# CASSIE QUIGLEY Assistant Professor in Science Education <u>cquigs@me.com</u>

# EDUCATION

<b>Ph.D. Curriculum and Instruction</b> Indiana University—Bloomington, Indiana Dissertation: In Their Words: An Exploration into how the Construction of Congruent Third Space Creates an Environment for Employment of Scientific Discourse in an Urban, African-American Kindergarten Girls	2007-2010
M.S. Science Education Indiana University Purdue University at Indianapolis (IUPUI)—Indianapolis, Indiana	2002-2003
<b>B.S. Biology with Spanish minor</b> Indiana University—Bloomington, Indiana	1996-2000
ACADEMIC APPOINTMENTS	
Associate Professor of Science Education Department of Teacher and Learning Clemson University—Clemson, SC	2016-present
Assistant Professor of Science Education Department of Teacher and Learning Clemson University—Clemson, SC	2010-2016
PROFESSIONAL EXPERIENCE	
<b>Consultant</b> STEAM Integration for Elementary and Middle School Teachers Berkeley County School District	2015-present
Faculty-in-Residence Penny J. Fisher STEAM Middle School Greenville County School District	2014-2015
<b>Consultant</b> STEAM Integration for Science and Math Middle School Teachers Greenville County School District	2014-2016
<b>Consultant</b> Summer STEM Institute for Science and Math Teachers Richland Lexington District 5	2013-2014

<b>Consultant</b> <i>Wakanyeja</i> "Sacred Little Ones" Early Childhood Education Initiative American Indian College Fund	2011-2012
Consultant Environmental education for Elementary schools Paul H. Douglas Center, Indiana Dunes Lakeshore Education Center Instructor School of Education Department of Curriculum and Instruction Courses titled: Secondary Science Methods, Scientific Inquiry for Elementary Teachers, Classroom M a n a g e m e n t Indiana University—Bloomington, Indiana	2007-2009
<b>Instructor</b> School of Education Department of Curriculum and Instruction Saturday Science course titled: Invention Convention (grades K-2) Indiana University—Bloomington, Indiana	2008
K-12 TEACHING	
<b>Science Teacher</b> Physics Teacher Broad Ripple High School—Indianapolis, IN	2005-2007
Science Teacher Biology and Middle Grades Science Teacher Northbridge International School Cambodia—Phnom Penh, Cambodia	2003-2005
Science Teacher Biology and Chemistry Teacher Northwest High School—Indianapolis, IN	2000-2003
LICENSURE	

Indiana Licensure Science- Physics, Chemical, and Biological Sciences Grades 5-12

# **PUBLICATIONS**

# International/National Refereed Journal Articles

Herro, D. & Quigley, C. (2016) Exploring Teachers' Perspectives of STEAM Teaching: Implications for Practice. *Professional Development in Education*. Accepted.

Quigley, C.F., Herro, D., & Jamil, F. (2015) STEAM: Conceptual Model for Transdisciplinary Learning. *School Science and Mathematics*. Accepted.

Miller, Z. D., **Quigley, C.,** Hallo, J. Seno, S., Dogbey, J., Che, S. (2016). Investigating Local Wildlife and Grazing Perspectives of Kenyan Community Members. *Journal for Nature Conservation*. Accepted

Quigley, C.F., Harrington, J., and Herro, D. (2016) Moving Beyond Just adding "A" to STEM: Arts as

Expression, Science Scope. Accepted.

Lyons, R. Dsouza, N., **Quigley, C.F**. (2016) Viewing equitable practices through the lens of intersecting identities. *Cultural Studies of Science Education*. DOI 10.1007/s11422-015-9699-z

Quigley, C., Che, S., Acheing, S. & Liaram, S. (2016) 'Women and the environment are together': Using Participatory Rural Appraisal to examine gendered tensions about the environment." *Environmental Education Research*. DOI: 10.1080/13504622.2016.1169511.

