science Education
EDSC 70033	Scientific Inquiries and the Nature of Science
EDSC 60033	Academic Language in Science
EDSC 60053	Internship in Informal Settings
EDSC 60810	Research Seminar: Topics in Science Education
EDSC 60810	Research Seminar: Teacher Continuum
EDSC 60333	Theory and Pedagogy in Science Teaching
EDSC 70033	Scientific Inquiries and the Nature of Science
EDSC 70053	History and Philosophy of Science

4C. Other Teaching

A. Honors Projects

Joanna Baxter – 2017

Rachel Hilton – 2015

B. McNair Scholar

Ana Benitez – 2022-2024

4D. Graduate Theses/Dissertation

A. Dissertation

A.1 Chair

Jayme Simlin, in progress [anticipated graduation May 2024
Megan Clawson, in progress [anticipated graduation December 2023]
Jennifer Tuff, in progress [anticipated graduation December 2023]
Tonie Domino, in progress [anticipated graduation December 2023]
Lara Charles-Kuhlman, in progress [anticipated graduation May 2023]
Heather Thompson, in progress [anticipated graduation May 2023]
Cassandra Cartmill, (November 2022). *"Who am I?" A narrative study of the (in)visible intersectionalities of Asian American women doctoral students in science*
Monica Amyett, (May 2022*). Understanding Mindset and Feedback During Classroom Problem-Solving: A Case Study with Instructional Guide Documents and High School Engineering Teachers*
John Cordell, (May 2021). *A passion for teaching science: A case study of five science teachers.*
Stacy Vasquez, (December 2020). *Moving beyond scientific content knowledge: Investigating the impacts of a multicultural science curriculum.*
Shelly Wu, (December 2020). *A case study of mentoring high school students with care ethics in a science research apprenticeship*.
Daniella Biffi, (January 2020). *Framing effects on attitudes and intentions towards shark meant consumption in Peru.*
Ron Ivey, (February 2019). *An exploration of teacher self-efficacy through the lens of power/knowledge in the elementary science classroom*
Morgan Stewart, (April 2018). *Investigating scientific curiosity in young learners: A multiple case study of a five-, six-, and seven-year-old*
Beau Hartweg, (March 2018) *A case study exploring the experiences of preservice teachers in a live-interactive portable planetarium program*
Ummuhan Malkoc, (March 2017). *Students' understanding of salt dissolution: Visualizing animation in the chemistry classroom.*
Erin Pearce, (April 2017). *Teaching in a post-standardized tested world: Physics and chemistry teachers' voices.*
Melissa Patterson, (April 2017). *Coloring, drawing, and water coloring to learn plant structures: Exploring pre-service teachers' perceptions of botany lessons with art interventions*.
Channa Barrett, (July 2016). *Veiled chameleons: Analyzing urban science teachers' epistemological and ontological beliefs on caring for urban student's science literacy.*
Jenesta Nettles, (December 2015). *The underlying relationships between the observed practices as revealed by an exploratory factor analysis of EQUIP ratings*.
Jingjing Ma, (May 2015). *Investigating academic language proficiency and chemistry content knowledge of newcomer English language learners in a public high school classroom.*
Angela Buffington, (April 2015). *Women scientists' scientific and spiritual ways of knowing*.
Katherine Fogelberg, (November 2014). *Attitudes and beliefs of university science professors toward the discipline of education.*
Deborah Henry, (September 2014) *Exploring hypothetical learning progressions for the chemistry of nitrogen and nuclear processes.*
Kelly Feille (April 2014) *Investigating the professional life history of upper elementary teachers who successfully facilitate effective science teaching both within the classroom and in the outdoor learning environment.*
Valerie Wielard (December 2012) *The effect of a computer program designed with constructivist principles for college non-science majors on understanding photosynthesis and cellular respiration.*
Deborah Flynn (December 2011). *A look at the definition, pedagogy, and evaluation of scientific literacy within the natural science departments at a southwestern university.*
April Sawey (December 2010). *The Lived Experience of In-service Teachers Building a Community of Practice During a Long-term Professional Development*.
Tammy Oliver (December 2009) *Inquiry Experiences and the Development of Science Vocabulary and Concepts with English Language Learners (ELLs)*
Mark Bloom (April 2008). *The Effect of a Professional Development Innovation on Inservice Science Teachers' Conception of Nature of Science.*
Kathy Smith (August 2000). *Early Childhood Teachers' Pedagogical Content Knowledge in*

Mathematics: Quantitative Study. Georgia State University

A.2 Dissertation Committee Member

Joshua Howton Torres, in progress. Dr. Jo Beth Jimerson, chair.

Chris Juarez, in progress [Grand Canyon University]. Dr. Hancock-Johnson, chair.

Yohanis de la Fuentes (November 2018*). Bilingual Preservice Teachers' Perspectives of Implementing Multimodal Translanguaging Pedagogy in Science Instruction*. Dr. Przymus, Chair.

Joe Ferrara (December 2013). *Teacher concerns associated with the implementation of project/problem based learning*. Texas Christian University. Dr. Thomas, Chair.

Lisa Bellows (June 2010*). A Case for Place-based Environmental Education: Immersive Field Experiences Utilizing Local Geographic Regions to Bring Awareness to Teachers*. Texas Christian University. Dr. Kelly, chair

Steven Palko (December 2008). *An Epistemological Framework for Curriculum and Instruction In The 21st century.* Texas Christian University. Dr. Powell, chair.

Jim Bowen (October 2006). *An Examination of Potential Teacher Behaviors that Encourage Persistence in AP Chemistry and the Idea that Branding Might Offer an Alternative Explanation*. Texas Christian University. Dr. Sacken, chair

Brenda Brockstein (July 2006). Middle school teachers' response to using hand held computers in teaching science, Georgia State University, Dr. Hannah, chair

Sarah Bexell (July 2006). *Effect of a Wildlife Conservation Camp Experience in China on Student Knowledge of Animals, Care, Propensity for Environmental Stewardship, and Compassionate Behavior toward Animals*. Georgia State University. Dr. Jarrett, chair

Terrie Kielborn (May 2001) *Sixth Grade Students' Perceptions of Science and Scientists Following a Field-Based Science Investigation*. University of Florida. Dr. Davis, chair.

Lucinda Gibson (April 2000). *Phases of Learning during Action Learning Experiences: An Exploratory Study*. Georgia State University. Dr. Willis, chair

Marie Borim (November 1999). *Factors Influencing Inservice Teachers' Gender Equity Awareness: A qualitative Study.* Georgia State University. Dr. Lakes, chair

Ann Stucke (July 1999). *An Interpretative Study of Elementary School Teachers' Conceptions of the Nature of Inquiry and of their roles While Participating in an Inquiry Based Science Curriculum*. Georgia State University. Dr. Lucy, chair

Susan Green (April 1999). *Women's Mid-Life Career Change: The Case of Episcopal Women Priests.* Georgia State University. Dr. Willis, chair

Catherine Carter (November 1998). *A Cast Study of Meaningful Learning in a Collaborative Concept Mapping Strategy as a Preparation for a College Biology Laboratory.* Georgia State University. Dr. Hassard, chair

Joyce Lockwood (September 1997). *The Effects of College Students' Gender and Ethnicity on Occupational Choice of Gender-Dominated Occupations*. Georgia State University. Dr. Willis, chair

Priscilla Golley (July 1997). *An Investigation of Teachers' Perceptions and Implementation of Interdisciplinary Mathematics and Science.* Georgia State University. Dr. Lucy, chair

Carol White (October 1996). *Voices of Collegiate Women: Influences that Impact Women Silence in an Undergraduate Classroom.* Georgia State University. Dr. Willis, chair

A.3 Dissertation External Reader

Hanadi Chatila – *Students' Attitudes Toward and Achievement in Science: A Cross-Cultural Approach.* Maquarie University, Australian Centre for Educational Studies, (Invited as outside examiner). Defense – June 2005. Dr. Cooney, Chair

Warren Rich – *Design Attributes of Education Computer Software for Optimizing Girls' Participation in Education Game Playing*. Curtin University of Technology (Perth, WA). (Invited as outside examiner). Defense – Spring 2005. Dr. Taylor, Chair

B. Master Thesis

B.1 Chair

Molly Marek (Fall 2021) *Scientific analogy-ing: A collaborative and critical approach to*

(re)generating analogical models in biology.

Marie Lamkin (Spring 2015) *Problem-based learning effects in 9th grade biology.*

David Blasingame (Spring 2015). *An evaluation of State Standards: Addressing the theory of evolution.*

Maegan Admire (Spring 2013) – *The effects of incorporating classroom pets into the fourth grade science curriculum.*

Teresa Powers (Fall 2012) – *"Some days it's good and some it's hard": The experience of faculty at Native American boarding schools.*

Morgan Stewart (Summer 2012) – *Using a schoolyard garden to increase language acquisition and conceptual understanding of science in elementary ELL students.*

Kristen Payne (May 2012) – *A collective case study: Teacher opinions of their students' engagement in the outdoor classroom.*

B.2 Committee Member

Ramya Enuga (April 2016). *Challenges pre-service science teachers face when implementing a 5E inquiry model of instruction.* Dr. Hokayem, chair.

Sarah Boukhari (April 2012) *Would You Give a Kindergartener an iPad2*? Dr. Reynolds, chair.

Megan Adams, (October 2010). *Goethe's Delicate Empiricism, Plant Growth and Young Children*. Dr. Reynolds, chair.

Robert Malloy, (July 2010) *Pre-service Teachers' Concept of Nature of Science*. Dr. Bloom, chair

Suzanne Reid, (February 2009) *Children and Delicate Empiricism*. Dr. Reynolds, chair

Anne Schruba, (April 2008). *Evaluation of Student Attitude toward Science and Self-Efficacy in a Non-majors College Biology Course.* Dr. Kelly, chair

Timothy Hayden (December 2007) *The Miseducation of America: An Examination of the Educational Experiences of Students of Color.* Dr. Reynolds, chair

Paul Vinson, (November 2006). *The Effect of Orientation on Learning Experiences in Science Centers.* Dr. Reynolds, chair

Karen Martin, (April 2003). *Perceptions, Attitudes, and Achievement in a Fifth Grade Hispanic Science Classroom.* Tarleton State University Dr. Smith, chair

Jamia Jester (April 2000). *Changing the Culture of the Classroom: A Study of the Elementary Science Education Partners (ESEP) Program*. Georgia State University. Dr. Kozaitis, chair.

B.3. Treaties

Brook Salazar (December 2019). *2019-2020 Pre-AP Biology DNA through Protein Synthesis Curriculum Unit*

Jacqueline Navarrete (May 2019). *Academic science language and its difficulties*

Jennifer Tuff (May 2019). *Are digital literacy programs delivering on promised benefits in their target classrooms?*

5. RESEARCH AND CREATIVE ACTIVITY

5A. Refereed publications in print

A.1 Peer Refereed Research Journal Articles (student)*

Price, C.*, Biffi, D., Weinburgh, M. H., Smith, K. H., Silva, C., Amyett, M.*, & Domino, A.* (2023). Emergent multilingual learners use of multimodal discursive practices in science journals to communicate 'doing' and 'learning' on erosion. *Electronic Journal of Research in Science and Mathematics Education*.

Weinburgh, M. H. (2022). "Students were just sticky notes on jamboard": A first-year biology teacher's story of 2020-2021. *School Science and Mathematics Journal122*(5), 235-246. DOI:10.1111/ssm.12539

Biffi, D., Richards, A. S., & Weinburgh, M. H. (2022). Framing effects on attitudes and intentions towards shark meat consumption in Peru. *Frontiers in Conservation Science*. 3:807252. Doi: 10.3389/fcosc.2022.807252

Feille, K., Stewart, M., Nettles, J., & Weinburgh, M. H. (2021). Like the kids do it: Engineering design in middle-school science teacher professional development. *Electronic Journal of Science and Mathematics Education, 25*(1), 5-19.

Weinburgh, M. H., Silva, C., & Smith, K. H. (2021). Multimodality and the 5R Instructional Model: Biology teachers learning to engage emergent multilingual learners. *Journal of Science Teachers Education. 32*(4), 378-399. DOI: 10.1080/1046560X.2020.1830503

Biffi, D., Lopez-Mobilia, A., Williams, D., Chumchal, M., & Weinburgh, M. H. (2020). Mislabelling and high mercury content hampers the efforts of market-based seafood initiatives in Peru. *Scientific Reports.*

Pearce, E.*, Stewart, M.*, Malkoc, U.*, Ivey, R.*, & Weinburgh, M. H. (2020). Utilizing a dynamic model of food chains to enhance English language learners' science knowledge and language construction. *International Journal of Science & Math Education, 18, 887-901* doi.org/10.1007/s10763-019-10004-5

Weinburgh, M. H. (2020). Emerging, Existing, and Imagined Identities: A Case of Mid-Career and Late-Career Secondary Science Teacher Departure/Dropout. *Journal of Science Teachers Education, 31(6), 654-674.*

Pearce, E.*, Hartweg, B.*, de la Fuentes, Y.*, & Weinburgh, M. H. (2019). Peer-Coaching as a Component of a Professional Development Model for Biology Teachers. *School Science and Mathematics 119*(3), 117-126.

Wu, S.*, Silveus, A*., Vasquez, S*., Biffi, D. *, Silva, C. & Weinburgh, M.H. (2019). Supporting ELL's use of Hybrid Language and Argumentation during Science Instruction. *Journal of Science Teacher Education, 30(1)*, 24-43. DOI: 10.1080/1046560X.2018.1529520

Weinburgh, M. H. & Kamen, M. (2019). A brief history of the Electronic Journal of Science education. *Electronic Journal of Science Education 2*3(5), 1-3.

Weinburgh, M. H., Stewart, M.*, & Silva, C. (2018). Manual-technical operations: A critical examination of one mode of Lemke's hybrid language. *Electronic Journal of Science Education. 22(4), 36-49.*

Feille, K., Nettles, J. & Weinburgh, M. H. (2018) Silhouettes of development: A tool for understanding the needs and growth of teachers. *Journal of Science Teacher Education. 29*(1) 30-45.

Hartweg, B*., Biffi, D*., de la Fuentes, Y*., Malkoc, U*., Patterson, M*., & Weinburgh, M. H. (2017). Peruvian Food Chain Jenga: Learning ecosystems with an interactive model. *School Science and Mathematics. 117(6),* 229-238.

Oliveira, A. & Weinburgh, M. H**.** (2016). Coming to Terms with Language: Editorial for the EJSE Special Issue on Science and Language. *Electronic Journal of Science Education, 20*(3), 1-10.

Melville, W., Weinburgh, M. H., & Bartley, A., Jones, D*., Lampo, A., Lower, J. & Sacevich, N. (2016). The chair's dispositions as virtues. *Teaching and Teacher Education, 57,* 109-117.

Biffi, D*., Hartweg, B*., de la Fuente, Y*., Patterson, M*., Stewart, M*., Simanek, E., & Weinburgh, M. H. (2016). Developing an Educational Tool to Model Food Chains. *Electronic Journal of Science Education, 20*(1), 40 – 53.

Faggella-Luby, M., Griffith, R., Silva, C. & Weinburgh, M. H. (2016) Assessing Ells' Reading comprehension and Science Language Development. *Electronic Journal of Science Education*, *20*(3), 40-53.

Huckaby, M. F. & Weinburgh, M. H. (2015). "Spark like a dialectic": Difference Inbetween Feminisms/Duoethnography. *International Review of Qualitative Research. 8*(1), 49-67.

Weinburgh, M. H., Silva, S., Smith, K., Groulx, J., & Nettles, J*. (2014). The intersection of inquiry-based science and language: Preparing teachers for ELL classrooms. *Journal of Science Teacher Education 25(5), 519-542.* DOI 10.1007/s10972-014-9389-9

Griffith, R., Silva, C., & Weinburgh, M. H. (2014). Language and literacy brokering: Becoming "linguisticians" through parent interviews. *Language Arts. 91(5)*340-351.

Melville, W., Hardy, I., Weinburgh, M. H., & Bartley, A. (2014). School leadership, subject departments and the politics of change: The need for educational alignment and autonomy. *Cogent Education.* 1:983587. DOI 10.1080/2331186X.2014.983587

Westmoreland, S., Garcia, J., Rich, R. & Weinburgh, M. H. (2013, August). Shifting Lab Activity. *The STATellite*. 57(3).

Silva, C., Weinburgh, M. H. & Smith, K. H. (2013). Not just good science teaching: supporting academic language development. *Voices in the Middle. 20*(3), 34-42

Melville, W., Bartley, A. & Weinburgh, M. H. (2012). Change forces: Implementing change in a secondary school for the common good. *Canadian Journal of Educational Administration & Policy, 133,* 1-26.

Silva, C., Weinburgh, M.H., Smith, K., Malloy, R*. & Marshall, J*. (2012). Toward Integration: A Model

of Science and Literacy. *Childhood Education*. 88(2). 91-95.

Holden, M., Groulx, J., Bloom, M. & Weinburgh, M. H. (2011). Assessing efficacy through an outdoor professional development experience for inservice science teachers. *Electronic Journal of Science Education*. *15*(2) 1-25.

Bloom, M.A., Sawey, A.*, Holden, M.E.*, & Weinburgh, M.H. (Winter, 2009). To What Degree Can Explicit Classroom Interventions Change pre-Service Elementary Teachers' Conceptions of Nature of Science? *Council for Elementary Science International 40(02), 27-39.*

Silva, C., Weinburgh, M. H., Smith, K. H., Barreto, G., & Gabel, J. (Winter, 2008/2009). Partnering to Develop Academic Language for English Language Learners in Mathematics and Science. *Childhood Education. 85(2), 107-112.*

Weinburgh, M. H. (2008). How middle childhood in-service teacher view the scientific method. *California Journal of Science Education. 9(1),* 87-102.

Weinburgh, M. H., Smith, K. H., & Clark, J. (2008). Using the reflective teaching model in long-term professional development: a case study of a second year urban elementary teacher. *Electronic Journal of Science Education. 12*(2), 1-20.

Weinburgh, M. H. (2008). The Effect of Tenebrio obscurus on Elementary Teachers' Content Knowledge, Attitudes, and Self-efficacy. *Journal of Science Teacher Education*. *18*(6) 801-816.

Collier, S., Weinburgh, M. H., & Rivera, M. (2004). Infusing technology skills into a teacher education program: Change in student's personal knowledge about and use of technology. *Journal of Technology & Teacher Education. 12*(3), 447-468.

Weinburgh, M. H., Collier, S., & Rivera, M. (2003). Preparing elementary teachers: Infusing technology as recommended by the international society for technology in education's national educational technology standards for teachers. *TechTrends. 47*(4), 43-46.

Weinburgh, M. H. (2003). Confronting and changing middle school teachers' beliefs about scientific methodology. *School Science and Mathematics, 103*(5), 222-232.

Weinburgh, M. H. (2003). Review of Equity and Science Education Reform. *Science Education, 87*(2), 301-302.

Weinburgh, M. H. (2003). The effects of systemic reform on Urban, African-American fifth grade students' attitudes toward science. *Journal of Women and Minorities in Science and Engineering. 9*(1), 53-72.

Weinburgh, M. H. (Fall 2000). Gender, ethnicity, and grade level as predictors of middle school students' attitudes toward science. *Current Issues in Middle Level Education*. 72-84.

Weinburgh, M. H. & Steele, D. (2000). The modified Attitudes Toward Science Inventory: Developing an instrument to be used with fifth grade urban students. *Journal of Women and Minorities in Science and Engineering, 6*(1), 87-94.

Weinburgh, M. H. (1998). Middle school students' grade expectation and preferred topics in science by gender and ethnicity. *Current Issues in Middle Level Education, 7*(2), 74-88.

Weinburgh, M. H., Smith, L. & Smith, K. H. (1997, Oct.). Preparing early childhood education majors to infuse technology into the teaching of mathematics and science. *TechTrends, 42*(5), 43-45.

Weinburgh, M. H. (1996). T.R.E.E.: Co-reform in professional development. *UPDATE, 12*(14), 10-11.

Weinburgh, M. H. (1995, Spring). Preparing gender inclusive science teachers: Suggestions from the literature. *Journal of Science Teacher Education*, *6*(5). 102-107.

Weinburgh, M. H. (1995). Gender differences in student attitudes toward science: A meta-analysis of the literature from 1970-1991. *Journal of Research in Science Teaching, 32*(4), 387-398.

Weinburgh, M. H., Franklin, B., & Franklin, C. (1994, Spring). Gender equity in science classroom: What can be done?. *Current Issues in Middle Level Education, 3*(1), 11-19.

Weinburgh, M. H. & Engelhard, G. (1994). Gender, prior academic achievement, and belief as predictors of student attitudes toward biology laboratory instruction. *School Science and Mathematics, 94*(3), 118-123.

A.2 Peer Refereed Teacher Journal Articles (student)*

Weinburgh, M. H., Gutierrez, N., & Silva, C. (Sept/Oct. 2022). Modifying instruction on plate tectonics using the 5E learning cycle and 5R instructional model with culturally and linguistically diverse students. *Science Scope*

Feille, K., Nettles, J. & Weinburgh, M. H. (2017). Water, water, everywhere! But is it clean to drink? Applying Engineering Design to the Challenge of Water Purification. *Science Scope. 40*(6), 50-56.

Biffi, D*., Hartweg, B*., Stewart, M*., Patterson, M*., Simanek, E., & Weinburgh, M.H. (2016). Engaging students with dynamic models: Peruvian food chain Jenga. *Science Scope, 39*(5), 51-57.

Weinburgh, M.H., Silva, C., Malloy, R*., Marshall, J*., & Smith, K. (2012). A Science Lesson or Language Lesson? Using the 5Rs. *Science & Children. 49*(9) 72-76.

Weinburgh, M. H. & Silva, C. (2011). Math, science, and models. *Science & Children*. 48(10). 38-42.

Weinburgh, M. H. (2004). Teaching photosynthesis: More than a lecture but less than a lab. *Science Scope. 27*(9), 15-17.

Weinburgh, M. H. (2003). Good Science Instruction: A Leg (or Three) to Stand On. *Science & Children. 40*(6), 28-30.

Weinburgh, M. H. (1994, Fall). Gender equity in science classrooms: Recommendations for teachers. *The Georgia Science Teacher, 36(*1) 7-8.

A.3 Peer Refereed Edited Books and Authored Books

Weinburgh, M. H., Silva, C., & Smith, K. H. (2019). *Supporting Emergent Learners in Science: Grades 6-12.* Arlington, VA: NSTA Press.

Oliveira, A. & Weinburgh, M. H. (Eds.) (2017). *Science Teacher Preparation in Content-Based Second Language Acquisition.* London: Springer

Wiseman, K. & Weinburgh, M. H. (Eds.) (2009). *Becoming and Being: Women's Experience in Leadership in K-16 Science Education Communities.* Monograph sponsored by the Association for Science Teacher Education. London: Springer

A.4 Peer Refereed Chapters in Books

Popejoy, K., Hammond, T. C., Malone, D., Morrison, J., Firestone, J., Bodzin, A. M., Leeson, D., Brown, K., Alexander, C., & Weinburgh, M. H. (accepted 06.20.2022) Integrating ArcGIS Digital Technologies for Learning: Socio-Environmental Science Investigations to Promote Geospatial Thinking. In S. Asim, J. Ellis, D. Slykhuis, & J. Trumble (Eds.). *Theoretical and Practical Teaching Strategies for K-12 Science Education in the Digital* Age. IGI Global

Carnes, G. N. & Weinburgh, M. E. (2022). Multicultural science education for middle-level teacher candidates: Examining the past while prepared for the future. In M. Atwater (Ed). *International Handbook of Multicultural Education*. (pp.1-20). Online https://link.springer.com/referenceworkentry/10.1007/978-3-030-37743-4_38-2

Gutierrez, N., Weinburgh, M. H. & Silva, C. (2020). Using the 5R Instructional Model to Enhance Learning for Emergent Multilingual Learners. In M. Bloom & S. Quebec Fuentes (Eds.). *Advancing science and mathematics education for a sustainable future* (pp. 9-18). Dallas, TX: International Consortium for Research in Science and Mathematics Education.

Oliveira, A. W, Weinburgh, M. H**.,** McBride, E., Bobowski, T., & Shea, R. (2019). Teaching Science to English Learners: Current Research and Practices in the Field of Science Education. In L.C. de Oliveira (Eds). (pp. 277-290) *Handbook of TESOL in K-12.* Wiley Press

Oliveira, A. & Weinburgh, M. (2019). Using communication models to teach ELL science. In. L.C. de Oliveira, K. Obenchain, R. Kenney, & A. Oliveiera (Eds). *Teaching Content Areas to English Language Learners in Secondary Schools*. (pp. 247-264). London, UK: Springer Press.

Oliveira, A. W. & Weinburgh, M. H. (2017) Introduction: Science Teacher Preparation in Language and Content. In A.W. Oliveira & M. H. Weinburgh (Eds.). *Science Teacher Preparation in Content-Based Second Language Acquisition.* (pp. 1-21) London: Springer.

Oliveira, A. W. & Weinburgh, M. H. (2017). Epilogue: Emergent Trends and Threads. In A.W. Oliveira & M. H. Weinburgh (Eds.). *Science Teacher Preparation in Content-Based Second Language Acquisition.* (pp. 363-371) London: Springer.

Marble, S., Kamen, M., Naizer, G. & Weinburgh, M. H. (2016). Our Journey of Understanding through Lesson Study. In G. Buck & V. Akerson (Ed). *Enhancing Profession Knowledge of Pre-service Science Teacher Education by Self-Study Research: Turning a Critical Eye on Our Practice* (pp.177-192). London: Springer

Oliveira, A. & Weinburgh, M. H. (2016). Guided Visualization: Promoting ELL Science Literacies through Images. In L.C. de Oliveira (Ed). *The Common Core State Standards in History, Science, and Technical Subjects* (pp. 91-108). Alexandria, VA: TESOL Press.

Silva, C., Weinburgh, M. H., & Smith, K. H. (2015). Joining the team: A study of unintentional professional development. In D. Freeman and Y. Freemen (Eds.). *Research on Preparing*

Inservice Teachers to Work Effectively with Emergent Bilinguals. Volume 24 (pp 3-32). Bingley, UK: Emerald Press.

Hokayem, H., Gotwals, A.W. & Weinburgh, M. H. (2014). The methods of developing a learning progression for systemic reasoning. In Berlin, D. F. & White, A. L. (Eds.). *Initiatives in Mathematics and Science Education with Global Implications* (pp. 63-72). Columbus, OH: International Consortium for Research in Science and Mathematics Education.

Weinburgh, M. H., Silva, C., & Smith, K. H. (2014). Is this a science, mathematics, or language arts lesson? Practical advice for teachers of students learning English. In Berlin, D. F. & White, A. L. (Eds.). *Initiatives in Mathematics and Science Education with Global Implications* (pp. 93-106). Columbus, OH: International Consortium for Research in Science and Mathematics Education.

Weinburgh, M.H., Silva, C. & Smith, K.H. (2014). Learning from fourth and fifth graders in a summer school for English language learners. In M. Diaz, C. Eick, and L. Diaz (Eds.) *Science Teacher Educators as K-12 Teachers: Practicing what we teach* (181-194). London: Springer Publishers.

Weinburgh, M.H & Silva, C. (2013). An Instructional Theory for English Language Learners: The 5R Model for Enhancing Academic Language Development in Inquiry-Based Science. In Irby, B.J., Brown, G., Lara-Alecio, R. (Eds.). *Handbook of Educational Theories.* (pp. 291-301). Charlotte, NC: Information Age Publishing Inc.

Huckaby, M.F. & Weinburgh, M. H. (2012) Alleyways and Pathways: Our Avenues through Patriotic Songs. In J. Norris, R. Sawyer & D. Lund (Eds.). Duoethnography: Promoting personal and societal change in dialogic self-study. (pp. 157-176). Left Coast Press.

Weinburgh, M. H., & Silva, C. (2011) Integrating Language and Science: The 5Rs for English Language Learners. In Berlin, D. F. & White, A. L. (Eds.). *Science and Mathematics: International Innovations, Research*, *and Practices* (pp. 19-32). Columbus, OH: International Consortium for Research in Science and Mathematics Education.

Weinburgh, M. H., & Sawey, A. (2011). Inquiry: Messy and Clean. In Berlin, D. F. & White, A. L. (Eds.). *Science and Mathematics: International Innovations, Research*, *and Practices.* (pp. 33-42). Columbus, OH: International Consortium for Research in Science and Mathematics Education.

Weinburgh, M. H. & Bailey, B. (2010). Parallel but perpendicular paths. In Scantlebury, K., Kahle, J.B., & Martin, S. (Eds.). *Re-visioning science education from feminist perspectives: Challenges, choices and careers*. (pp. 47-56). Boston: Sense Publishers.

Bloom, M.A., Holden, M., Sawey, A.T., & Weinburgh, M.H. (2010). Promoting the use of Outdoor Learning Spaces by K-12, In-service, Science Teachers through a Year-long Outdoor Professional Development Experience. In A. Bodzin, B. Klein, and S. Weaver (Eds.). *The Inclusion of Environmental Education in Science Teacher Education.* (pp. 97-110). London: Springer.

Weinburgh, M. H. & Wiseman, K. (2009). Epilogue: Seeds in want of your watering to germinate, grow, flower, fruit and seed. In K. Wiseman & M. Weinburgh (Eds). *Becoming and Being: Women's Experience in Leadership in K-16 Science Education Communities.* (pp.221-236). Monograph sponsored by the Association for Science Teacher Education.

Wiseman, K. & Weinburgh, M. H. (2009). Introduction: Seeds germinating and growing. In K. Wiseman & M. Weinburgh (Eds). *Becoming and Being: Women's Experience in Leadership in K-16 Science Education Communities.* (pp. 5-16). Monograph sponsored by the Association for Science Teacher Education. London: Springer

Weinburgh, M. H., Hart, L., & Carriere, J. (2007). A new perspective on integrating math and science: The Decatur elementary math/science project. In Berlin, D. F. & White, Al. L. (Eds.). *Global Issues, Challenges, and opportunities to Advance Science and Mathematics Education.* (pp. 21-38) Columbus, OH: International Consortium for Research in Science and Mathematics Education.

Weinburgh, M. H. (2007). Challenging elementary preservice teachers' beliefs about scientific methodology. In Berlin, D. F. & White, A. L. (Eds.). *Global Issues, Challenges, and opportunities to Advance Science and Mathematics Education.* (pp. 181-188) Columbus, OH: International Consortium for Research in Science and Mathematics Education.

Weinburgh, M.H., (2005). Long-term Professional Development for Elementary Teachers: Cost and Benefits. Berlin, D. F., & White, A. L. (Eds.). *Collaboration for the global improvement of science and mathematics education.* (pp. 133-140) Columbus, OH: International Consortium for Research in Science and Mathematics Education.

Weinburgh, M. H. (2003). Changing elementary and college science teaching through co-teaching/co-generative dialogue. In D. Berlin & A. Whites (Eds). *Improving Science and Mathematics*

Education: Insights for a Global Community. (pp. 63-74). Columbus, OH: ICRSM.

Weinburgh, M. H. (2002). Case 6.2 What is the shape of a star? In Tippins, D., Koballa, T, &Payne, B. (Eds). *Learning from Cases: Unraveling the Complexities of Elementary Science Teaching*. (pp. 113-115). Allen & Bacon.

Weinburgh, M. H. (2000). Chapter 5: Weather. In Irvine, J. J. & Armento, B. J. (Eds). Culturally Responsive Lesson Planning for Elementary and Middle Grades. McGraw-Hill.

Golley, P. and Weinburgh, M. H. (1997). The Scientific Field Study. In Irvine, J. J & Armento, B.J. (Eds). Perfecting Educational Practice: Culturally Responsive Curricula for Middle Grades. Pp. 133-178. AACTE and Philip Morris Co.

Weinburgh, M. H., Hughes, M., Blass, S., & Turner, J. (1997). Weather. In Irvine, J. J & Armento, B.J. (Eds). Perfecting Educational Practice: Culturally Responsive Curricula for Middle Grades. Pp. 179-220. AACTE and Philip Morris Co.

Weinburgh, M. H. (1996). Ethel Brown Harvey. In B. Shearer & B. Shearer (Eds), *Noted Women Scientist: A biographical dictionary. Vol 1: Life Science.* (pp. 156-159). New Port: Greenwood Publishers.

A.5 Peer Refereed Proceedings

Alexander, C., Weinburgh, M. & Brown, K. (2022). Cultural Heritage Mapping using ArcGIS. In L. Langran & D. Henriksen (Eds.), *Proceedings of SITE Interactive Conference* (pp. 128-130). Online: Association for the Advancement of Computing in Education (AACE). Retrieved November 1, 2022 from https://www.learntechlib.org/primary/p/221581/.

Bartley, A., Melville, W., Weinburgh, M., Jones, D., Lampo, A., Sacevich, N. & Lower, J. (2011). Curriculum innovation from within: Emancipatory action research in the context of single sex classes in science and mathematics. Proceedings of the 2011 Annual Conference of the Association for Science Teacher Education, Minneapolis, MN.

Weinburgh, M. H. (2007). Sustained Professional Development: An Examination of the Effects on Urban Elementary Teachers' Content and Practice. In proceedings of the National Association of Research in Science Teaching, New Orleans.

Watkins, J.K., & Weinburgh, M. H. (2003). On a learning curve: The Institute of Mathematics, Science, and Technology Education. In N. Hall and D. Springate (Eds.). Proceedings of the 13th Annual Conference of the European Teacher Education Network.

Weinburgh, M. H. & Jones, S.L. (2002). (Eds.). Situating Gender and Science Education in Local Contexts. Proceedings of Gender and Science Education International Conference. Fort Worth, TX: Institute of Mathematics, Science, and Technology Education

Weinburgh, M. H. (2002). Gender Equity: Past, Present, Future. In M. Weinburgh & S. Jones (Eds.) Situating Gender and Science Education in Local Contexts. Fort Worth, TX: Institute of Mathematics, Science, and Technology Education.

Farokhi, E. & Weinburgh, M. H. (2002). Internationalization at Georgia State University. In. N. Hall and D. Springate (Eds.). Proceedings of the 13th Annual Conference of the European Teacher Education Network.

Weinburgh, M. H. & Russell, D. (2001). A workshop on curriculum as a means of transformative research in cross-cultural teacher education. Proceedings of the 41st International Conference World Education Fellowship. Sun City, South Africa.

Weinburgh, M. H. (2000). How middle childhood in-service teachers view the scientific method. In P. Rubba, P. Keig & J. Rye (Eds.), Proceedings of the 2000 Annual International Conference of the Association for the Education of Teachers in Science (pp. 227-241). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 438 191).

Farokhi, E. & Weinburgh, M. H. (1999). Is the climate chilly or warm for women in higher education institutions? In Proceedings of the 1999 symposium: Higher Education in Transition; the politics and practices of equity (pp 127-142). Washington, DC: American Association of University Women.

Weinburgh, M.H. (1999). Addressing issues of (gender) equity in science education: So much to do in only fifteen weeks. In Hildebrand, G. M (Ed), "Gazing into the Future: Proceedings of the Gender and Science Education (GASE) Colloquium", Boston: The University of Melbourne, Parkville, Vic.

Weinburgh, M. H. (1998). Gender, ethnicity, and grade level as predictors of middle school students' attitudes toward science. In P. Rubba, P. Keig & J. Rye (Eds.), Proceedings of the 1998 Annual International Conference of the Association for the Education of Teachers in Science (pp. 667-677). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 421363).

Thorsen, C. C, Weinburgh, M. H. & Wierson, C. H. (1997). Gender equity: In and out of the classroom. In Proceedings of the 1997 symposium: Gender and Race on the Campus and in the School: Beyond Affirmative Action. (pp. 97-104). Anaheim, CA: American Association of University Women.