Quigley, C. F., Hall, A. (2016) Taking Care: Understanding the roles of caregiver and being cared for in a kindergarten classroom. *Journal of Early Childhood Education 14*(2). 181-195, DOI: 10.1177/1476718X14548783

Quigley, C., & Herro, D. (2016) 'Finding the joy in the unknown': Shifts in STEAM Teaching Practices in Middle School Science and Math Teachers. *Journal of Science Education and Technology*, 25(3), 410–426. DOI: 10.1007/s10956-016-9602-z

Simpson, A. & Quigley, C.F. (2016) Member Checking Process with Adolescent Students: Not just Reading a Transcript. *The Qualitative Report.* 21(2): 376-392

Quigley, C., Trauth-Nare, A., & Beeman-Cadwallader, N. (2015). The viability of portraiture for science education research: learning from portraits of two science classrooms. *International Journal of Qualitative Studies in Education*, 28(1), 21-49. DOI: 10.1080/09518398.2013.847507.

Quigley, C., Tlusty, T., Hendrix, C, & Foster, A. (2015- January) No Space? No Money? No Garden? Not So Fast.... Science Scope, 38(5), 40-47.

Rivera, S., Oliveira, A., **Quigley, C.**, Rogers, P., Sambursky, D., Barss, K. (2015). Environmental A g e n c y in Read-Alouds. *Cultural Studies of Science Education*. 10(2) 247-274. DOI 10.1007/s11422-013-9531-6.

Quigley, C. F, Dogbey, J., Che, M. & J., Hallo. (2015) Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members and Teachers. *Cultural Studies in Science Education*. *10*(3) 551-580 DOI: 10.1007/s11422-014-9584-1

Quigley, C. (2014) Emotions in Teaching Environmental Education. *Cultural Studies of Science Education*. DOI: 10.1007/s11422-014-9657-1

Buck, G., Akerson, V., **Quigley, C**., & Weiland, I. (2014). Exploring the potential of using explicit reflective instruction through contextualized and decontextualized approaches to teach first-grade African American girls the practices of science. *Electronic Journal of Science Education*. 18(4) 1-21.

Quigley, C.F., Dogbey, J., Che, M. & Hallo, J. (2015). Shared Understandings: Environmental perspectives of Kenyan community members and teachers. *Environmental Education Research*. 21(7) 1079-1104,DOI: 10.1080/13504622.2014.966660

Quigley, C. F., Miller, Z. D., Dogbey, J., Che, M. & Hallo, J. (2014) 'No one should destroy the forest': Using Photo-based Vignette Interviews to Understand Kenyan Teachers' Views of the Environment. *International Journal of Science Education. (36)* 17, 2937-2957. DOI: 10.1080/09500693.2014.940024

Buck, G., Cook, K., **Quigley, C.,** Prince, P., & Lucas, Y. (2014). Seeking to Improve African American Girls' Attitudes Toward Science: A Participatory Action Research Project. *The Elementary*  Journal. 114(3) 431-453. DOI: 10.1086/674419

Dogbey, J., **Quigley, C. F.**, Che, M. & Hallo, J., (2014). Using Smartphone Technology in Environmental Sustainability Education: The case of the Maasai Mara region in Kenya. *International Journal of Mobile and Blended Learning*. 6(1), 1-16, January-March 2014. DOI: 10.4018/ijmbl.2014010101

Quigley, C. F, Dogbey, J., Che, M., & Hallo, J. (2014) Through Their Lens: The Potential of Photovoice for Understanding Environmental Perspectives among Kenyan Teachers. *The Qualitative Report.* 18(9) 1- 22.

Quigley, C. (2014). Expanding our view of Authentic Learning: Bridging in and out-of-school experiences. *Cultural Studies of Science Education*, 9(1) 115-122, DOI 10.1007/s11422-013-9535-2

Quigley, C. F. (2013). With Their Help: How community members construct a congruent Third Space in an urban kindergarten classroom. *International Journal of Science Education*, *35*(5), 837-863. DOI: 10.1080/09500693.2011.582521

Cook, K. & **Quigley, C**. (2013) Connecting to our community: Utilizing photovoice as a pedagogical tool to connect college students to science, *International Journal of Environmental and Science Education*, 8(2),339-357. DOI: 10.12973/ijese.2013.205a

Quigley, C.F & Buck, G.A. (2012) The Potential of Photo-Talks to Reveal the Development of Scientific Discourses. *Creative Education*, 3(2): 208-216. DOI: 10.4236/ce.2012.32033

Beeman-Cadwallader, N, **Quigley, C.F.**, & Yazzie-Mintz (2012) Enacting Decolonized Research: The Doing of Research in Educational Communities. *Qualitative Inquiry*. 18(1): 3-15. DOI: 10.1177/1077800411426414

Quigley, C., Marshall, J., Deaton, C., Cook, M., and Padilla, M. (2011) Challenges to Inquiry Teaching and Suggestions for How to Meet Them. *Science Educator*, 20(1): 55-61.

Quigley, C. & Allspaw, K. (2011). The cultural and ecological "worlds" of Central Asia: An Integrated Science and Social Studies Unit of Instruction for Middle School. *Science Scope*, *35*(2), 71-74.

Quigley, C. (2011) Pushing the Boundaries of Cultural Congruence Pedagogy in Science Education Towards a Third Space. *Cultural Studies of Science Education*, 6(3) 549-557. DOI 10.1007/s11422-011-9335-5

Quigley, C., Buck, G. & Akerson, V. (October 2011) Take the 30-day NOS Challenge: Thirty-days of explicit-reflective Nature of Science Instruction for Elementary Students. *Science and Children*. 49(2): 57-61.

Quigley, C.F., Escobedo, A., Cook, K, & Buck, G.A. (April/May 2011) All about Me/All About Gary: Kindergartners Use Cameras to Share the Results of Their Localized Research. *Science and Children*, 48(8): 47-51

Quigley, C.F., Oliveira, A. W., Curry, A., Horn, N. & Buck, G.A. (2011). Coming to Terms with Language: A Comparative Text Analysis of the Translation Techniques on Technical Terminology in a Science Textbook from English to Khmer. *Language, Culture, and Curriculum*, 24(2) 159-178. DOI: 10.1080/07908318.2011.583663

Quigley, C.F., Pongsanon, K. & Akerson. V. (2010) If we teach them, they can learn: Young Students Views of Nature of Science Aspects During an Informal Science Educational Program. *Journal of Science Teacher Education* 21(7): 887-907. DOI: 10.1007/s10972-009-9164-5

Quigley, C.F., Beeman-Cadwallader, N, Riggs, M., Rodriguez, A., & Buck, G.A. (2009). Deer tracks in the city? Problem-based learning in a kindergarten classroom. *Science and Children* 47(2): 34-37

Beeman-Cadwallader, N, **Quigley, C.F.,** Buck, G.A (2009). Fix the potholes! Helping Students Translate Their Interests Into Investigable Questions. *Science Scope* 33(8): 42-46

Buck, G. A., Cook, K., **Quigley, C.**, Eastwood, J., Lucas, Y. (2009). Urban, low SES, African American girls' personal science orientations: A sequential mixed-methods study. *The Journal of Mixed-Methods Research* 3(4): 386-410. DOI: 10.1177/1558689809341797

#### **Invited Papers**

Herro, D. & Quigley, C. F. (2016) Innovating with STEAM in Middle School Classrooms: Remixing Education. *On the Horizon*. Forthcoming.

### **Book Chapters**

Quigley, C.F. & Che, S. (2016) What are the ramifications of science under suspicion on science teaching? Tobin, K. & Bryan, L. (Eds.) In *The Culture of Science and Science Education: In what way does the culture of science and/or images of science affect the science educational process*?Peter Lang, New York, NY.

Quigley, C.F. & Lyons, R. (2015) The role of care in environmental education. Bellochi, A. Cass, K. Quigley,

C.F. (Eds.) In Exploring emotions, aesthetics and wellbeing in science education research. Springer, Dordrecht

Quigley, C.F. (2014) Rebuilding Community Spaces: Integrating Resilience into STEPWISE. Bencze, L (Ed.) In Science & Technology Education Promoting Wellbeing for Individuals, Societies & Environments. Springer, Dordrecht