Farokhi, E., Thorsen, C.C., & Weinburgh, M. H. (1997). Integrating gender equity and reform in higher education. In Proceedings of the 1997 symposium: Gender and Race on the Campus and in the School: Beyond Affirmative Action. (pp. 299-308). Anaheim, CA: American Association of University Women.

Weinburgh, M. H., DeHaan, R., & Goebel, C. (1996). Elementary science education partners: Pathways for professional growth for elementary science teachers. In P. Rubba, P. Keig & J. Rye (Eds.), Proceedings of the 1996 Annual International Conference of the Association for the Education of Teachers in Science (pp. 528-536). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 398-060).

A.6 Editorial Refereed Textbooks/Manuals

Drenner, R. & Weinburgh, M. H. (2004). Contemporary Issues in Biology: Professional Development Module for Teachers. Texas Education Agency/Texas Higher Education Coordinating Board. [online at www.contemporaryissues.tcu.edu]

Weinburgh, M. H. (1999). Gender differences in student attitudes toward science: A meta-analysis of the literature from 1970 to 1991. Journal of Research in Science Teaching, 32, 387-398. Reprinted in full, with my original researchers' comments, in Gall, M. D., Gall, J. P., & Borg, W. R., Applying Educational Research: A Practical Guide, 4th edition. New York: Addison Wesley Longman.

Weinburgh, M. H. & Farokhi, E. (1999). A Professional Development Manual for Gender Equity in Collegiate Science, Engineering, Mathematics, and Education. Georgia Institution of Technology College Press: Atlanta, GA.

Weinburgh, M. H. & Farokhi, E. (1999). K-12 Model One: One-time, In-service Workshops. In Weinburgh & Farokhi (Eds). A Professional Development Manual for Gender Equity in Collegiate Science, Engineering, Mathematics, and Education. Georgia Institution of Technology College Press: Atlanta, GA.

Weinburgh, M. H. & Farokhi, E. (1999). Model Four: Classroom Instructor Observation and Debriefing. In Weinburgh & Farokhi (Eds). A Professional Development Manual for Gender Equity in Collegiate Science, Engineering, Mathematics, and Education. Georgia Institution of Technology College Press: Atlanta, GA.

Weinburgh, M. H. & Farokhi, E. (1999). Model Two: General Awareness Session followed by Topical Workshops. In Weinburgh & Farokhi (Eds). A Professional Development Manual for Gender Equity in Collegiate Science, Engineering, Mathematics, and Education. Georgia Institution of Technology College Press: Atlanta, GA.

Weinburgh, M. H. (1995). Month Four. In A.D.A.M. (Eds). Nine Month Miracle Teacher's Guide. Pp 2:63-2:71. Atlanta, GA: ADAM.

Weinburgh, M. H. (1995). Month Eight. In A.D.A.M. (Eds). Nine Month Miracle Teachers's Guide. Pp 2:102-2:115. Atlanta, GA: ADAM.

Weinburgh, M. H., Davenport, M., Golley, P., Jacobson, T. & Weinburgh, P. (1994). Tropical Rainforest: An Interdisciplinary Approach. Atlanta, GA: Visions United.

Weinburgh, M. H. (1994). The one computer classroom. Georgia Public Television/GSU. Atlanta, GA: Georgia State University.

Weinburgh, M. H. (1994). Computer labs. Georgia Public Television/GSU. Atlanta, GA: Georgia State University.

Weinburgh, M. H. (1994). Opening School Experience: Handbook for MSIT. Oklahoma City: Custom Academic Publishing Company.

McCloskey, M. L. & Weinburgh, M. H. (1993). Interdisciplinary curriculum pilot: Rainforest and oceans. Atlanta, GA: Visions United.

5B. Non-Refereed Research/Columns

B.1. Non-Refereed Textbooks/Manuals

Hart, L., Weinburgh, M., & Carriere, J. (2002). Decatur Elementary Mathematics/Science Project: A Handbook for Staff Developers. Georgia State University. [http://education.gsu.edu/lhart/]

Farokhi, E. & Weinburgh, M. H. (1999). Issues dealing with gender equity: Institutional self-study 1990-1998. Atlanta, GA: Georgia State University.

Smith, K. H. & Weinburgh, M. H. (1997). A working handbook for successful teaching in the early childhood science classroom. Oklahoma City: Custom Academic Publishing Company.

Weinburgh, M. H. (1995). Successful science teaching to middle childhood students: A methods manual. Atlanta, GA: Georgia State University.

Weinburgh, M. H. & Putzell, S (1995). Creating multimedia using HyperCard templates: A process of infused instruction. Atlanta, GA: Georgia State University.

Weinburgh, M. H. (1994). Science Resources. Atlanta, GA: Georgia State University.

Weinburgh, M. H., North, A., Jones, J., Crane, A., & Johnston, H. (1994). Student Teaching Handbook for MSIT. Oklahoma City: Custom Academic Publishing Company.

B.2 Research/Project Reports

Hernandez, F., Huddleston, G., & Weinburgh, M. H. (2022). COVID-19 impact and recovery. Morris Foundation.Report #090122

Weinburgh, M. H., Alanis, N., Clawson, M., Titus, A., & Wallace, S. (2021). Chemistry Boot Camp. Report #122921

Anderson, S., Ezzani, M., Hernandez, F., Huddleston, G., Lacina, J., & Weinburgh, M. H. (2021). Rainwater Foundation community partners: A snapshot of stakeholder COVID-19 experiences. Rainwater Charitable Foundation Project #23764. Report #080121

Alexander, C., & Weinburgh, M. H. (2021) Collaborative Research: Socio-Environmental Science Investigations: Exploring Alternative New Directions. Year 1 2020-2021 National Science Foundation. #1949393

Weinburgh, M.H. & Mitrano, M. (2020). Year 4 Report to Bryant Bridge of Hope.

Weinburgh, M.H. & Mitrano, M. (2019). Year 3 Report to Bryant Bridge of Hope.

Weinburgh, M. H. & Biffi, D. (2018). Sustainable seafood initiatives in Peru. Final Report

Weinburgh, M. H. & Smith, P. (2018). Evaluation of Teacher Quality Projects in Texas for Cycle 2017-2018. State Agency for Higher Education.

Weinburgh, M. H. (2018). Teacher Quality Grant 547 - 2016-2018 cycle – Final Report to the Texas Higher Education Coordinating Board.

Weinburgh, M.H. & Mitrano, M. (2018). Year 2 Report to Bryant Bridge of Hope.

Weinburgh, M. H. & Smith, P. (2017). Evaluation of Teacher Quality Projects in Texas for Cycle 2016-2017. State Agency for Higher Education.

Weinburgh, M.H. & Mitrano, M. (2017). Year 1 Report to Bryant Bridge of Hope.

Weinburgh, M.H. & Smith, P. (2017). Evaluation of Teacher Quality Projects in Texas for Cycle 2014-2016. State Agency for Higher Education.

Weinburgh, M.H. & Smith, P. (2016). Evaluation of Teacher Quality Projects in Texas for Cycle 2012-2014. State Agency for Higher Education.

Weinburgh, M. H. (2016). Teacher Quality Grant 547 - 2016-2018 cycle – Mid-point Report to the Texas Higher Education Coordinating Board.

Weinburgh, M. H. (2016). Teacher Quality Grant 532 - 2014-2016 cycle – Final Report to the Texas Higher Education Coordinating Board.

Weinburgh, M. H. & Smith, P. (2015). Management Report 2014-2015

Weinburgh, M. H. & Smith, P. (2015). State Higher Education Executive Officers (SHEEO) Report -- Cycle 2012-2014 [TCU grant 24289]

Weinburgh, M. H. (2015). THECB's Report to Texas Commissioner of Education – Teacher Quality Grants 24289 and 24292

Weinburgh, M. H. (2015). THECB – Teacher Quality Grant 24288 - 2012-2014 cycle – Mid-point Report

Weinburgh, M. H. & Smith, P. (2015). Technical Report 2014-2015

Weinburgh, M. H. (2014). THECB – Teacher Quality Grant 502 - 2012-2014 cycle – Final Report

Weinburgh, M. H. (2014). Teacher Quality Standard State Evaluation 24289 – Progress report to THECB committee [with presentation in Austin]

Weinburgh, M. H. & Smith, P. (2014). Teacher Quality Standard State Evaluation 24289 – Final Report to the Texas Higher Education Coordinating Board.

Weinburgh, M. H. & Smith, P. (2014). Teacher Quality Standard State Evaluation 24292 – First Progress report to the Texas Higher Education Coordinating Board.

Weinburgh, M. H. (2014). THECB – Teacher Quality Grant 24296 – Interim Progress Report.

Weinburgh, M. H. (2013). Earth/Space. Grant 502. Midpoint Report to the Texas Higher Education Coordinating Board.

Weinburgh, M. H. (2013). Teacher Quality Standard State Evaluation 2012-2013 cycle – End of Year 1 Report December 31, 2013. Report to the Texas Higher Education Coordinating Board.

Weinburgh, M. H. (2012). An examination of the Professional Growth of Teachers Participating in a Professional Development Program (cycle 2009-2012). Report to the Texas Higher Education Coordinating Board. Grant # 05829.

Weinburgh, M. H. (2011). Environmental Systems Emphasizing Sustainable Education. Report to the Texas Higher Education Coordinating Board. Grant # 469.

Weinburgh, M. H. (2009). Developing PCK in Environmental Education. Report to the Texas Higher Education Coordinating Board. Grant # 406.

Weinburgh, M.H. (2009). Elementary teachers developing PCK in Outdoor Ed – Final Report to the Texas Higher Education Coordinating Board. Grant # 411.

Weinburgh, M.H. (2009). MSL Summer School Grant – Report to JP Morgan Chase. November 2009.

Weinburgh, M. H. (2008). Increasing PKC and NOS Using Contemporary Issues in Biology. Report to the Texas Higher Education Coordinating Board. Grant # 322.

Weinburgh, M. H. (2007). Increasing Content Knowledge and Pedagogical Skills Using Contemporary Issues in Biology. Report to the Dana Center. Grant # 270.

Weinburgh, M. H. (2007). Developing Content and Pedagogy for Earth/Space Science. Report to Dana Center. Grant #278.

Weinburgh, M. H. (2006). Professional Development for Biology Teachers: Contemporary Issues. Report to Texas Higher Education Coordinating Board. Grant #178.

Weinburgh, M. H. (2005). Biology Module: Contemporary Issues in Biology. Report to Texas Higher Education Coordinating Board. Grant # 000.

Weinburgh, M. H. (2004). Biology: Opportunities for Learning and Teaching. Report to Texas Higher Education Coordinating Board. Grant #86.

Weinburgh, M. H. (2003). Bransom-Hommel Water Project. Report to Texas Higher Education Coordinating Board.

Hart, L., & Weinburgh, M. H. (2003). The Decatur Elementary Math/Science Project: Enhancing Teacher Change (Year 3), Report to Eisenhower Higher Education Funds.

Weinburgh, M. H. & Hart, L. (2002). The Decatur Elementary Math/Science Project: Enhancing Teacher Change (Year 2), Report to Eisenhower Higher Education Funds.

DeHaan, R., Allwood, V., Weinburgh, M., and Hall, B. (2001). Annual Progress Report: Elementary Science Education Partners. Report to National Science Foundation. Grant #ESI-9552864.

Weinburgh, M. H. & Hart, L. (2001). The Decatur Elementary Math/Science Project: Enhancing Teacher Change, Report to Eisenhower Higher Education Funds.

DeHaan, R., Allwood, V., Weinburgh, M., and Stickland, B. (2000). Annual Progress Report: Elementary Science Education Partners. Report to National Science Foundation. Grant #ESI-9552864.

DeHaan, R., Allwood, V., Weinburgh, M., and Stickland, B. (1999). Annual Progress Report: Elementary Science Education Partners. Report to National Science Foundation. Grant #ESI-9552864.

Farokhi, E. & Weinburgh, M.H. (1999). Issues Dealing With Gender Equity: Institutional Self-Study 1990-1998. Highlights. Report to Georgia State University administration on the findings of the National Science Foundation Grant HRD-9453106.

Farokhi, E. & Weinburgh, M.H. (1999). Issues Dealing with Gender Equity: Institutional Self-Study 1990-1998. Report to Georgia State University administration on the findings of the National Science Foundation Grant HRD-9453106.

DeHaan, R., Allwood, V., Weinburgh, M., and Stickland, B. (1998). Annual Progress Report: Elementary Science Education Partners. Report to National Science Foundation. Grant #ESI-9552864.

DeHaan, R., Allwood, V., Weinburgh, M., and Canada, B. (1997). Annual Progress Report: Elementary Science Education Partners. Report to National Science Foundation. Grant #ESI-9552864.

B.3 Column not Refereed

Weinburgh, M. H. (February 22, 2013) Huffington Post. Blog. *Women in Math, Science and Medicine: Still Work to be Done*

Bloom, M., Weinburgh, M. H., & Danell, P. (2008, Spring). What's good for the teacher may not be good for the student. *Childhood Education International: Focus on Middle School. 20(3), 4-8.*

Bloom, M. & Weinburgh, M. H. (2007, Fall). Why every teacher should know NOS. *Childhood Education International: Focus on Middle School, 20(2), 1-4.*

5C. Materials accepted

N/A

5D. Presentations

A. International

Popejoy, K., Hammond, T., Bodzin, A., Morrison, J., & Weinburgh, M. (March, 2022). Advancing Teachers' Geospatial TPACK: Three Universitates' Professional Development Initiatives. Paper presented at the annual meeting of NARST, Vancouver, BC.

Brown, K. A., Weinburgh, M.H., & Alexander, B (2022 January). Professional development during COVID-19: Using socio-environmental science investigations to promote geospatial thinking. Paper set presented at the virtual annual meeting of the Association for Science Teacher Education.

Thompson, H. & Weinburgh, M., (2022 January). Pedagogical practices: Using the 5R Instructional Model and multimodal language to scaffold entry into a community of practice. Paper set presented at the virtual annual meeting of the Association for Science Teacher Education.

Weinburgh, M.H., Biffi, D., & Silva, C. (2022 January). Situated cognition and socio-cultural constructivism: Science teacher instructional intentions and science learning by a emergent multilingual learner. Paper set presented at the virtual annual meeting of the Association for Science Teacher Education.

Biffi, D., Richards, A.S, & Weinburgh, M. (2021 November). Framing effects on attitudes and intentions towards shark meat consumption in Peru. Society for Conservation Biology, Conservation Marketing Virtual Conference (ConsMark2021).

Biffi, D., Richards, A.S, & Weinburgh, M. (October 2021). Framing effects on attitudes and intentions towards shark meat consumption in Peru. Paper presented at the Society for Conservation Biology, Conservation Marketing Virtual Conference.

Weinburgh, M. H. (2021August) *The 5R Instructional Model: Supporting Emergent Multilingual Students*. Workshop for Improving Science Education in Kazakhstan: An online professional development program for high school teachers. Funded by NARST.

Weinburgh, M. H. (2021 July). *Improving instruction: 5R Instructional Model.* Workshop presented for the Hanoi, Vietnam science teachers.

Weinburgh, M. H. (2021 April). *Movement: Disruptive or appropriate in science labs*. Paper presented at the virtual annual meeting of NARST.

Weinburgh, M., Alexander, C., & Brown, K. (January 2021). Synchronous or asynchronous: Learning geospatial thinking and reasoning through ZOOM. Paper set presented at the virtual annual meeting of the International Consortium for Research in Science & Mathematics Education. Online

Weinburgh, M. H., Silva, C., Smith, K. H., Biffi, D., Price, C., Amyett, M., & Domino, A. (2021 January). *What I Did-What I Learned: Discursive resources students use to communicate 'practice' and 'content'*. Paper set presented at the virtual annual meeting of the Association for Science Teacher Education.

Thompson, H., Cordell, J., & Weinburgh, M. H. (2020 January). *Investigating African-American and Latinx Discourse Practices in Joining a Chemistry Lab Community*. Paper presented at the annual meeting of the Association for Science Teacher Education. San Antonio, TX.

Weinburgh, M. H. (2020 January*). Secondary Science Teacher Dropout: A Case Study*. Paper presented at the annual meeting of the Association for Science Teacher Education. San Antonio, TX.

Biffi, D., Lopez-Mobilia, A., Kelez, S., Williams, D.A., Chumchal, M.M., & Weinburgh, M.H. (2019 September). *Mislabeling and mercury content in seafood in Peru. 1st Peruvian Shark Symposium. Lima, Peru.* 14th International Conference on Mercury as a Global Pollutant. Krakow, Poland.

Weinburgh, M. H. (2019 April). *Movement expressiveness as an enactment of engagement and learning: A case study within a chemistry lab*. Paper presented at the annual meeting of NARST, Baltimore, MD.

Gayne, G., Edmondson, W. E., Luft, J. A., Bell, R., Reiser, B. J., Whitworth, B., Meser, F. & Weinburgh, M.H. (2019 April). *Early Career Faculty Forum*. Invited forum at NARST, Baltimore, MD.

Biffi, D., Lopez-Mobilia, A., Kelez, S., Williams, D., Chumchal, M.M., & Weinburgh, M. H. (2019 March). *Mislabeling and mercury content in seafood in Peru*. Paper presented at the First Latin American Congress of Sharks, Rays, and Chimaeras, Playa del Carmen, Mexico

Weinburgh, M.H., & Silva, C. (2019 January). *A case study of a 6th grade science teacher's implementation of the 5R Instructional Model*. Paper presented at the annual meeting of the Association for Science Teacher Education. Savannah, GA.

Weinburgh, M.H., Silva, C., Smith, K. H., & Gutierrez, N. (2019 March). *Using the 5R Instructional Model to Enhance Learning for Emergent Multilingual Learners.* Paper presented at the ICRSME, San Jose, Costa Rica.

Weinburgh, M.H. (2018 July). *Erosion: Using inquiry science as access for students with special needs*. University of Hanoi's Special Education Conference, Hanoi, Vietnam.

Biffi, D., Lopez-Mobilia, A., Kelez, S., Williams, D., Chumchal, M.M., & Weinburgh, M. H. (2018 June). *Mislabeling and mercury content in seafood in Peru*. Paper presented at the 5th International marine Conservation Congress, Kuching, Sarawak Malaysia.

Adams, J., Bayne, G., Bell, R., Butler, M., Luft, J., Otulaja, F. & Weinburgh, M.H., (2018 March) *Early Career Faculty Forum*. Panel presented at the annual meeting of NARST, Atlanta, GA.

Weinburgh, M.H., Silva, C., & Smith, K.H. (2018 January). *School/University partnerships focusing on science for ELLs*. Paper presented at the annual meeting of the Association for Science Teacher Education. Baltimore, MD.

De la Fuente, Y., Vasquez, S., Biffi, D., & Weinburgh, M. H. (2018 January). *An ELL's journey into a science speech community.* Paper presented at the annual meeting of the Association for Science Teacher Education. Baltimore, MD.

Wu, S., Vasquez, S., Silveus, A., Biffi, D., & Weinburgh, M. H. (2018 January*). How ELLs use the hybrid language of science to construct scientific argumentation*. Paper presented at the annual meeting of the Association for Science Teacher Education. Baltimore, MD.

Biffi, D.*, López-Mobilia, A., & Weinburgh, M. H. (2017 September). *Attitudes and knowledge about the marine ecosystem: An exploratory study in northern Peru*. Paper presented at the annual meeting of the World Environmental Education Congress, Vancouver, Canada.

Biffi, D., Lopez-Mobilia, A., Williams, D.A., Chumchal, M. M. & Weinburgh, M. (2017 October) *Mercury content and mislabeling in sharks from markets in Lima and Tumbes.* 1st Peruvian Shark Symposium. Lima, Peru.

Weinburgh, M., Silva, C. & Smith, K. (2017 January). *Professional Development: What attracts biology teachers and what they value.* Paper presented at the annual meeting of the Association for Science Teacher Education. De Moines, Iowa.

Naizer, G. & Weinburgh, M. H. (2017 January). *Our journey of understanding through Lesson Study.* Poster in invited session ASTE Book Series in Science Education – Enhancing Professional Knowledge of Pre-service Science Teacher Education by Self-study Research presented at the annual meeting of the Association for Science Teacher Education, De Moines, Iowa.

Weinburgh, M., Silva, C. & Smith, K. (2016 January). *Inservice Science Teacher Needs: Integration of Mathematics and Language.* Paper presented at the annual meeting of the Association for Science Teacher Education. Reno, NV.

Hartweg, B., Biffi, D., de la Fuente, Y., Stewart, M., Patterson, M., & Weinburgh, M. (2016 January). *Engaging Students with Dynamic Models: Peruvian Food Chain Jenga.* Paper presented at the annual meeting of the Association for Science Teacher Education. Reno, NV.

Silva, C. & Weinburgh, M. (2016 April). *Acquiring the discourse of the science classroom*. Annual meeting of European Teacher Education Network. Setubal, Portugal

Oliveria, A. & Weinburgh, M. (2016 May) *Communication Models of ELL Science Instruction*. Paper presented at the annual meeting of the Canadian Society for the Study of Education, Calgary, CA.

Weinburgh, M., & Stewart, M. (2015 October) *Hybrid language of science: What is the manual-technical part?* Paper presented at the annual meeting of School Science & Mathematics Association. Oklahoma City, OK.

Smith, K.H., Silva, C., Weinburgh, M.H., & Smith, N. (2015 March). *Emerging Bilinguals: Developing a Rubric for Communicating in Mathematics* Paper presented at the annual meeting of RCML. Las Vegas.

Weinburgh, M., Silva, C. & Smith, K. (2015 January). *Developing conceptual understanding and academic language for English language learners*. Paper presented at the annual meeting of the Association for Science Teacher Education. Portland, OR.

Bartley, A., Weinburgh, M., Jones, D., Campbell, H., Lampo, A., & Sacevich, N. (2015 January). *Triumphs and tensions: What we have learned from four years of single sex classes for at-risk boys.* Paper presented at the annual meeting of the Association for Science Teacher Education. Portland, OR.

Nettles, J., Feille, K. & Weinburgh, M. (2015 January) *Reflection writing: A tool for understanding teacher's perspectives on long term professional development*. Paper presented at the annual meeting of the Association for Science Teacher Education. Portland, OR.

Smith, K.H., Silva, C., Weinburgh, M. H, & Smith, N. (2014, March) *As mathematicians, how do English language learners communicate mathematically?* Paper presented at the annual meeting of the RCML, San Antonio, TX.

Silva, C., Weinburgh, M. H., & Smith, K. (2014, January) *Natural language – reading writing, speaking, listening - Paper 1.* Paper set (*Interrogating the hybrid language of science in ELL classrooms.*) presented at the annual meeting of the Association for Science Teacher Education. San Antonio, TX.

Smith, K. Weinburgh, M. H., & Silva, C. (2014, January) *Visual representation – What can you learn from what I draw? - Paper 2.* Paper set (*Interrogating the hybrid language of science in ELL classrooms.*) presented at the annual meeting of the Association for Science Teacher Education. San Antonio, TX.

Weinburgh, M. H., Silva, C., & Smith, K. (2014, January) *Manual/technical skills – Do I communicate like a scientist? - Paper 3.* Paper set (*Interrogating the hybrid language of science in ELL classrooms.*) presented at the annual meeting of Association for Science Teacher Education. San Antonio, TX.

Melville, W., Weinburgh, M.H., & Bartley, A. (2014, January). *Conduct in leadership: Virtues and the department chair*. Paper presented at the annual meeting of the Association for Science Teacher Education. San Antonio, TX.

Weinburgh, M. H., Silva, C., & Smith, K. (2013, January). *Using student artifacts with pre-service teachers: changing methods courses - Paper 2.* Paper set (Educating science teachers for ELL classrooms: stories from the field) presented at the annual meeting of the Association for Science Teacher Education. Charleston, SC.

Meadows, L., Jablon, P., Eick, C., Akerson, V., Guy, M., Lott, K., Weinburgh, M., & Brown, S. (2013, January). *Teaching science to K-12 students as professional development for science teacher educators: An interactive panel discussion on various approaches, goals, and benefits.* Invited panel presented at the annual meeting of the Association for Science Teacher Education. Charleston, SC.

Smith, K. H., Silva, C., & Weinburgh, M.H. (2013, March). *How do ELL students and families view communication in mathematics?* Paper presented at the annual meeting of the Research Council on Mathematics Learning.

Hokayem, H. & Weinburgh, M. (2013, March). *Elementary students' reasoning about species interactions in an ecosystem.* Paper presented at the bi-annual meeting of the International Consortium of Science and Mathematics Education. Granada, Nicaragua.

Kamen, M. & Weinburgh, M.H. (2013, March). *So you want to publish in (or review for) the Electronic Journal of Science Education.* Paper presented at the bi-annual meeting of the International Consortium of Science and Mathematics Education. Granada, Nicaragua.

Weinburgh, M. H., Silva, C. & Smith, K. H. (2013, March). *Is this a science, mathematics, or language arts lesson? Practice Advice.* Paper presented at the bi-annual meeting of the International Consortium of Science and Mathematics Education. Granada, Nicaragua.

Silva, C., Smith, K.H., Cox, J., Balial, R. & Weinburgh, M. H. (2012, February) *Academic language: A manner of speaking*. Presentation at the National Association for Bilingual Education, Dallas, TX

Weinburgh, M. H., Silva, C., Smith, K. (2012, January). *Integrating languages and content: Science, mathematics, and English - Paper 1.* Paper set presented at the annual meeting of the Association for Science Teacher Education. Clearwater, FL.

Silva, C., Weinburgh, M. H., Nettles, J., & Smith, K. (2012, January). *Inquiry as an equalizer: Natural and mathematical language through science - Paper 3.* Paper set presented at the annual meeting of the Association for Science Teacher Education. Clearwater, FL.

Bartley, A., Melville, W., Jones, D., Weinburgh, M. H., Lampo, A., Sacevich, N., Campbell, H., Lower, J., Seymour, R., & Petrick, N. (2012, January*). Where the Boys Are – Issues in Single Sex Classes for Science and Mathematics.* Paper set presented at the annual meeting of the Association for Science Teacher Education. Clearwater, FL.

Weinburgh, M. H. (2011, November). *Undergraduate Research in chemistry: Authentic and Original.* Paper presented at the annual meeting of School Science and Mathematics Association. Colorado Springs, CO.

Huckaby, M. F. & Weinburgh, M. (2011, May) *Duoethnographies of Difference*: *Alleyways and paths of patriotism, pride, and oppression.* Panel presented at the International Congress of Qualitative Inquiry. Urbana, Illinois.

Weinburgh, M. & Silva, C. (2011, April*). Discourse of science: Helping English language learners with speaking, reading, writing.* Paper presented at the annual meeting of the National Association for Research in Science Teaching. Orlando, FL.

Huckaby, M. F. & Weinburgh, M. (2011, April). *Duoethnographies of Status, Privilege, and Power: Alleyways and paths of patriotism, pride, and oppression: New avenues of Dear Molly.* Panel paper presented at the annual meeting of the American Educational Research Association. New Orleans, LA.

Weinburgh, M. H., Silva, C., Marshall, J., Smith, K., & Malloy, R. (2011, January). *Science talk-Math talk: Using the 5R model to help English language learners make meaning through language and integrated science and mathematics. Paper 3 – Oral discourse.* Paper set presented at the annual meeting of the Association for Science Teacher Education. Minneapolis, MN.

Smith, K., Weinburgh, M. H., Malloy, R., Marshall, J. & Silva, C. (2011, January). *Science talk-Math talk: Using the 5R model to help English language learners make meaning through language and integrated science and mathematics. Paper 2 – Written discourse.* Paper set presented at the annual meeting of the Association for Science Teacher Education. Minneapolis, MN.

Bartley, A.W., Melville, W., Weinburgh, M., Jones, D., Lampo, A., Sacevich, N., Lower, J. (2011, January). *Curriculum innovation from within – Emancipatory action research in the context of single sex classes in science and mathematics.* Paper presented at the annual meeting of the Association for Science Teacher Education. Minneapolis, MN.

Huckaby, M.F. & Weinburgh, M. (2011, January). *Alleyways and pathways: Our avenues through patriotic songs.* 2011 International Conference: narrative, Arts-Based, and "Post" Approaches to Social Research.

Weinburgh, M. H. & Silva, C (2010, March). *Integrating language and science: The 5R's for English language learners*. Paper presented at the bi-annual meeting of the International Consortium of Research in Science and Mathematics Education, Los Angeles Locos, Mexico.

Weinburgh, M. H. (2010, March*). Inquiry: Messy science-clean science*. Paper presented at the bi-annual meeting of the International Consortium of Research in Science and Mathematics Education, Los Angeles Locos, Mexico.

Weinburgh, M. H., Silva, C., & Oliver, T. (2010, March). *Testing a model for developing content knowledge and academic language in science: The 5Rs for teaching ELLs*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA.

Holden, M., Groulx, J., Bloom, M., & Weinburgh, M. H. (2010, March). *Assessing efficacy through an outdoor professional development experience for inservice science teachers.* Paper presented at annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA.

Weinburgh, M. H., & Silva, C. (2010, January). *Science content knowledge and language acquisition: Replacing, repositioning, revealing, repeating and reloading academic language.* Paper presented at the annual meeting of the Association for Science Teacher Education, Sacramento, CA.

Bartley, A., Melville, W., Jones, D., & Weinburgh, M. (2009, May). *Describing science as inquiry: The use of video evidence to analyze exemplary practice.* Paper presented at annual conference of the Canadian Society for the Study of Education, Ottawa, CA

Weinburgh, M. H., Silva, C., Oliver, T., and Wielard, V. (2009, April). *Reloading and repositioning science language for ELL students: A new look at sheltered instruction*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Orange Grove, CA.

Giscombe, C., Davis, K., Wiesemen, K., Abder-Fraser, P., Yeotis, C., Weinburgh, M., Johnson, A. & Monosson, E. (2009, January). *I answer with my life: Lessons learned from the experiences of women science teacher educators as they navigate and negotiate in sciece careers*. Paper presented at the annual meeting of the Association for Science Teacher Education, Hartford, CT.

Wiesemen, K., Weinburgh, M., Giscombe, C., Davis, K., Abder-Fraser, P., & Yeotis, C. (2009, January). *Turning on your leadership lights: a workshop of activities for becoming and being leaders.* Invited workshop presented at the annual meeting of the Association for Science Teacher Education, Hartford, CT.

Weinburgh, M. H. (2009, January). *Informing college teaching through self-study: A three-year journey*. Paper presented at the annual meeting of the Association for Science Teacher Education, Hartford, CT.

Weinburgh, M. H. (2008, May). *Delicate empiricism: Creating a model for science education.* Paper presented at the International Consortium for Research in Science and Math Education XII, Quito, Ecuador.

Weinburgh, M. H., Silva, C., Oliver, T. & Wielard, V. (2008, May). *Science content and language acquisition for elementary ELL students*. Paper presented at the International Consortium for Research in Science and Math Education XII, Quito, Ecuador.

Kamen, M., Marble, S., Mitchell, M. & Weinburgh, M. H. (2008, May). *Japanese Lesson Study.* Paper presented at the International Consortium for Research in Science and Math Education XII, Quito, Ecuador.

Weinburgh, M. H., Reynolds, S., Sawey, A., & Holden, M. (2008, January). *If it is brown, It must be dead: Student data informing instructional decisions.* Paper presented at the annual meeting of the Association for Science Teacher Education, St. Louis, MO.

Weinburgh, M. H., Smith, K., Silva, C., Wielard, V., Oliver, T., & Gabel, J. (2008, January). *Is it a delta or data? Building academic language in science and mathematics for English Language Learners.* Paper presented at the annual meeting of the Association for Science Teacher Education, St. Louis, MO.

Bloom, M.A., Sawey, A.T., Holden, M.E., & Weinburgh, M. H. (2008, January). *To what degree can explicit classroom interventions change pre-service elementary teachers' conceptions of nature of science?* Paper to be presented at the annual meeting of the Association for Science Teacher Education, St. Louis Missouri.

Sawey, A., Holden, M., Bloom, M., Weinburgh, M. H., & Huckaby, M. F. (2008, January). *Pre-service teachers' theoretical conceptions of the nature of inquiry.* Paper presented at the annual meeting of the Association for Science Teacher Education, St. Louis, MO.

Holden, M., Sawey, A., Bloom, M., Weinburgh, M. H., & Huckaby, M. F. (2008, January). *How pre-service teachers' conceptualization of inquiry affects teaching practice.* Paper presented at the annual meeting of the Association for Science Teacher Education, St. Louis, MO.

Scantlebury, K., Elmesky, R., Pringle, R., McKinley, E., Bailey, B., & Weinburgh, M. H. (2007, April). *Re-visioning Science Education from Feminist Perspectives.* Symposium presented at the annual meeting of the National Association for Research in Science Teaching. New Orleans, LA.

Weinburgh, M. H. (2007, April). *Sustained Professional Development: an Examination of the Effects on Urban Elementary Teachers' Content and Practice.* Paper presented at the annual meeting of the National Association for Research in Science Teaching. New Orleans, LA.

Reynolds, S., Weinburgh, M. H., Reid, S., Adams, M. & Bellows, L. (2007, April). *A Goethean Approach to Science Education*. Paper presented at the annual meeting of the American Education Research Association. Chicago, IL.

Weinburgh, M. H., Groulx, J., Bloom, M. & Sawey, A. (2007, January). *The effect of professional development on biology teachers' knowledge of classic content, contemporary content and nature of science*. Paper presented at the annual meeting of the Association Science Teacher Education. Clearwater, FL.

Weinburgh, M. H., Groulx, J., Bloom, M. & Sawey, A. (2007, January). *Deconstructing the myth of scientific method with elementary pre-service teachers*. Paper presented at the annual meeting of the Association Science Teacher Education. Clearwater, FL.

Weinburgh, M. H. (2006, March). *Challenging Elementary Preservice Teachers' Beliefs about Scientific Methodology*. Paper present at the International Consortium for Research in Science and Math Education, The Bahamas.

Weinburgh, M. H., Hart, L. & Carriere, J. (2006, March). *A Professional Development Model for Integrating Math and Science in Urban Elementary Schools*. Paper presented at the International Consortium for Research in Science and Math Education, The Bahamas.

Weinburgh, M. H., Bloom, M. (2006, January). *Professional Development for Biology Teachers: Change in Knowledge of Classical Content and Contemporary Content*. Paper presented at the annual meeting of the Association of Science Teacher Education. Portland, OR.

Kamen, M., Weinburgh, M. H., Marble, S. & Naizer, G. (2006, January). *Implementing Lesson Study Among Elementary Science Methods Instructors*". Presented at the annual meeting of the Association Science Teacher Education. Portland, OR.

Weinburgh, M. H. (2006, January). *Using Local Informal Science Centers to Prepare Elementary Pre-service Teachers to Teach Science*. Paper presented at the annual meeting of the Association Science Teacher Education. Portland, OR.

Kamen, M., Weinburgh, M. H., Marble, S., Fraser-Abder, Pamela, Eick, C. & Mitchell, M. (2006, January). *New Professor Session*. Sponsored by the Membership Committee and presented as an interactive panel discussion at the annual meeting of the Association Science Teacher Education. Portland, OR.

Kamen, M., Marble, S., Mitchell, M., Weinburgh, M. H. & Nazier, G. (2006, January). *Japanese Lesson Study with Pre-service Teachers*. Professional Workshop presented at the annual meeting of the Association Science Teacher Education. Portland, OR.

Wieseman, K., Adbuer, P., Koch, J., Yeotis, C., Moscovici, H. & Weinburgh, M. H. (2005, April). *Crucial Intersections in Academic/Professional and Personal Livers: Women's Experience in Science Education*. Presented at the annual meeting of the National Association for Research in Science Teaching, April 6, 2005, Dallas, TX.