Quigley, C.F. & Beeman-Cadwallader, N. (2013) Beyond Scientific Facts: Choosing to honor and make visible specific contexts. Ruth Nicole Brown, Rozanna Carducci & Candace Kuby (Eds.) In *Disruptive Qualitative Methodologies and Methods: Possibilities & Tensions in Education Research*. Peter Lang, New York, NY: 153-172

Buck, G.A., & Quigley, C. F (2012). Allowing our Research on African American Girls and Science Education to Actively and Continually Rewrite Itself. Bianichi, J., Akerson, V., Calabrese Barton, A., Lee, O, Rodriguez, A. (Eds.) *In Moving the Equity Agenda Forward*, Springer: New York: 173-190

# **Book Section**

Quigley, C.F in Meloy, J.M. (2012). (3rd Ed). Writing the qualitative dissertation: 21st century learning by doing. London: Routledge/Taylor-Francis. pp. 195-197

### **Book Review**

Goodman, J., Garcia, A., Quigley, C.F. (2011). Review of Knowledge, Power, in a Global Economy: Implications for Education. *Journal of The American Association for the Advancement of Curriculum Studies* 7, 1-42

### **Edited Book**

Bellochi, A., Ortel-Cass, K. & **Quigley, C.F.** (Eds.) (Contract, expected publish date June 2016) Exploring emotions, aesthetics and wellbeing in science education research. Springer, Dordrecht

#### **Articles Undergoing Refereed Review**

Herro, D. Quigley, C.F, & Andrews, J.J (2016) Co-Measure: Developing an Assessment for Student Collaboration in STEAM Activities. International Journal of STEM Education (under review).

Herro, D., Quigley, C.F., & Dsouza, N. (2016) STEAM Enacted: Exploring Middle School Teachers Implementing STEAM Instructional Practices. The Journal of Educational Research. (under review)

#### Whitepaper

Quigley, C., Herro, D., Petersen, G., Lee, C., High, K. (2015). Developing a STEAM Ecosystem to increase the STEM Workforce in South Carolina. Clemson University, invited white paper on creating an interdisciplinary STEAM Ecosystem to benefit K-12 education

#### **Conference Proceeding Papers**

Herro, D. & Quigley, C. (2016). STEAM Enacted: A Case Study of a Middle School Teacher Implementing STEAM Instructional Practices. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (pp. 1373-1380). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

# PRESENTATIONS

### Keynotes

Quigley, C.F. (2015) STEAM: *Enhancing STEM Learning for Increased Participation*. Green Schools Summit. Las Vegas, NV

#### **Refereed International/National Presentations**

Herro, D., Quigley, C.F., Andrews, J., Delacruz, G. & Holmes, J. (2016) Co-Measure: Developing a Rubric to Assess Student Collaboration in STEAM. *International Test Commission*. Vancouver, B.C. Canada.

Beeman-Cadwallader, N., **Quigley, C.F.**, Carter, I. (2016) Lasting Impacts of Cross-cultural Research on Science and STEM Teaching and Research in the U.S. NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Baltimore, M.D.

Quigley, C.F., Herro, D. & Jamil, F.M. (2016) STEAM Conceptual Model: Towards Transdisciplinary Teaching. American Educational Research Association. Washington, D.C

Herro, D. & Quigley, C. (2016). Teacher Perceptions of STEAM Practices: Professional Development

Encouraging STEAM Teaching. American Educational Research Association. Washington, D.C

Herro, D. & Quigley, C. (2016). STEAM Enacted: A Case Study of a Middle School Teacher Implementing STEAM Instructional Practices Society for Instructional Technology in Education. Savannah, GA.

Quigley, C.F., Herro, D. & Jamil, F.M. (2016) STEAM Classroom Assessment of Learning Environment: Transdisciplinary Teaching Practices for Science Teachers. The Association for Science Teacher Education. Reno, NV

Quigley, C.F., & Che, S. (2016) Gendered tensions in environmental issues. Transformative Education Research and Sustainable Development Conference, Kathmandu, Nepal

Quigley, C.F., Milne, C., Siry, C. & Verma, G. (2015) Toward a meaningful science education: Cultural Studies of Science Education. European Science Education Research Association (ESERA). Helsinki, Finland