Jones, L., Shipman, H., Weinburgh, M. H., Gilmer, P. & Smith, W. (2005, January). *Learning Science for Teaching: Content Courses for Elementary Education Majors*". Presented as a roundtable discussion at the annual meeting of the Association for the Education of Teachers in Science. Colorado Spring, CO.

Weinburgh, M. H. (2005, January). *Pre-service Elementary Science Methods: Refining a Learning Experience*. Paper presented at the annual meeting of the Association for the Education of Teachers in Science. Colorado Spring, CO.

Weinburgh, M. H., Anderson, P. & Jones, L. (2004, April). *Whiskey is for Drinking: Water is for ….* Symposium presented at the annual meeting of the National Association for Research in Science Teaching, Vancouver, BC.

Weinburgh, M. H. (2004, April). "Effect of Tenebrio obscurus on Elementary Preservice Teachers' Content Knowledge, Attitudes, and Self-Efficacy. Presented at the annual meeting of the National Association for Research in Science Teaching, Vancouver, BC.

Weinburgh, M. H. (2004, March). *Long-term Professional Development for Elementary Teachers: Cost and Benefits*. Presents at the International Consortium for Research in Science and Mathematics Education, 2004 Consultation, Conception, Chile.

Kamen, M., Weinburgh, M. H., Marble, S., Fraser-Abder, P., Eick, C. & Mitchell, M. (2004, January) *First time professor? Cutting your professional teeth*. Presented as an interactive panel discussion at the annual meeting of the Association for the Education of Teachers in Science. Nashville, TN.

Kamen, M., Yeotis, C., Nichols, S., Nichols, S., Tippins, D., Norman, K. & Weinburgh, M. H. (2004, January). *The learning cycle in science teacher education: embrace or move out?* Presented as an interactive panel discussion at the annual meeting of the Association for the Education of Teachers in Science. Nashville, TN.

Kamen, M., Mitchell, M., Roebuck, K., Van Sickle, M., Weinburgh, M. H. & Marble, S. (2004, January). *Blocking/integrating science and math methods: perspectives and lessons learned from those who do*. Presented as an interactive panel discussion at the annual meeting of the Association for the Education of Teachers in Science. Nashville, TN.

Weinburgh, M. H. (2003, December). *Role and Potential of E-teaching and E-learning in Transatlantic Projects.* Invited paper for Session 9 of the Transatlantic Education and Training conference, Lisbon, Portugal.

Weinburgh, M. H. (2003, March). *Using the Reflective Teaching Model to Change In-service Teachers' Beliefs and Behaviors.* Presented at the annual meeting of the National Association for Research in Science Teaching. Philadelphia, PA.

Jones, L., Fisher, K., Haury, D., Weinburgh, M. H., Jackson, D., Meadows, L., Staver, J., Reiss, M. & Venville, G. (2003, March). *Rethinking the Evolution/Creation Controversy: Epistemological Alternatives*". Invited symposium presented at the annual meeting of the National Association for Research in Science Teaching. Philadelphia, PA.

Weinburgh, M. H. (2003, January). *Learning to Teach From (or About) a Worm*. Presented at the annual meeting of the Association for the Education of Teachers in Science. St. Louis, MO.

Weinburgh, M. H. (2002, April). *Equity of Input in Science Classrooms: Have Interactions Changed in Twenty Years?* Presented at the annual meeting of the National Association for Research in Science Teaching. New Orleans, LA.

Weinburgh, M. H. (2002, January). *Changing Elementary and College Science Teaching Through Coteaching/Cogenerative Dialogue.* Presented at the biannual meeting of International Consortium for Research in Science and Mathematics Education. Panama City, Panama.

Weinburgh, M. H. (2002, January). *Getting Involved in AETS*. Presented at the annual meeting of the Association for the Education of Teachers in Science. Charlotte, NC.

Weinburgh, M. H., Hughes, M. & Steele, D. (2000, April). *Urban, African-American Students' Realistic Understanding of the Nature of Scientific Knowledge*. Presented at the annual international conference of the National Association of Research in Science Teaching. New Orleans, LA.

Lewis, B., Jones, L. Weinburgh, M. H. & Hayes, M. (2000, April). *Embracing an Antiracist Agenda for Science Education: Explorations of Racism and White Privilege from Northern and Southern Perspectives*. Invited symposium, "Science for all: Is it a fitting objective?", Paper presented at the annual international conference of the National Association of Research in Science Teaching. New Orleans, LA.

Fraser-Abder, P., Anderson, P., McGinnis, R., Ross, K., Calabrese-Barton, A., Hammond, L., Weinburgh, M. H., Letts, W., Lewis, B., Norman, O. & Sadler, K. (2000, April). *Science Education for All? Examining Connections/Disconnections Between Theory and Classroom Practice and Finally Moving this Ideas from Rhetoric Toward Reality*. Invited panel presented at the annual international conference of the National Association of Research in Science Teaching. New Orleans, LA.

Weinburgh, M. H. (2000, January). *How Middle Childhood In-service Teachers View The Scientific Method*. Presented at the annual international conference of the Association for the Education of Teachers of Science. Akron, OH.

Roseman, J. E. & Weinburgh, M. H. (2000, January). *K-12 Benchmarks and Standards: What Role Should They Play in Pre-Service Programs?* Presented at the annual international conference of the Association for the Education of Teachers of Science. Akron, OH.

Weinburgh, M. (1999, March-April). *Addressing Issues of (Gender) Equity in Science Education: So much to do in only fifteen weeks.* Invitational Colloquium: Gender and Science Education. Boston, MA.

Weinburgh, M. H. (1999, March). *Does Hands-on, Inquiry Science Really Help African-American and Female Students?* Presented at the annual international conference of the National Association for Research In Science Teaching, Boston, MA.

Roseman, J. E., Weinburgh, M. H. & Lederman, N. (1999, January). *Finding Textbooks that meet Benchmarks and Standards*. Presented at the annual international conference of the Association for the Education of Teachers of Science, Austin, TX.

Koch, J., Hines, S. M., Weinburgh, M. H., Epps, V. & Fraser-Abder, P. (1999, January). *Images of Inclusive Science education: Involving Diverse Learners in School Science*. Presented at the annual international conference of the Association for the Education of Teachers of Science, Austin, TX.

Norby, R. F., Graham, M., Weinburgh, M. H. & Melear, C. (1998, April) *Women, Science, Inequities, and the Glass Ceiling-Science Education's Role*. Symposium presented at the annual international conference of the National Association for Research in Science Teaching, San Diego, CA

Weinburgh, M. H. & Steele, D. (1998, April). *Streamlining the Attitude Toward Science Inventory to Improve the Effectiveness of Data Gathering*. Presented at the American Educational Research Association, San Diego, CA.

Weinburgh, M. H., Schriver, M. & Thorsen, C. (1998, April). *Perspectives on Developing Gender Equity Workshops for Faculty at Teaching and Research Institutions*. Panel presented at the annual international conference of National Association for Research in Science Teaching, San Diego, CA.

Hughes, M. & Weinburgh, M. H. (1997, January). *The Effects of Hands-on, Kit-based Instruction on Fourth Grade Teachers' Willingness to Teach Science*. Presented at the annual international meeting of the Association for the Education of Teachers of Science. Cincinnati, OH.

Goebel, C. & Weinburgh, M. H. (1996, January). *Elementary Science Education Partners: Pathways to Professional Development*. Presented at the annual international meeting of the Association of Educators of Teachers of Science. Seattle, WA.

Weinburgh, M. H. (1995, January). *Race and Gender as Predictors of Middle School Students Attitude Toward Science.* Presented at the annual international meeting of the Association for the Education of Teachers in Science. Charleston, WV.

Weinburgh, M. H. (1994, March). *Achievement, Grade Level and Gender as Predictors of Student Attitudes Toward Science*. Presented at the annual international meeting of the National Association of Research in Science Teaching. Anaheim, CA.

Weinburgh, M. H. (1994). *Gender Equity in Science Classrooms: What can Teacher Preparation Do?* Presented at the annual international meeting of the Association of Educators of Teacher of Science. El Paso, TX.

B. National

Alanis, N., Wallace, S., Titus, A., Clawson, M., & Weinburgh, M. (2022, March 4-6). *Underrepresented Minorities and First-Generation First-Year Students Taking a Summer Chemistry Bootcamp Course* [Conference roundtable session]. American Association of Colleges for Teacher Education (Holmes Scholar Preconference), New Orleans, LA, United States

Alexander, C., Hammond, T., Popejoy, K., Valverde, E., Stroup, M., Weinburgh, M., Brown, K., & Leeson, D. (November 2021). Cultural Heritage Mapping with GIS in Two U.S. Cities. Presented at the National Council for the Social Studies 2021 Annual Conference. Online. Retrieved from https://whova.com/portal/webapp/ncsse_202111/Agenda/1959511.

Brown, K., Weinburgh, M. H., & Alexander, C. (October 2021). Zooming through professional development: Learning Geospatial thinking and reasoning through ZOOM. Paper set presented at the annual meeting of the School Science & Mathematics Association, online Retrieved from https://whova.com/portal/webapp/ssama_202110/Agenda/1969801

Clawson, M., Charles-Kuhlman, L., del Mario, Jayme, & Weinburgh, M. H. (November 2020). *Investigating Discourse Practices in STEM Undergraduate Classes Using DART*. Paper presented at the virtual meeting of School Science and Mathematics Association.

Thompson, H. & Weinburgh, M. H. (November 2020). Pedagogical acts: Scaffolding chemistry literacy using multimofality and the 5R Instructional Model. Paper presented at the virtual meeting of School Science and Mathematics Association.

Biffi, D., Price, C., Smith, K. H., Silva, C., & Weinburgh, M. H. (November 2020). *Investigating science discourse practices of emergent multilingual learners using SALT*. Paper presented at the virtual meeting of School Science and Mathematics Association.

Tolar, A., Huddleston, G. & Weinburgh, M. (October, 2019). Posthumanist theory in the service of anti-racist curriculum studies scholarship. Panel at the Journal of Curriculum Theorizing Conference on Curriculum Theory and Classroom Practice (Bergamo), Dayton, OH.

Silva, C. & Weinburgh, M.H. (November 2019). *Language development within science and mathematics content instruction: A case study.* Paper presented at the annual meeting of the SSMA.

Weinburgh, M.H. (November 2019). *A four year journey of self-study as a science educator*. Paper presented at the annual meeting of the School Science and Mathematics Association.

Huddleston, G., Tolar, A. & Weinburgh, M. H. (October 2019). *Thought experiments as diffractive practice in science education.* Bergamo Conference on Theory & Pedagogy. Dayton, OH.

Biffi, D., Lopez-Mobilia, A., Kelez, Sh., Williams, D., Chumchal, M. & Weinburgh, M. (July 2019). *Mislabeling and mercury content in seafood in Peru*. Paper presented at the Joint Meeting of Ichthyologists and Herpetologists, Snowbird, Utah

Silveus, A., Wu, Shelly, de la Fuentes, Y., & Weinburgh, M.H. (2018 October). *Exploring hybrid language and argumentation results from a ELL program.* Paper presented at the annual meeting of School Science and Mathematics Association, Little Rock, AR.

Thompson, H., Cordell, J. & Weinburgh, M. H. (2018 October). *Antibiotics from antidepressants: A case study of joining the chemistry community*. Paper presented at the annual meeting of School Science and Mathematics Association, Little Rock, AR.

Wu, S., Silveus, A., Vasquez, S, Biffi, D., & Weinburgh, M.H. (2017, October). *Using knowledge maps to assess emergent bilingual 5th graders' sue of hybrid language and argumentation in science notebooks.* Paper presented at the annual meeting of School Science and Mathematics Association, Lexington, KY.

De la Fuente, Y., Vasquez, S., Biffi, D., & Weinburgh, M.H. (2017, October). *Language and content of the science speech community in a student's journal: A case study.*. Paper presented at the annual meeting of School Science and Mathematics Association, Lexington, KY.

Weinburgh, M.H., Cordell, J., Thompson, H. & Malkoc, U. (2017, October). *Hybrid discourse practices as entry into a chemistry research community*. Paper presented at the annual meeting of School Science and Mathematics Association, Lexington, KY.

Smith, K. H., Harmon, H., Weinburgh, M. H., & Silva, C. (2016 October). *Mathematical thinking within the Middle School Science Classroom*. Paper presented at the annual meeting of School Science and Mathematics Association, Phoenix, AR.

Weinburgh, M. H., Silva, C., & Smith, K. H. (2016 October). *Using Reflections to Explore In-service Biology Teachers' Professional Growth*. Paper presented at the annual meeting of School Science and Mathematics Association, Phoenix, AR.

Smith, K. H., Weinburgh, M. H., & Silva, C. (2016 October). *Examining Students' Understanding of Mathematical Communication.* Paper presented at the annual meeting of School Science and Mathematics Association, Phoenix, AR.

Smith, K.H., Smith, N., Silva, C. & Weinburgh, M.H. (2014, June). *Scaling up: Student learning for ELLs*. Paper presented at the annual meeting of TODOS 2014, Phoenix, AR.

Silva, C., Smith, K.H., Cox, J., Balial, R. & Weinburgh, M. H. (2011). *Academic language: A manner of speaking*. Presentation at the National Association for Bilingual Education, Dallas, TX

Weinburgh, M. H., & Smith, K.H. (2010, November). *Word Walls: Strategies for use in mathematics and science classrooms*. Paper presented at the annual meeting of the School Science and Mathematics Association, Fort Myers, FL.

Weinburgh, M. H. (2009, October). *Reloading science academic language for ELL students.* Paper presented at the annual conference of School Science and Mathematics Association. Reno, NA

Weinburgh, M. H. (2008, November). *Delicate empiricism: Goethe's Science of Nature*. Paper presented at the annual conference of School Science and Mathematics Association. Raleigh-Durham, NC.

Weinburgh, M. H. (2007, November). *Developing an understanding of plants using a Goethean approach with preservice teachers*. Presented at the annual meeting of the School Science and Mathematics Association, November 2007, Indianapolis, IN.

Reynolds, S., Weinburgh, M. H. Reid, S., Bellows, L. & Adams, M. (2007, October). *It is green or it is dead*. Paper presented at the annual Curriculum & Pedagogy Conference. Marble Falls, TX.

Weinburgh, M. H., Reynolds, S., Reid, S., Bellows, L. & Adams, M. (2007, October). *Goethe: Transforming College Curriculum through Action Research*. Paper presented at the annual Curriculum & Pedagogy Conference, Marble Falls, TX.

Reynolds, S., Weinburgh, M. H., Adams, M. & Reid, S. (2006, October). *A Goethean Approach to Science Education.* Paper presented at Curriculum and Pedagogy Conference, Austin, TX.

Groulx, J. & Weinburgh, M. H. (2005, April). *Improving the Development and Support of Student Teacher Mentors: A Pilot Evaluation*. Presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada.

Weinburgh, M. H. (2004, October). *Pre-service elementary teachers' content knowledge about electricity: how shocking can it be?* Presented at the annual meeting of the School Science and Mathematics Association, Atlanta, GA.

Farokhi, B. & Weinburgh, M. H. (1999, June). *Is the Climate Chilly or Warm for Women in Higher Education Institutions?* Presented at the bi-annual Symposium for Higher Education, American Association of University Women, Washington, DC.

Baird, M. K., Weinburgh, M. H. & Farokhi, E. (1998, August). *Self-Efficacy and Outcome Expectations in Undergraduate Women*. Poster session at American Psychological Association, San Francisco, CA.

Irvine, J., Frasher, R., Weinburgh, M. H., Jones, J. & Causey, V. (1998, February). *Perfecting Educational Practice: Culturally Responsive Curriculum Development.* Presented at the annual meeting of the American Association of Colleges for Teacher Education, New Orleans, LA.

Weinburgh, M. H. (1998, January). *Gender, Ethnicity, and Grade Level as Predictors of Middle School*

Students' Attitudes Toward Science. Presented at the annual meeting of the Association for the Education of Teachers of Science. Minneapolis, MN.

Weis, C., Weinburgh, M. H. & Thorsen, C. (1997, June). *Gender Equity In and Out of the Classroom*. Presented at the semi-annual symposium of the American Association of University Women. Anaheim, CA.

Farokhi, B., Weinburgh, M. H. & Thorsen, C. (1997, June). *Integrating Gender Equity and Reform in Higher Education*. Presented at the semi-annual symposium of the American Association of University Women. Anaheim, CA.

Weinburgh, M. H. & Mewborn, D. (1997, March). *Integrating Gender Equity and Reform: Reports from the participating institutions*. Presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Irvine, J., Frasher, R., Weinburgh, M. H. & Causey, V. (1996, October). *Culturally Responsive Pedagogy: Weather Unit*. Presented at the annual meeting of the American Association of Colleges of Teacher Education. Augusta, GA.

Canada, B., Kozaitis, K., Allwood, V., Weinburgh, M. H. & DeHaan, B. (1996, June). *Elementary Science Education Partners". Presented at the National Science Foundation's Dynamic Partnerships: Seeding and Sustaining Education Reform*. Washington, DC.

Causey, V., Weinburgh, M. H., Irvine, J., Frasher, R. & Jones, J. (1996, February). *Developing Culturally Responsive Middle Grades Curriculum Material*. Presented at the annual meeting of the American Association of Colleges for Teacher Education. Chicago, IL.

Weinburgh, M. H. (1994, April). *Achievement, Grade Level, and Gender as Predictors of Student Attitudes Toward Science*. Presented at the Distinguished Research Session of the annual meeting of the American Educational Research Association. New Orleans, LA.

Weinburgh, M. H. (1994, March). *Gender Equity in Science Classrooms: Recommendations for the classroom teacher*. Presented at the annual meeting of the National Science Teachers Association. Anaheim, CA.

Weinburgh, M. H. (1994, April). *Gender Differences in Student Attitudes Toward Science: A Meta-analysis of the literature from 1970-1991*. Presented at the Distinguished Paper Session at the annual meeting of the American Educational Research Association. Atlanta, GA.

Freedman, F., Weinburgh, P. & Weinburgh, M. H. (1993, November). *Critical Thinking in a Student Centered Classroom*. Presented at the Fall Forum of Coalition of Essential Schools. Louisville, KY.

C. Regional

Brown, K., Weinburgh, M. H., & Alexander, C. (October 2021). Teachers learning with GIS while learning about GIS: 2020-2021 PD. Paper set presented at the annual meeting of the Southwest Association of Science Teacher Educators, The Woodlands, TX

Weinburgh, M. H. (October 2021). Developing ELL's conceptual understanding and language for doing and learning. Paper set presented at the annual meeting of the Southwest Association of Science Teacher Educators, The Woodlands, TX

Weinburgh, M.H. (2018 October). *Dropout or departure: Where are the science teachers*? Paper presented at the annual meeting of Southwestern Association for Science Teacher Education, Norman, OK.

Wu, S., Salazar, B., & Weinburgh, M. H. (2018 October). *An exploratory case study of a high school student's fieldwork and lab experiences with diatoms on turtles*. Paper presented at the annual meeting of the Southwestern Association for Science Teacher Education, Norman, OK.

Weinburgh, M. H. (2017 September). *Movement expression in chemistry: Multimodal ensembles*. Paper presented at the annual meeting of Southwestern Association for Teacher Educators, Waco, TX.

Weinburgh, M.H. (2013, October). *Becoming a reviewer.* Paper presented at the annual meeting of the Southwestern Association for Science Teacher Educators, San Antonio, TX.

Weinburgh, M. (2012, October). *Helping ELLs with science academic language using the 5R Instructional Model.* Paper presented at the annual meeting of the Southwestern Association for Science Teacher Education. Houston, TX.

Weinburgh, M. H. (2011, October). *Are we smart enough to use a smart phone?* Roundtable presented at the annual meeting of the Southwestern Association for Science Teacher Education. Lubbock, TX.

Weinburgh, M. H. (2010, October). *Chemistry students doing original research*. Paper presented at the annual meeting of the Southwestern Association for Science Teacher Education. Stillwater, OK.

Weinburgh, M. H. (2010, October) *Finding time to get it all done.* Roundtable presented at the annual meeting of the Southwestern Association for Science Teacher Education. Stillwater, OK.

Stuessy, C., Weinburgh, M.H., Kamen, Michael, Naizer, G., & Thomas, J. (2010, October). *It's everyone's problem: Science teacher preparation and professional development*. Symposium presented at the annual meeting of Southwestern Association for Science Teacher Education. Stillwater, OK.

Bloom, M., Holden, M., Sawey, A., & Weinburgh, M. H. (2008, November). *Promoting the use of Outdoor Learning Spaces by K-12, In-service Science Teachers through an Outdoor Professional Development Experience.* Paper presented at the annual meeting of Southwest Association of Science Teacher Education, Arlington, TX.

Holden, M., Bloom, M., & Weinburgh, M. H. (2008, November). *Examining K-12 Teacher Efficacy in the Use of Outdoor Learning Spaces through a Sustained Professional Development Experience*. Paper presented at the annual meeting of Southwest Association of Science Teacher Education, Arlington, TX.

Weinburgh, M. H. (2007, October). *Goethe and Kuhn: Using Philosophers to Guide Instructional Design*. Paper presented at the annual meeting of the Southwest Association for Science Teacher Education, Fort Worth, TX.

Sawey, A. & Weinburgh, M. H. (2007, April). *Preservice Teachers Language of Inquiry: Messy vs. Clean Science*. Paper presented at the annual meeting the Southwest Association for Science Teacher Education, Fort Worth, TX.

Holden, M., Sawey, A., Bloom, M., Weinburgh, M. H. & Huckaby, F. (2007, April). *Pre-service Teachers' Conceptualization of Inquiry: Effects on Beginning Practice.* Paper presented at the annual meeting the Southwest Association for Science Teacher Education, Fort Worth, TX.

Weinburgh, M. H. (2006, September). *Reflective Teaching Model in Long-term Professional Development for Urban Elementary Teachers*. Paper presented at the Southwestern Association of Science Teacher Educators, Wichita, KA.

Weinburgh, M. H., Groulx, J., & Bloom, M. (2006, September). *Increasing Classical and Contemporary Biology Knowledge through Professional Development*. Paper presented at the Southwestern Association of Science Teacher Educators, Wichita, KA.

Bloom, M. & Weinburgh, M. H (2006, September). *Surveying Science Teachers' Knowledge of Evolution Uncovers Misconceptions of the Nature of Science*. Paper presented at the Southwestern Association of Science Teacher Educators, Wichita, KA.

Weinburgh, M. (2005, February). *Findings from a Year-long Professional Development Experience for Science Teachers in Urban Elementary Schools*. Presented at the annual meeting of the Southwestern Association of Science Teacher Educators, San Antonio, TX.

Weinburgh, M. H (2004, February). *Do they even realize what they don't know: A look at elementary pre-service teachers' content knowledge*. Paper presented at the annual meeting of Southwest Association for the Education of Teachers of Science, Georgetown, TX.

Weinburgh, M. H (2001, October). *Sex and Race Differences in Interactions Between Teachers and Students in Fifth Grade Science Classrooms*. Presented at the annual meeting of the Southeastern Association for the Education of Teacher in Science, Tampa, FL.

Weinburgh, M. H (1999, October). *Longitudinal Study of the Effect of a Local Systemic Change Project of Fifth Grade Students' Attitudes Toward Science*. Presented at the annual meeting of the Southeastern Association of Educators of Teachers of Science, Athens, GA.

Weinburgh, M. H (1998, December). *Helping Teachers Become Comfortable with Technology*. Presented at the Technology for Teachers Conference, Atlanta, GA.

Weinburgh, M. H (1998, November). *Inquiry Approaches to Content Learning*. Presented that regional meeting of National Science Teachers Association, Birmingham, AL.

Weinburgh, M. H (1997, November). *Validity vs Permission: What is a Researcher to do?* Presented at the annual meeting of the Southeastern Association for the Education of Teachers of Science, Wachulla Springs, FL.

Weinburgh, M. H (1996, November). *Gender Equity and Reform: Report from the first year*. Presented at the annual meeting of the Southeastern Association for Education of Teachers of Science, Smyrna, GA.

Gardner, C., Cosgrove, M. & Weinburgh, M. H (1996, October). *Perfecting Educational Practice: The Georgia Model*. Presented at the annual meeting of the National Science Teachers Association regional meeting, Atlanta, GA.

Wolf, L. & Weinburgh, M. H (1996, June). *InGEAR: A Collaborative for Reform*. Presented at the South Atlantic Regional Conference of the American Association of University Women, Charleston, SC.

Weinburgh, M. H (1996, March). *Partners as Change Agents in Elementary Science Classrooms*. Presented at the annual meeting of the Southeastern Association of Educators of Teachers of Science, Auburn, AL.

Weinburgh, M. H (1995, March) Developing *a Technology Course for Middle Childhood Majors*. Presented at the annual meeting of the Southeastern Association for the Education of Teachers in Science, Pensacola, FL.

Weinburgh, M. (1993, October). *Gender Equity in Science Classrooms: A Challenge to Teacher Education Programs*. Presented at the annual meeting of the Southeastern Regional Association of Teacher Educators, Nashville, TN.

D. State

Weinburgh, M. H (2001, November). *Equity in Teacher-Student Interactions in Fifth Grade Science Classrooms: Reality or Myth*. Presented at the annual meeting of the Georgia Educational Research Association. Clayton College & State University, Morrow, GA.

Weinburgh, M. H (1999, October). *Urban Fifth Grade Students' Attitudes Toward Science: A Three Year Study*. Presented at the annual meeting of the Georgia Educational Research Association, Morrow, GA.

Weinburgh, M. H (1998, November). *The Role of Parents in Creating Educational Equity*. Presented at the Saturday School for Scholars and Leaders, Atlanta, GA.

Weinburgh, M. H (1998, November). *An Examination of Student Attitudes Toward Science During the First Two Years of a Five-year Science Initiative*. Presented at the Georgia Educational Research Association, Morrow Ga.

Weinburgh, M. H (1998, October). *Designing, Implementing, and Evaluating Two Undergraduate Teacher Preparation Programs.* Panel presented at the Georgia Association of Teacher Educators. Atlanta, GA.

Weinburgh, M. H (1998, March). *Using Technology to Enhance Learning In Math and Science*. Presented at the annual Microcomputers Online With Education '98 conference, Atlanta GA and the annual Georgia Staff Development Council. Atlanta, GA.

Weinburgh, M. H (1997, November). *Middle School Students' Grade Expectation and Preferred Topics in Science.* Presented at the annual meeting of the Georgia Educational Research Association, Atlanta, GA.

Weinburgh, M. H., Smith, L., Smith, K. H., Brown, T., Evarts, R., Borah, T & Rumph, C. (1997, October). *Listening to the Voices of Early Childhood Education Majors as They Learn to Infuse Technology into the Teaching of Mathematics and Science*. Presented at the annual meeting of the Georgia Association of Teacher Education, Macon, GA.

Irvine, J., Frasher, R., Armiento, B & Weinburgh, M. H (1997, October). *Perfecting Educational Practice: Culturally Responsive Curricula for Middle Grades*. Presented at the annual meeting of the Georgia Association of Colleges for Teacher Education, Macon GA.

Weinburgh, M. H & Thompson, R (1996, Atlanta). *Integrating Gender Equity and Reform*. Presented at the annual meeting of the Georgia Educational Research Association, Atlanta, GA.

Weinburgh, M. H (1006, March). *Developing Technology Rich Educational Environments: A co-reform effort*. Presented at the annual meeting of the Georgia Association of Colleges for Teacher Education, Chattanooga, TN.

Weinburgh, M. H (1996, March). *Where Did I Get It?* Presented at the fourth annual statewide Conference for Teachers of Minorities in Mathematics and Science, Atlanta, GA.

O'Neill, K. & Weinburgh, M. H (1996, March). *Developing Technology Rich Educational Environments: A co-reform effort*. Presented at the annual GPTV Conference. Clayton State College, Morrow, GA.

Weinburgh, M. H (1995, October). *Middle School Students Attitude Toward Science as Predicted by Race and Gender*. Presented at the annual meeting of the Georgia Educational Research Association, Atlanta, GA.

Weinburgh, M. H (1995, October). *Developing Technology Rich Education Environments: A co-reform effort*. Presented at the annual meeting of the Georgia Association of Teacher Educators. Savannah, GA.

DeHaan, R. & Weinburgh, M. H (1995, April) *Elementary Science Education Partners*. Presented at the conference on Improving Student Learning Through Action Research and Assessment. Kennesaw, GA.

Jones, J. & Weinburgh, M. H (1994, October). *The Influence of the Cooperating Teacher on Pre-service Teachers' Beliefs and Practice*. Presented at the annual meeting of the Georgia Association of Teacher Education, Atlanta, GA.

Armento, B., Jones, J. & Weinburgh, M. H (1994, October). *Using the Reflective Teaching Model in Teacher Education*. Presented at the annual meeting of the Georgia Association of Teacher Education. Atlanta, GA.

Armento, B., Jones, J. & Weinburgh, M. H (1994, October). *Teaching Activities from the Math/Science/Social Studies Block*. Presented at the annual meeting of the Georgia Association of Teacher Education, Atlanta, GA.

Weinburgh, M. H & Weinburgh, P. (1993, November). *Developing the Student-as-Worker*. Presented at the annual meeting of the Georgia Independent School Association, Atlanta, GA.

Weinburgh, M. H (1993, October). *Achievement, Grade Level, and Gender as Predictors of Student Attitudes Toward Science*. Presented at the annual meeting of the Georgia Educational Research Association, Atlanta, GA.

Weinburgh, M. H (1992, October). *Gender Differences in Student Attitudes toward Science: A Meta-analysis of the literature from 1970-1991*. Presented at the annual meeting of the Georgia Educational Research Association, Decatur, GA.

Weinburgh, M. H (1991, October). *Gender, Prior Academic Achievement, and Belief as Predictors of Student Attitudes Toward Biology Laboratory Instruction*. Presented at the annual meeting of the Georgia Educational Research Association, Decatur, GA.

E. Invited

THECB –*Big Data to Answer Big Questions*. Teacher Quality Grants Program 2016 Spring Technical Meeting. Fort Worth, TX. March 23, 2016.

THECB – *Project Evaluation Components: Planning for Data Collection.* Teacher Quality Grants Program 2016 Spring Technical Meeting. Fort Worth, TX. March 25, 2016

SMU – *Equity Research: Why and How*. Teaching and Learning Speaker Series, September 22, 2016

UNT-HSC – *Didactic Classrooms: Learning to Pause the Lecture* – Seminar Series, October 24, 2016

THECB – *Conducting Standard Evaluation at the State Level*. Teacher Quality Grants Program presentation to commissioner, November 14, 2016

5E. Editorships, consulting, etc

A. Editor

Editor, *Electronic Journal of Science Education*. 2013-2019

Co-editor, *Electronic Journal of Science Education*. (Michael Kamen, Co-Editor), 2012-2013

Associate Editor, *Electronic Journal of Science Education*. (Michael Kamen, Editor), 2005-2012.

B. Consulting

Texas Christian University, Transdisciplinary Education for Critical Hacks of Medical Devices NSF grant, Education consultant, 2014-2016

Oklahoma State University, Red Light, Green Light Signals? Defining Family and School Influences on Rural, American Indian Girls' Early STEM Interests. NSF grant. Evaluation consultant 2009-2011

Texas Higher Education Coordinating Board – 2011 ESEA Title II, Part A National Conference, representative for Texas, June, 2011.

National Science Foundation Review Panel – Climate Change Education Partnership Phase I (CCEP-I) – July 14-16, 2010.

Texas Higher Education Coordinating Board – Teacher Quality Grants, 2009, 1010

Charles A. Dana Center – Technical Assistance to Teacher Quality Grants, 2006, 2007, 2008

Women in Science Project. Sushu Mpuchane, PI. University of Botswana, Gabrone, Botswana. Funded by the USAID Education Democracy and Development Initiative (EDDI). 2000-2003.

AAAS, Project 20161 Textbook – 2000-2003

Detectives in the Classroom. Science Education Partnership Award. Mark Kaelin, Project Director, Montclair State University. Funded by National Institute of Health. 2000-2003.

A.D.A.M. Software, Inc., Atlanta, Ga., 1993-1996.
Georgia Public Television/GSU. Atlanta, GA. Television series. 1996
Visions United, Atlanta, GA. 1994-1996.
Evaluation of NSF "Mathematica" grant at Georgia Institute of Technology, Atlanta, GA. John Wiggins: PI, 1995.
Evaluation, NSF "Gift" grant at Georgia Institute of Technology, Atlanta, GA. Joanna Fox: PI, 1995.
Critical Friend, Salem High School, Conyers, GA 1993-1996.

C. Professional Engagements

C.1 International

Southwestern University, College Self-Study, September 2020
University of Nebraska – Lincoln, College Self-Study, July 2020
Ministry Education, Commission for Academic Accreditation, UAE, January 2020
School/University Partnerships.(co-facilitated with A. Esping). Banmai School, Hanoi, Vietnam, July 2018
Science and Language Education (co-present with C. Silva). Panama Bilingue, February 2018
Partnerships for Improving Teacher Education, Banmai School, Hanoi, Vietnam, October 2016
Acquiring the discourse of the science classroom (co-present with C. Silva) Escola Superior de Educacao de Setubal, Setubal, Portugal, March 2016
How Topics of Interest Differ with Males and Females. Seminar for Faculty. Lakehead University, Thunder Bay, Ontario, Canada. September 9, 2009.
Increasing Content Knowledge and Pedagogical Skills Using Contemporary Issues in Biology. Seminar for Faculty. Lakehead University, Thunder Bay, Ontario, Canada. October 23, 2007.
Using Contemporary Issues in Pre-Service Teacher Education. Seminar for BL2040A. Lakehead University, Thunder Bay, Ontario, Canada. October 22, 2007.
Learning from the Young Women: Reporting on Three Years. University of Botswana, Gaborone, Botswana, July 9, 2004 (EDDI grant).
Equity in Science Education: Taking a Longer Look. University of Botswana, Gaborone, Botswana, July 11, 2003 (EDDI grant).
The Status of Women in Science/Technology in the United States: 2002. Women in Science and Technology Conference: Women's Participation in Science and Technology…Positioning Southern Africa for Equity. University of Botswana, Gaborone, Botswana, July 3, 2002. (EDDI grant)
Who Is Doing Science? University of Botswana, Gaborone, Botswana, August 12, 2001. (EDDI grant)
Indigenous Knowledge used in Teaching Science, University of Cape Coast, Faculty of Education and Faculty of Science, July 27, 2000.
Using Everyday Objects and Indigenous Knowledge to Teach Science, University of Cape Coast, Faculty of Education and Faculty of Science, August 1, 1999.
Educational Reform around the World. University of Kumasi, Ghana, July 28, 1999.
Good Childhood: What does that mean? Keynote for "Good Childhood", Hanzehogeschool, Groningen, The Netherlands, March 23, 1998.
Using Technology to Enhance Learning with Early Childhood Students. Hanzehogeschool/Faculty Gamma, Groningen, The Netherlands, March 24, 1998.
Reflective Teaching Model: The Cote d'Ivoire Model. Ecole Normale Superiure, Abadajan, Cote d'Ivoire, Africa. March 11-April 11, 1997.

C.2 Regional

Science Teacher Education in the New Millennium: Issues and Challenges. Keynote for annual conference of the Southeastern Association for Teachers in Science, October 7, 2000.

C.3 State

Using a Modified Japanese Lesson Study to Help Improve Science Instruction. Dana Center's Annual Mathematics and Science Higher Education Conference. October, 2006. Austin, TX
Teacher Quality Modules: Biology. Invited session at Texas Science Education Leadership Association,, November 3, 2004.
Equity Issues in Science and Science Education. "Closing the Gaps in Math and Science" Conference of the Effective Schools Project. Tarleton State University, October 30, 2002.