Quigley, C.F., Liaram, S. Acheing, S., Che, S. (2015) 'Women and the environment are together': Gender inequality in environmental resource management. American Educational Research Association. Chicago, IL

Boucher, M. L., Grimmet, K. D., Tippins, D., & **Quigley, C.** (2015) Participant empowerment through photo elicitation in ethnographic research: New research and approaches. American Educational Researchers Association (AERA). Chicago, IL

Quigley, C. F., Dogbey, J., Che, M., Hallo, J. (2014) Broadening the dialogue: Environmental Perspectives of Kenyan Teachers and Community Members. NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Pittsburg, PA

Quigley, C. F., Dogbey, J., Che, M., Hallo, J. (2014) Shared Understandings: Common environmental perspectives of Kenyan community members and teachers. American Educational Research Association (AERA). Philadelphia, PA

Quigley, C.F. & Beeman-Cadwallader, N. (2014) Disrupting Science Education Research: Choosing to honor and make visible specific contexts. American Educational Research Association (AERA) Philadelphia, PA

Quigley, C.F., & Hall, A. (2014) Taking Care: The Relational Aspect of Early Childhood Teaching. American Educational Research Association (AERA). Philadelphia, PA

Hall, A. & Quigley, C. F. (2014) Creating Space: Understanding the Relational Aspect of a Kindergarten Science Classroom. American Educational Research Association (AERA). Philadelphia, PA

Hallo, J., Nabaala, M., **Quigley, C.**, Dogbey, J. & Che, M. (2013) Kenyan Community Members' Perspectives of 'Environment' and 'Sustainability', and Their Connections with Protected Areas. A paper presented at the George Wright Society. Denver, CO

Quigley, C. F. & Womac, P. (2013) Adding a Dimension to Early Years Science Teaching: The Relational Pedagogical Aspect of Third Space. American Educational Research Association (AERA). San Francisco, CA

Quigley, C. F, Dogbey, J., Che, M., Hallo, J & Womac, P. (2013) Through Their Lens: The Potential of Photovoice for Understanding Environmental Perspectives among Kenyan Teachers. American Educational Research Association (AERA). San Francisco, CA

Quigley, C. F, Dogbey, J., Che, M., Hallo, J. (2013) Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members and Teachers. American Educational Research Association (AERA). San Francisco, CA

Quigley, C. F. & Womac, P. (2013) Adding a Dimension to Early Years Science Teaching: The Relational Pedagogical Aspect of Third Space. NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Rio Grande, Puerto Rico

Quigley, C. F, Dogbey, J., Che, M., & J., Hallo, J. (2013) Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members and Teachers. American Educational Research Association (AERA). San Francisco, CA

Quigley, C. F, Dogbey, J., Che, M., Hallo, J & Womac, P. (2013) Through Their Lens: The Potential of Photovoice for Understanding Environmental Perspectives among Kenyan Teachers. NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Rio Grande, Puerto Rico

Quigley, C. F, Dogbey, J., Che, M., Hallo, J. (2013) Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members and Teachers. NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Rio Grande, Puerto Rico

Trauth-Nare, A. & **Quigley, C.F**. (2013) A comparative study of teachers' sense of place: Moving from theory to praxis. National Association for Science Teacher Educators, Charleston, SC

Quigley, C. F. & Medford, L (2013) Service-Learning in Your Place: Creating Sustainable Community Connections for Science Teaching. National Association for Science Teacher Educators, Charleston, SC

Rivera, S., Oliveira, A., **Quigley, C.**, Rogers, P., Sambursky, D., Barss, K. (2013). Environmental Agency in Read-Alouds. National Association for Science Teacher Educators, Charleston, SC

Cook, K. & Quigley, C. (2013) Utilizing Photovoice as a Tool to Connect Learners to Science A paper presented at the National Association for Science Teacher Educators (ASTE), Charleston, SC

Cook, K. & Quigley, C. (2012, March). Using Photovoice to empower pre-service teachers to connect science to their daily lives. Paper presentation at NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research, Indianapolis, IN

Quigley, C., Varelas. M., Smith, D., Upadahyay, B. (2012, March) Learning from Children: A Conversation about Science Education in the Early Years. NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Indianapolis, IN