The Study of Whiteness: Missing Link to Ethnic Studies. Panel discussion. Human Relations Student Leadership Retreat. November 13, 1999. Office of Diversity, Georgia State University, Atlanta, GA

How to Mentor/Tutor. Community Service: An Integration of Living and Learning. February, 1999 Atlanta, GA.

Status of Women in Medicine. Association of Women in Medicine, March 24, 1996. Atlanta, GA.

Equity in Education: The Role of Counselors. Region I Counselors. November 9, 1995. Savannah, GA.

Surviving and Thriving at Emory. President's Council on the Status of Women Faculty, October 14, 1995, Decatur, GA.

Meeting the Needs of Girls and Women. Diversity Panel, Georgia Initiative in Mathematics and Science. September 28, 1995, Decatur, GA.

Gender Inclusive Lesson Planning. CEISMC: Gender Journey, July 26, 1995, Atlanta, GA.

Education Makes a Difference. Kappa Delta Pi, May 6, 1995, Atlanta, GA.

Observing, Recording, and Changing Gender Biased Actions in the Classroom. Georgia Department of Education: Vocational/Applied Technology Instructional Division. January 19, 1995, Savannah, GA.

Gender Equity in Schools: Suggestions for High School Counselors. Cobb County Board of Education. January 28, 1994, Cobb County, GA.

Gender Equity in Schools: Suggestions for Middle School Counselors. Cobb County Board of Education. January 21, 1994, Cobb County, GA.

Gender Equity in Schools: Suggestions for Elementary School Counselors. Cobb County Board of Education. January 14, 1994, Cobb County, GA.

Gender Equity in Science: Problems, Practices, Solutions. College Board Southern Regional Conference. May 1993, Atlanta, GA.

D. External Reviewer for Promotion and Tenure

Auburn University
Board of Regents, Louisiana
Florida International University
Florida State University
Kent State
Oklahoma State University
Old Dominion University
Rice University
Tarleton State University
Texas A & M – Commerce
The Ohio State University
Trinity University
University of Connecticut
University of Georgia
University of Hawaii
University of Nebraska
University of Nevada, Las Vegas
University of North Texas
University of North Texas- Health Science Center
University of Northern Arizona
University of Maryland
University of Michigan-Dearborn
University of Mississippi
University of South Florida
University of Vermont
University of North Colorado
Bowdoin College

5F. External support

A. Funded *[>$12,400,862.00]*

A.1 at TCU [>$6,561,988.00]

Leo Potishman. "Andrews Institute Math/Science/Language Program". Written by Molly Weinburgh and Dennis Alexander. **$10,000.00**. May 2021 – April 2021

Rainwater Charitable Foundation. "Rainwater Foundation community partners: A snapshot of stakeholder COVID -19 experiences". Written by Sue Anderson, Miriam Ezzani, Frank Hernandez, Gabe Huddleston, Jan Lacina, and Molly Weinburgh. $**59,340.00** November 2020 – August 2021.

NSF. "Collaborative Research: Expanding Socio-Environmental Science Investigations with Geospatial Technologies in High Schools". PI – Tom Hammond (Lehigh University), PI – Judith Morrison (Washington State University), and PI – Curby Alexander (TCU) with Molly Weinburgh (TCU senior personnel). **$3,000,000.00** overall. May 2020 – May 2024.

Bryant Bridge of Hope. "Events to engage the next generation of learners with mathematics and science". Written for Andrews Institute by Beth Zimmerman, Sarah Fuentes, Matt Switzer, Hayat Hokayem, Mary Patton, and Molly Weinburgh. $**34,500.00**. May 2019 – May 2020

Leo Potishman. "Andrews Institute Math/Science/Language Program". Written by Molly Weinburgh and Dennis Alexander. $25,000.00. May 2019 – April 2020.

Bryant Bridge of Hope. "Events to engage the next generation of learners with mathematics and science". Written for Andrews Institute by Beth Zimmerman, Sarah Fuentes, Matt Switzer, Hayat Hokayem, Mary Patton, and Molly Weinburgh. $**34,500.00**. May 2018 – May 2019

Bryant Bridge of Hope. "Events to engage the next generation of learners with mathematics and science". Written for Andrews Institute by Beth Zimmerman, Sarah Fuentes, Matt Switzer, Hayat Hokayem, Mary Patton, and Molly Weinburgh. $**34,500.00**. May 2017 – May 2018

Waitt Foundation Rapid Ocean Conservation Grant. "Sustainable seafood initiatives in Peru: Exploring assumptions. Co-PI. Molly Weinburgh and Daniella Biffi. $**9,955.00**. April 2017 to August 2018

Sid Richardson Foundation. Summer programing for Youth. PI. Molly Weinburgh with Dennis Alexander. **$45,000.00** April 2017 – February 2018.

Bryant Bridge of Hope. "Events to engage the next generation of learners with mathematics and science". Written for Andrews Institute by Beth Zimmerman, Sarah Fuentes, Matt Switzer, Hayat Hokayem, Mary Patton, and Molly Weinburgh. $**34,500.00**. May 2017 – May 2018

Texas Higher Education Coordinating Board, Teacher Quality Granting Program. "An examination of the professional growth of teachers participating in a professional development program". Year 2 of 2016-2018 cycle. PI: Molly Weinburgh. **$295,000.00**. November 2017 to September 2018

Texas Higher Education Coordinating Board, Teacher Quality Enhancement. "Communities of practice in environmental science". PI: Molly Weinburgh [Molly Weinburgh, primary director, and Cecilia Silva, secondary director] Year 2 additional **$163,000.00.** [TCU Grant 24101; THECB 547] April 2017 – February 2018.

Texas Higher Education Coordinating Board, Teacher Quality Granting Program. "An examination of the professional growth of teachers participating in a professional development program". Year 1 of 2016-2018 cycle. PI: Molly Weinburgh. **$395,000.00**. January 2016 to September 2017

Texas Higher Education Coordinating Board. "Communities of practice in environmental science". PI: Molly Weinburgh [Molly Weinburgh, primary director, and Cecilia Silva, secondary director] **$230,000.00.** [TCU Grant 24101; THECB 547] April 2016 – May 2017.

Bryant Bridge of Hope. "Events to engage the next generation of learners with mathematics and science". Written for Andrews Institute by Beth Zimmerman, Sarah Fuentes, Matt Switzer, Hayat Hokayem, Mary Patton, and Molly Weinburgh. $**19,000.00**. May 2016 – May 2017

Texas Higher Education Coordinating Board, Teacher Quality Granting Program. "An examination of the professional growth of teachers participating in a professional development program". Year 2 of 2014-2016 cycle. PI: Molly Weinburgh **$375,000.00**. January 2015 to September 2016.

National Science Foundation, "Transdisciplinary Education for Critical Hacks of medical Devices (TECH MeD)" **$270,019.00**. PI – Michael Bachmann and Adam Shniderman. Assessment coordinator, Molly Weinburgh.

Sid Richardson Foundation. "Math/Science/Language Summer Experience" **$25,000.00** May 2015-May 2016. PI: Molly Weinburgh with Cecilia Silva and Dennis Alexander (University Development).

Texas Higher Education Coordinating Board, Teacher Quality Enhancement. "Biology: A Crime Scene Investigation- Year 2". PI: Molly Weinburgh [Molly Weinburgh, primary director, and Cecilia Silva, secondary director] **$251,437.00** [TCU grant 24296; THECB 12904] April 2015 – May 2016.

Texas Higher Education Coordinating Board. "Biology: A CSI investigation". PI: Molly Weinburgh, [Molly Weinburgh, primary director, and Cecilia Silva, secondary director] $**399,410.00**. February 2014- April 2015.

Texas Higher Education Coordinating Board, Teacher Quality Granting Program. "An examination of the professional growth of teachers participating in a professional development program". Year 1 of 2014-2016 cycle. PI: Molly Weinburgh **$375,000.00**. January 2014 to September 2015

Texas Higher Education Coordinating Board. "An examination of the professional growth of teachers participating in a professional development program". PI: Molly Weinburgh, Year 4 amendment of **$365,527.00**. May 2013- September 2014.

Texas Higher Education Coordinating Board, Teacher Quality Enhancement. "Earth/Space Science: Inquiry and Content Development", PI: Molly Weinburgh, extended to year 2 with additional **$92,700.00**. February 2013 – May 2014.

Texas Higher Education Coordinating Board. "An examination of the professional growth of teachers participating in a professional development program". PI: Molly Weinburgh, Year 3 amendment of **$385,527.00**. May 2013- September 2014.

Texas Higher Education Coordinating Board, Teacher Quality Enhancement. "Earth/Space Science: Inquiry and Content Development", PI: Molly Weinburgh, **$112,700.00**. February 2012 – April 2013.

JP Morgan Chase Foundation. "Math/Science/Language Camp – Year 5". Penny Bishop, Cecilia Silva, and Molly Weinburgh. **$40,000.00**. November 2012-Nov 2013.

Texas Higher Education Coordinating Board. "An examination of the professional growth of teachers participating in a professional development program". PI: Molly Weinburgh, **$395,890.00**. March 2012- September 2013.

JP Morgan. "Math/Science/Language Camp- Year 4". Penny Bishop, Cecilia Silva, and Molly Weinburgh. **$40,000.00**. September 2011-August 2012.

Texas Higher Education Coordinating Board. "An examination of the professional growth of teachers participating in a professional development program". PI: Molly Weinburgh, **$407,000.00**. June 2011-December 2012

Texas Higher Education Coordinating Board, Teacher Quality Enhancement. "Environmental Systems Emphasizing Sustainable Education [ESESE]", Co-PI: Molly Weinburgh and Mark Bloom, **$126,633.00**. *Amended and extended for year 3 January 2011.* April 2011 – January 2012.

JP Morgan Chase Foundation. "Math/Science/Language Camp – Year 3". Penny Bishop, Cecilia Silva, and Molly Weinburgh. **$40,000.00**. November 2010-Nov 2011.

Lakehead University - RACDEF. "Teaching and Learning in Single Sex Classes: Case Studies in Math and Science". Co-PI: Tony Bartley, Wayne Melville, and Molly Weinburgh $**2,500.00**. June 2010-June 2011.

Texas Higher Education Coordinating Board, Teacher Quality Enhancement. "Environmental Systems Emphasizing Sustainable Education [ESESE]", Co-PI: Molly Weinburgh and Mark Bloom, **$29,958.00** *amendment February 2010.* May, 2009 – May, 2011.

JP Morgan Chase Foundation. "Math/Science/Language Camp –Year 2". Penny Bishop, Cecilia Silva, and Molly Weinburgh. **$30,000.00**. April 2010-August 2010.

National Science Foundation. "Red Light, Green Light Signals: Encouraging Rural, Native American Girls' STEM Interests". Lead institution: Oklahoma State University. PI: Julie Thomas. External Evaluator: Molly Weinburgh

Texas Higher Education Coordinating Board, Teacher Quality Enhancement. "Environmental Systems Emphasizing Sustainable Education [ESESE]", Co-PI: Molly Weinburgh and Mark Bloom, **$285,003.00**. May 2009 – May, 2011.

JP Morgan Chase Foundation. "Math/Science/Language Camp". Penny Bishop, Cecilia Silva, and Molly Weinburgh. **$30,000.00**. April 2009-August 2009.

Dana Center, Teacher Quality Enhancement Grants. "Elementary Teachers Developing PCK in Outdoor Education", Co-PI, Molly Weinburgh and Mark Bloom**. $87,000.00.** May 2008 – September 2009.

Dana Center, Teacher Quality Enhancement Grants. "Elementary Teachers Developing PCK in Outdoor Education", Co-PI, Molly Weinburgh and Mark Bloom**. $87,000.00** May 2008 – September 2009.

Texas Regional Collaborative Grant. "TRC with ESC XI, Year 4", Lead institute – Region XI Educational Center. Partners – TCU (Molly Weinburgh) and Fort Worth Museum of Science & History.

$142,000.00. March 2008 – February 2009.

Dana Center, Teacher Quality Enhancement Grants. "Increasing Teachers' PCK and NOS in Biology", Co-PI, Molly Weinburgh and Mark Bloom**. $87,000.00.** May 2007 – September 2008.

Texas Regional Collaborative Grant. "TRC with ESC XI, Year 3", Lead institute – Region XI Educational Center. Partners – TCU (Molly Weinburgh) and Fort Worth Museum of Science & History. **$142,000.00**. March 2007 – February 2008.

Dana Center, Teacher Quality Enhancement Grants, "Increasing Content Knowledge and Pedagogical Skills Using Contemporary Issues in Biology". Co, PI: Molly Weinburgh and Mark Bloom. **$85,000.00.** May 2006 – September 2007.

Dana Center, Teacher Quality Enhancement Grants, "Developing Content and Pedagogy for Earth/Space Science". Co, PI: Molly Weinburgh and Lisa Bellows. **$85,000.00.** May 2006 – September 2007.

Texas Regional Collaborative Grant. "TRC with ESC XI, Year 2". Lead institute – Region XI Educational Center. Partners – TCU (Molly Weinburgh) and Fort Worth Museum of Science & History. **$120,000.00**. March 2006 – February 2007.

Texas Higher Education Coordinating Board, Teacher Quality Enhancement. "Professional Development for Biology Teachers: Contemporary Issues in Biology", Co-PI: Molly Weinburgh and Mark Bloom, **$81,963.00**. April 2005 - September, 2006.

Texas Regional Collaborative Grant. "TRC with ESC XI, Year 1", Lead institute – Region XI Educational Center. Partners – TCU (Molly Weinburgh) and Fort Worth Museum of Science & History. **$185,000.00**. March 2005 – February 2006.

Texas Higher Education Coordinating Board, Teacher Quality Enhancement: Type B, "Contemporary Issues in Biology: Opportunities for Learning and Teaching", Co-PI: Molly Weinburgh and Ray Drenner, **$80,000.00**. April 2004 - September, 2005.

Texas Higher Education Coordinating Board, Teacher Quality Enhancement: Type A, "Biology Module: Contemporary Issues in Biology", Co-PI: Molly Weinburgh and Ray Drenner, **$285,190.00**. January 2004 -January 2005.

Texas Higher Education Coordinating Board, Teacher Quality Enhancement, "Bransom/Hommel Water Quality Project: Enhancing Teacher Change Through Partnerships, Co-PI: Molly Weinburgh and Ray Drenner, **$77,685.00**, April 2003 - August 2004.

Funds for the Improvement of Postsecondary Education (FIPSE), U.S. Department of Education, "Certificate in International Education: Developing Educators for a Global Society", PI: Parker Blount (Georgia State University), Total award of **$199,995.00**. Subcontract PI: Molly Weinburgh, $54,673. October 1, 2002 - September 30, 2005.

A.2 at GSU [$6,202,874.00]

Eisenhower Higher Education, "Decatur Elementary Math and Science Project - Year 3", Co-PIs: Lynn Hart and Molly Weinburgh**, $31,545.00**. June 1, 2002 - May 2, 2003.

Preparing Tomorrow's Teachers Today, "Elementary Education Preservice Program Evaluation", Co-PIs: Molly Weinburgh and Sunya Collier, **$20,400.00**. February 2002 - August 2002.

BellSouth, "Extending the PT3 to In-service Teachers", PI: Molly Weinburgh, **$35,000**. January 2000 - May 2001.

National Science Foundation (NSF), "Teacher Enhancement Through an Elementary Science Education Partner", PI: Bob DeHaan (Emory University), Collaborator Co-PIs: Molly Weinburgh (Georgia State University), Vernon Allwood (Morehouse School of Medicine), and Ben Canada (Atlanta Public Schools), **$5.7 million** overall: $768,171 to GSU. September 1995 - December 2000. NSF #9552864

Eisenhower Higher Education, "The Decatur Elementary Math/Science Project: Enhancing Teacher Change – Year 2", Co-PIs: Lynn Hart and Molly Weinburgh**. $27,345.00**. June 2001 - March 2003.

Eisenhower Higher Education, "The Decatur Elementary Math/Science Project: Enhancing Teacher Change", Co-PIs: Lynn Hart and Molly Weinburgh. **$20,345.00**. June 2000 - March 2001.

Board of Regents (BOR), "Developing Teacher Education Exchange: University of Cape Coast and Four University System of Georgia Schools". Dr. Fobih, Dr. McIntosy, Dr. Call, Dr. Weinburgh, and Mr. Paracka. **$18,200.00.** March 2000 - December 2000. (GC&SU #1047636250337)

National Science Foundation (NSF), "Integrating Gender Equity and Reform", Co-PI: Beth Farokhi; Strand Leader: Molly Weinburgh**, $141,000.00**. September 1995 - July 1998.

SouthEastern Regional Vision for Education (SERVE), "An Interpretative Study of Elementary School Teachers' Conception of the Nature of Inquiry and of Their Roles While Participating In An Inquiry Based Science Curriculum". PI: Molly Weinburgh**, $15,120.00**. Jan. 1998 - June 1998.

Quality Improvement Funds (QIF), "Hands-on Equipment for Early childhood Science Instruction", Co-PIs: Olga Jarrett and Molly Weinburgh, **$8,500.00.** January 1997 - June 1997.

Council for Public Broadcasting (CPB), "Developing Technology Rich Educational Environments in Science", PI: Kathy O'Neill, Co-PI: Molly Weinburgh, **$5,000.00**. September 1996 - July 1997.

Principles of Educating Teachers (POET), "University/school collaboration for the Enhancement of Math, Science, Technology Integration for Teacher Education", Co-PIs: Molly Weinburgh, Laura Smith, Olga Jarrett, and Kathy Smith, **$4,011.00**. September 1996 - July 1997.

Coca Cola, "Developing technology rich educational environments", PI: Kathy O'Neill: writers: Molly Weinburgh, **$106,000.00**. 1995 -1996.

Eisenhower, "Science/Math Academy: Enhancing middle grades science and math teaching through strengthening content", PI: Molly Weinburgh and Joan Jones, **$22,476.00**, 1995 -1996.

Quality Improvement Grants (QIF), "Creating a demonstration instructional area as an open access resource", Molly Weinburgh, **$47,932.00**, 1994 -1995.

B. Not Funded [>$8 Million]

NSF, "PIRE: Dissecting the Milky Way and 1000s of Nearby Galaxies with SDSS-IV, PI – Peter Frinchaboy; Co-PIs – Kat Barger and Molly Weinburgh. **$6,500,000.00**. September 2015 to August 2019.

AT&T, "Developing Academic Language in Mathematics and Science for ELL students", Co-PI: Cecilia Silva, Molly Weinburgh, and Kathy Smith, **$57,642.00**. September 2007-June 2010.

National Science Foundation, Robert Noyce Scholarship Program, "Creating Urban Educators in Science. Co-PI: Molly Weinburgh, Cecilia Silva, and Ray Drenner, **$182,000.00**. Sept. 2007- June 2011.

American Honda Foundation, "Math, Science, and Language Camp", Co-PI: Molly Weinburgh and Cecilia Silva. **$41,000**. May 2006 - August 2006.

National Science Foundation, Robert Noyce Scholarship Program, "Creating Urban Educators in Science. Co-PI: Molly Weinburgh, Cecilia Silva, and Ray Drenner, **$182,000.00**. Sept. 2006 – June 2010.

Howard Hughes Medical Institute. "Contemporary Issues in Biology: A Precollege Teacher Enhancement Program", Co-PI: Ray Drenner and Molly Weinburgh. Asking for **$1,300,000.00** over four years.

National Science Foundation, Robert Noyce Scholarship Program. "Creating Urban Educators in Science. Co-PI: Molly Weinburgh, Cecilia Silva, and Ray Drenner, **$92,000.00.** Sept. 2005 – June 2009.

National Science Foundation (NSF), "Invigorating and Educating STEM faculty: A Paradigm Shift for Faculty "Co-PI: Molly Weinburgh and Ray Drenner. **$58,235.00.** August 2002 - August 2004.

5G. Internal Support

A. Funded [>$27,000.00]

A.1 at TCU

TCU Invests in Scholarship. "Examining science discourse practices in emergent multilingual students: A semiotic and hermeneutic approach. **$11,070.00**. June 2019- August 2020

Global Engagement Grant. "Vietnam Partnership/Teaching Internship. Amber Esping and Molly Weinburgh. $**5,200.00**. May 2018 – August 2018.

Instructional Development Grant. "Developing a Service-Learning Partnership with Hanoi University of Education (Vietnam)". Co-PI: Amber Esping and Molly Weinburgh. **$3,608.00**. October 7, 2016 to October 7, 2017.

Andrews Institute Grant, "Math, Science, Language (MSL) Retelling Study". Co-PI: Robin Griffith, Michael Fagella-Luby, Cecilia Silva, and Molly Weinburgh. **$405.00**. June 2014 – August 2014

TCU Research and Creative Activities Fund, "Churchill Higher Achievement in Mathematics Project". PI: Molly Weinburgh. **$1,150.00**. June 1, 2010 – May 31, 2011.

TCU Instructional Development Funds, "Enhancing Undergraduate Teacher Candidate Education through Video Analysis". Co-PI: Mary Patton and Molly Weinburgh. **$3,085.00**. June 2005-May 2006.

TCU Instructional Development Grant, "Using a 3-Dimensional Projector To Enhance Science Instruction", PI: Molly Weinburgh, **$2,000.00**, June 1, 2003 to May 31, 2004.

TCU Research and Creative Activities Funds, "A pilot investigation of a new model of supervision/mentoring", Co-PI: Judy Groulx and Molly Weinburgh, **$2,110.00**, November 2, 2003

to May 30, 2004.

TCU Research and Creative Activities Fund, "Using the Reflective Teaching Model to Change Elementary Teachers' Behaviors and Beliefs About Teaching Science and Math", PI: Molly Weinburgh, **$1,800.00**. October 2002-June 2003.

A.2 at GSU

GSU, College of Education Proposal Development Grant, "Science Education and/or Opportunities for Female Students", PI: Molly Weinburgh, **$4,000.00**. September 2001- May 2002.

GSU, College of Education Scholarly Inquiry Grant Program, "Fifth Grade Students' Attitudes Toward Science: Evaluation of the Elementary Science Education Partners Program", PI: Molly Weinburgh, **$1,500.00**, January-June 2001.

GSU, College of Education Preparing Tomorrow's Teachers Today, "Elementary Education Preservice Program Evaluation", Co-PIs: Molly Weinburgh and Sunya Collier, **$8,300.00**. November 2000-June 2001.

GSU, Improving Instruction Grant. "Developing a Cross-Discipline, Web-based Freshman Core Course". Co-PIs: Molly Weinburgh, Sam Deitz, and David Vanko. **$3,900.00**. June 2000-June 2001.

5H. Endowments [$6,000,000.00 with help of Advancements and Donor Relations]

Andrews Foundation Gift $500,000.00 in 2016
Paul and Judy Andrews Gift $5,000,000.00 in 2007
Greater Texas Foundation Gift $500,000.00 in 2006

6. SERVICE

6A. Department Service (prior to TCU) [no departments within the College of Education]

Department of Early Childhood Education (ECE) at Georgia State University

Search Committee, Math position (1998)
BSE Committee, ECE (1996-2002)
Pre-K Committee, ECE (1996-2002)
Ph.D. Committee, ECE (1996-2002)

6B. College Service

A. TCU College of Education

Cabinet, (2007-2010; chair, 2009-10), 2022-2025
Cooks Children Hospital IRB from TCU (2014-2025)
Search Committee for Curriculum Studies, 2021-2022
Advisory Committee, 2021-2022
Literacy Institute, 2021-2022
Diversity, Equity, and Inclusion Committee, 2018-2020
Faculty 180 Committee, 2018
COE Honors Committee, 2016 - 2018
Departmental Institutional Review Board, 2016-2019
Doctoral Advisory, 2016
Tenured Faculty committee, 2016
Ad Hoc Travel committee, 2016
Ad Hoc Full Professor committee, 2016
Pre-tenure group, organizer, 2016 - 2017
Ad Hoc FWISD Collaboration, 2016
Ad Hoc Masters+Certification, 2016
Search Committee for Science Education, (2011-2012), chair
Search Committee for Mathematics Education, (2009-2010)
Institutional Coordinator – AERA, Assessment of Education Research Doctorate Programs (2009-2010).
Search Committee for Dean of College of Education (2008-2009), chair
Search Committee for Mathematics Education (2008-2009), chair
Search Committee for Special Education Endowed Chair (2008-2009)

Search Committee for Science Education (2007-2008), chair

Search Committee for Mathematics Education (2007-2008)
Search Committee for Science Education (2006-2007), chair
Tenure Review Committee (2003- present)
EC-4 Committee, TCU (2002-present)
Middle/Secondary Committee, (2004-present), co-chair
Social Studies Search Committee, TCU (2003-04)
Graduate Programs in Science and Science Education, TCU (2002)
Undergraduate Programs in Science, TCU (2002)

B. TCU Honors College
Honors College Advisory Council, 2016-2020
Tenure & Promotion (Akagi), 2017-2021
Honors College Council, 2016-2018
Faculty Search Committee, 2016
Fogelson Forum Planning Committee, 2015-2016
Fogelson Forum Planning Committee, 2014-2015

C. GSU (1993-2002)
Diversity Committee of the Professional Education Faculty, Chair, GSU (1998-2002)
Advisory Board for Preparing Tomorrow's Teachers, GSU (1999-2002)
Instructional Technology Center Advisory Board, GSU (1999-2002)
Diversity Committee of the Professional Education Faculty, GSU, Chair (1998-present)
Instructional Technology Center Advisory Board, GSU (1999)
Faculty Affairs, member, GSU (1997-1999)
Leadership Team, Integrating Gender Equity and Reform, GSU (1995-1998)
Search Committee, Local Coordinator for Elementary Science Education Partners, GSU (Fall 1995)
Advisory Board, TREE's Project, Coke Cola funded project, GSU (1995-1997)
Liaison Committee for College of Education Instructional Technology Center, GSU (1995-1996)
Search Committee, MSIT department chair, GSU (Spring, 1995)
GSU Legislative Reception, representing "best programs" of College of Education, ESEP, January 1998.
GSU Legislative Reception, representing "best programs" of CoE, Technology, January 1995.
GSU Legislative Reception, representing "best programs" of CoE, Diversity Education, January 1994
NCATE, Curriculum and Instruction Committee (1992-1995)
Student Georgia Association of Educators faculty advisor (1991-1996)

6C. University Service

A. TCU
STEM Scholar Committee, 2018-2020
AD Hoc O.D. Wyatt Partnership Committee, 2018
University Council, 2017-2020
Ad Hoc Faculty Senate "Raising TCU's Academic Profile" – AY 2016-2018
University Advisory Committee (Tenure & Promotion) – Fall 2016- Spring 2019
Search Committee, Director of Development – Summer 2016
Add Hoc Committee on Human Resources Building – 2014- present
Women and Gender Studies, Curriculum Committee, 2015
Honors College Review Committee, 2014-2015
Research Group (Bonnie Melhart, chair), 2011-2016
Human Subject Review Committee, 2007-2011
Quality Enhancement Council, 2006- present
University Advisory P & T Committee 2005-2007
Graduate Council 2005- 2008
HHMV Committee 2005 -2007
Size, Mix and Residentially Committee, convener 2004
Center for Teaching Excellence, Advisory Board 2003-2006
Human Subjects Review Committee 2003-2006
University Senate, 2003-2006

Tenure, Promotion & Policy Committee
Curriculum Advisory Committee, 2002-2005
Adam's Chair Search Committee, 2002

B. GSU (1993-2002)
Vice President for Research and Sponsored Programs Search Committee, member, 1999-2000
Faculty Senate, member from ECE, assigned to Research and Diversity committees, 1998-2001
Prejudice Awareness Summit; Exploratory Committee, 1999
Diversity Education Programs Advisory Board, 1998 to 2002
Professional Education Committee, Diversity chair, 1997 to 2002
Professional Education Committee, Executive committee, 1997-2002
Project LINK, Cote d'Ivoire visiting team, 1996 to 2002
Faculty Senate, 1993-1995
Research, Diversity, and Budget committees
German/GSU Exchange Program, host, April 1996
Gender Equity Team, 1994 to 2002
Advisory Board, Integrating Gender Equity and Reform, NSF funded project, 1995-1997
Georgia Science Olympiad, Regional Tournament, session coordinator, 1996
Georgia Science Olympiad, State Tournament, session coordinator, 1995
Faculty Liaison for Educational Partnership with Fulton High School, 1991-1994
Student Affairs Committee, member, 1991-1993

6D. Professional Service to Community

A. Community Committees (also see Professional Memberships for other committee work)
Out Teach National Education Committee, 2018-2020
BRIT Education Committee – 2015 - 2020
FWISD/Devon Energy for Teaching Excellence in Secondary Science Selection Committee – 2014-2018
FWISD/Lockheed Martin Elementary Math and Science Chair Selection Committee – 2009-2013
FWISD Science Steering Committee, 2008
PASS, Fort Worth ISD, 2007
Campus Educational Improvement Committee, Tanglewood Elementary School, FWISD, 2002-2003
Science Curriculum Review Committee, City Schools of Decatur, 2002
Staff Development Committee, Elementary Science Education Partners, 1995-2001
Executive Committee, Elementary Science Education Partners, 1995-2001
Metro-Atlanta P-16 Academic Standards Development Committee, 1997-1999
Staff Development Committee, Elementary Science Education Partners, 1995-2001
Executive Committee, Elementary Science Education Partners, 1995-2001
Science Curriculum Review Committee, Atlanta Public Schools, 1996

B. Advisory Boards
MSoMI Academy for Girls National Board, 2018-2022
Out Teach (was REAL School Gardens) Regional Advisory Board, 2018-2021
Texas A&M *English Language and Literacy Acquisition-Validation* NSF grant, Study Advisory Board 2013-2016
River Legacy Board of Directors, 2005-2009
Films for the Humanities, 2006-2009
Advisory Board to Gender Equity and Disability Subpanel, National Gender Equity Expert Panel, OERI, 1997
Fort Worth ISD PASS, 2006-2008
Channel 13: PBS, "The Secret Life of the Brain", five part video series, 2000-2002
Project Inquiry: Building a Presence for Science in the Lowcountry, NSF funded TE Grant, 1999- 2004
Curriculum Advisory Board, Atlanta Girls' School, 1999-2002
Girls Incorporated, NSF funded "Teaching Smart", 1999-2002
Gender Equity and Disability Subpanel of the Gender Equity Expert Panel, US Department of Education's Office of Educational Research and Improvement, 1997-2001
Elementary Science Education Partners, 1995-2001

6E Professional service

Editor

Electronic Journal of Science Education, 2011 to 2019

Associate Editor

Journal of Science Teacher Education, 2022-2025

Editorial Review Board

Electronic Journal of Science Education, 2005-2011
Journal of Science Teacher Education, 2003-2007
Journal of Research in Science Teaching, 2002-2006; 2022-2025
Journal of Elementary Science Education, 2000-2005; 2007-2010
Journal of Science Education for Students with Disabilities, 2001-2006

Reviewer

Journals

Science Education, 2002- present
International Journal of Science Education' 2018 (invited)
Journal of Science Teacher Education 2016 to present
School Science and Mathematics, 2016 to present
Journal of Teacher Education, 2014 to present
Journal of Research in Science Teaching, 1998-to present.
Georgia Educational Researcher, 1996-2002
International Journal of Qualitative Studies in Education, 2017 (invited), 2018 (invited)
Journal of Elementary Science Education, 1996-2016
Journal of Science Education for Students with Disabilities, 1998 (invited), 2001 (invited), 2014 (invited), 2017 (invited)
American Educational Research Journal, student reviewer, 1993

Other

Chapter "Scientific Investigations" for *Nature of Science* book edited by Bill McCommas.
NSTA Book, *Building the Department*, January 31, 2017.
Palgrave/Macmillan Book*, Teaching science to English language learners: Preparing pre-service and in-service teachers.* De Oliveira & Wilcox (Eds). March 1, 2017.

Conferences

National Association for Research in Science Teaching
Strand 6 co-chair of strand, 2000-2001
Strand 4 conference proposals, 2000 - 2010
Strand 6 conference proposals, 1998 - 2014
Association of Science Teacher Educators
Strand coordinator 2008
Strand coordinator 2007
Reviewer for conference proposals, 1998 through 2018
Southern Association for the Education of Teachers in Science
Conference proposals, 1997, 1998, 1999, 2000, 2001
Southwestern Association of Science Teacher Educators
Conference proposals 2002 to 2013
Association for the Education of Teachers in Science sessions: Fall 1997 NSTA regional
Association for the Education of Teachers in Science conference proposals, 1997
American Educational Research Association,
Conference proposals, 2002, 2003
National Educational Computing Conference,
Conference proposals, 2000
Georgia Department of Education, Document for Counselors: K-12, Gender Equity sections, 1995

Grants

National Science Foundation – ADVANCE Catalyst proposals, December 2021
National Science Foundation ITEST, 2015, 2016
National Science Foundation Noyce Scholarship, 2014
Georgia State University Research Initiation Grant, 1994, 1995
Georgia Association for Supervision and Curriculum Development Mini-grant competition, 1994

Membership (*active member)
National Association of Research in Science Teaching (NARST)*
2000-02 Culture, Social and Gender Issues; Co-coordinator of stand
1996-99 Equity Committee
Association of Science Teacher Educators (ASTE)*
2011-17 Ad Hoc Committee on New ASTE Publication
2008-11 Publication Committee
2008 Conference strand coordinator
2007 Conference strand coordinator
2002 Past President
2001 President
2000 President-elect
1998-01 Member of Board
1998-01 Committee on Membership and Communication, chair
1997-98 Leadership team, member
1997-98 Committee for Inclusive Science Education, associate member
1997-98 Ad Hoc Committee on Structure and Finances of ASTE Annual Meetings, member
1996-98 Ad Hoc Committee on Mentoring, member
1995-97 Ad Hoc Committee on Conventions, member
National Science Teachers Association (NSTA)*
1997 ASTE session representative, Nashville, TN
1996 Local Arrangement Committee: Area Convention, Co-liaison
School Science and Mathematics (SSMA)*
2005-08 Finance Committee
2004-05 Local Arrangement Committee
2002-05 Policy Committee
1999-02 Membership Committee
Southwestern Association of Science Teacher Educators (SW-ASTE)*
2007 President
2006 President-elect
2004 Program Committee
2002-04 Planning Committee
2006-07 Planning Committee
2012-13 Planning Committee
American Educational Research Association (AERA)
2003 Discussant
2002 Discussant
1995 SIG:EST liaison to Committee on Role and Status of Women in Educational Research and Development
1994 SIG:EST paper session reviewer
American Association of University Women (AAUW)
American Association for the Advancement of Science (AAAS)
2001 Nominated for Electorate Nominating Committee of Section Q
Southeastern Association of Science Teacher Educators (SASTE)
1998-01 Regional Director
1997-08 Past-president
1996-07 President
1995-06 President-elect
Georgia Educational Research Association (GERA)
1999-01 Executive Council, Member-At-Large

1997-99 Outstanding Research Committee, chair
1992-93 Executive Council, student member
Georgia Association of Teacher Educators (GATE)
Council of Science Society Presidents (CSSP) 1999-2002
2002 Committee on Math and Science Education, Chair

6F. Advising (academic year)

	Undergraduate	M.Ed. Science Ed	M.Ed. C&I: Science	Ph.D. Science Ed	Total
2003-2004	25				25
2004-2005	27				27
2005-2006	22	4		4	30
2006-2007	21	4		7	32
2007-2008	24	2		12	38
2008-2009	26	2		12	40
2009-2010	28	4		12	44
2010-2011	21	5		11	37
2011-2012	9	9		12	30
2012-2013	9	9		12	30
2013-2014		8		14	22
2014-2015		8		15	23
2015-2016		5		13	18
2016-2017		5		14	19
2017-2018		3	1	16	20
2018-2019			3	12	16
2019-2020			1	13	14
2020-2021			1	13	14
2021-2022			1	13	14
2022-2023			7	14	21