Quigley, C. (2012- April) With Their Help: How Community Members Construct a Congruent Third Space in an Urban Kindergarten Science Classroom. American Educational Association of Research, Vancouver, BC

Quigley, C., Trauth-Nare, A & Beeman-Cadwallader, N (2012, April) The viability of portraiture for science education research: Learning from portraits of two science classrooms. American Educational

Association of Research, Vancouver, BC

Cook, K. & **Quigley**, C. (2012-March). Using to tool of photovoice to engage students in place-based socio-scientific inquiry. National Science Teachers Association (NSTA), Indianapolis, IN

Quigley, C, Buck, G., Akerson, A (2012-March). Take the 30-day NOS Challenge: Thirty-days of explicitreflective Nature of Science Instruction for Elementary Students. National Science Teacher Association (NSTA) Conference. Indianapolis, IN

Quigley, C.F. (2011-September). With Their Help: How Parents and Community Members Help to Create a Congruent Third Space to Encourage Understanding of Scientific Discourse. Educational Association of Science Education. Lyon, France

Quigley, C.F. (2011-September). An exploration into how urban, kindergarten girls integrate scientific and everyday discourse. Educational Association of Science Education. Lyon, France

Buck, G.A., & **Quigley, C.F**. (2011- April) Equity in Ethics: An interactive symposium. National Association for Research in Science Teaching (NARST), Orlando, FL

Buck, G., Cook, K., & **Quigley, C.** (2011-April). *The effects of becoming a science-focus school in regards to urban, low SES, African American Girls' Emotional Engagement with Science*. National Association for Research in Science Teaching (NARST), Orlando, FL.

Quigley, C.F, Trauth-Nare, A., Beeman-Cadwallader, N. (2011-April) *People and Places: The Use of Portraiture for Understanding Context in Science Classrooms*. National Association of Science Teaching and Research (NARST), Orlando, FL

Quigley, C.F., Beeman-Cadwallader, N, & Yazzie-Mintz (2011, April). *Enacting Decolonized Research: The Doing of Research in Educational Communities*. American Educational Research Association (AERA), New Orleans, LA

Quigley, C., Serriere, S., & Buck, G (2010, April). In Their Words: The Use of a Photo-elicitation Technique to Understand how Young Girls Acquire New Scientific Words. American Educational Research Association (AERA), Denver, CO

Buck, G., **Quigley, C.**, Beeman-Cadwallader, N. & Akerson, V. (2010, March). Urban African-American Girls' Understandings of the Nature of Science Through the Use of Worldview Theory. National Association for Research in Science Teaching (NARST), Philadelphia, PA

Park Rogers, M. A., & Quigley, C. F. (2010, March). Guided Peer Discussions as a Scaffold for Developing Learning Progressions about Inquiry. National Science Teacher Association (NSTA), Philadelphia, PA

Quigley, C. & Buck, G.A (2010, March). "Dressing rooms, jelly donuts, and straws": An exploration into how urban, kindergarten girls integrate scientific and everyday discourses. National Association of Research in Science Teaching (NARST), Philadelphia, PA

Buck, G.A., Cook, K.L., **Quigley, C.F.**, & Eastwood, J. (2009, April) *Exploring how Urban African-American Girls Position Themselves in Science Learning*. National Association for Research in Science Teaching (NARST), Garden Grove, CA

Park Rogers, M. A., & Quigley, C. F. (2009, April). Guided Peer Discussions as a Scaffold for

Developing Learning Progressions about Inquiry. National Association for Research in Science Teaching (NARST), Garden Grove, CA

Pongsanon, K. & Quigley, C.F. (2009, April) How explicit reflective instruction fosters early elementary students' understandings of Nature of Science. National Association for Research in Science Teaching (NARST), Garden Grove, CA

Quigley, C.F., Oliveira, A. & Buck, G.A. (2009, April). Coming to Terms with Language: The

Transl

ation of Technical Terminology in Science Textbooks. National Association for Research in Science Teaching (NARST), Garden Grove, CA

Quigley, C. F. (2004, March) Implementing Reading Strategies across the Curriculum, East Asian Region Council of Schools (EARCOS), Bangkok, Thailand

# **Regional/State Presentations**

Quigley, C. F. (2013). Service Learning in the Middle School Science Classroom. Noyce Southeastern Regional Conference. Greenville, SC

Quigley, C.F., Hajosy, S., Reid, A., Watson, H., Achee, M., Schaible, A. (2012) Water Quality Unit. Noyce Southeastern Regional Conference. Greenville, SC

Quigley, C. F., Burdette, N., & Rice, K. (2011) A Pedagogical Tool for Biology Teachers. Noyce Southeastern Regional Conference. Greenville, SC

Cowden, A., Fasolino, T., McCubbin, M. & Quigley. C (2010-March) Service Learning Speed-Connecting: Creating Networked Communities Through Cross-Disciplinary Collaboration. South Carolina Statewide Service-Learning Conference. West Columbia, SC

Cowden, A., Fasolino, T., McCubbin, M. & Quigley. C (2010-December) Service Learning Speed-Connecting: Creating Networked Communities Through Cross-Disciplinary Collaboration. Gulf South Summit. Roanoke, VA

Quigley, C. Beeman-Cadwallader, N. and Buck, G.A. (2009, February). *Science Fairs: Hate Them? We'll help.* Hoosier Association of Science Teachers (HASTI), Indianapolis, IN

Quigley, C. and Park Rogers, M.A. (2008, December). *Life in a Square: An inquiry-based outdoor project to explore NOS aspects*. National Science Teacher Association (NSTA), Cincinnati, OH

#### **Local Presentations**

Simpson, A., Martinez, E., Reese, K., Pindar, L., Fine, C., Quigley, C. (2013). *The IRB Conundrum: The Challenges of Research in a Digital Age.* HEHD Spring Forum. Clemson University, Clemson, SC

Cowden, A., Fasolino, T., McCubbin, M. & Quigley. C. (2011-March) Creating Healthy Communities Through Cross-Disciplinary Collaboration. Service Learning Fellows Presentation. Clemson University. Clemson, SC

Quigley, C (2010). In Their Words: The Use of a Photo-elicitation technique to understand how urban, African-American girls understand scientific discourse. Indiana University Science Education Symposium. Bloomington, IN Quigley, C. (2009). Coming to Terms with Language: The Translation of Technical Terminology in Science Textbooks. Indiana University Science Education Symposium, Bloomington, IN

### **Invited Presentations**

Herro, D. & Quigley (2016) *The STEAM Collective: Learning in the Digital Age*. Eugene T. Moore School of Education Engagement Day.

Quigley, C.F. & Thomas, J. (2016) InspirED Beyond Measure Panel. South Carolina Governor's School for the Arts.

Quigley, C.F. (2016) STEAM + Service Learning: An Initiative to Improve Communities and Increase Opportunities. Clemson University Collaborations Service- Learning Webcast

Quigley, C.F. (2015) Sustainability + STEM. Green Schools Summit. Las Vegas, NV

Quigley. C.F. & Herro, D. (2015) Capacity Building: STEM to STEAM in South Carolina. National Dropout Prevention Center Solutions Webcast

Quigley, C.F. (2015) Service Learning in K-12 Schools: Avoiding the Canned Food Drive Mentality. Clemson University Collaborations Service- Learning Webcast

Griffin, S., **Quigley, C.** Whitcomb, J. (2012). Research on Mixed-Methods. Center for Collaborative Research Activity Panel Workshop

Quigley, C. (2014) Service Learning in International Contexts: A New Approach to Collaboration. Clemson University Collaborations Service-Learning Webcast

Quigley, C., Pope, R., Taylor, C. (2012) Service-Learning in Your "Place": Creating Sustainable Community

Connections for the Environmental Sciences" Clemson University Collaborations Service- Learning Webcast

Quigley, C.F. (2011) Using place to promote science learning in early childhood and elementary classrooms

Wakanyeja "Sacred Little Ones" Early Childhood Education Initiative Denver, CO

Quigley, C.F. (2011). Issues and techniques in translating scientific terms from English to Khmer for a university level text in Cambodia. Invited presentation for Engineering and Science Education seminar. Clemson University, Clemson, SC

Quigley, C.F. & Cook, K. (2009). *Photovoice: Listening to the Lake*. Invited presentation at the Paul H. Douglas Center, Indiana Dunes Lakeshore Education Center, Gary, IN

# Presentations Undergoing Review

Herro, D., **Quigley, C.F.,** Andrews, J. (2016) Developing an Assessment for Students' Collaborative Problem Solving in STEAM Activities. American Educational Research Association. San Antonio, Texas.

# GRANTS

External

Herro, D., **Quigley, C.F.**, Andrews, J. DeLaCruz, G., & Holmes, J. Co-Measure: Developing a Measure to Assess Student Collaboration in STEAM. MacArthur funded grant for collaborative work with National Center on Evaluation for Research on Evaluation and Student Testing (CRESST) and Educational Testing Service (ETS). \$50,000. 2015. Co-investigator 40%

Fisk, W., Che., S., Klar, H., **Quigley, C.F.** Clemson University International Leaders in Education Program. *International Research and Exchange Program United States Department of Education*. \$110,071. 2014. Co-investigator 10%

Quigley, C.F., Herro, D. *Greenville County School District STEAM Expert Teacher Project.* Bosch Community Fund Grant. \$60,000.00. 2014. Principle investigator 10%

Medford, L., Johnson, D. & Quigley, C.F. Southeast Regional Noyce Conference Grant. National Science Foundation (NSF). \$576,585.00. 2011. Co-investigator 10%

Buck, G.A, Cross, D. & Quigley, C.F. Enhancing urban, African American girls' conceptual engagement in science and mathematics. Indiana Department of Education Mathematics and Science Partnership Program (MSP). \$45,766.00. 2008. Co-investigator 10%

Quigley, C. The effects of current methods courses of pre-service Cambodian science teachers on Cambodian girls. E. Wayne Gross Foundation. \$2,600. 2008. Principle investigator.

# **Funded Internal**

Putman, B., High, K., Kurz, M., Martin, J., Peters, T., Porter, C., **Quigley, C.**, Smith, M., Summers, J. *Emagine: Advancing STEM in Schools and Communities through Outreach, Research, and Education.* Transformative Initiative for Generating Extramural Research (TIGER) Grant. \$20,000. 2016. Co-investigator: 10%.

Quigley, C. F. Determining the Effects of the Interactive Photo Exhibit on Environmental Perspectives. University Research Grants Council (URGC) Completion Grant. \$2885. 2014. Principle investigator.

Quigley, C.F., Che, S., Dogeby, J., Halo, J. HEHD Interdisciplinary Research Innovation Grant. Thinking Globally—Acting Locally: Interactive Mobile Exhibit from Kenya to South Carolina. \$20,000. 2013. Principle investigator.

Quigley, C.F., Che, S., Dogeby, J., Halo, J. HEHD Interdisciplinary Research Innovation Grant Enhancing Environmental Education Through an Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members, Teachers, and Students. HEHD Innovation Grant. \$49,999. 2012. Principle investigator.

Quigley, C., Che, S., Dogeby, J. Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members, Teachers and Students. University Research Grant Council. \$9,995. 2012. Principle investigator.

Quigley, C. & Spearman. The Sustainable Food Project: A Service-Learning Project with Future Science and Social Studies Teachers to Promote and Encourage Sustainable Living. Service Learning Alliance 2020 Planning Grant. \$3250. 2011. Principle investigator.

Quigley, C. In Their Words: The Use of Photo-elicitation techniques to understand the acquisition of scientific vocabulary in urban elementary girls. E. Wayne Gross Fellowship. \$3,000. 2009.

Principle investigator.

Quigley, C. The effects of current methods courses of pre-service Cambodian science teachers on Cambodian girls. E. Wayne Gross Fellowship. \$2,600. 2008. Principle investigator.

#### **Proposals Not Funded**

Quigley, C.F., Herro, D., Frady, K., Alexander, A. STEAM Teacher Innovators. Duke Energy Foundation. \$72,450. 2016. Principle investigator

Cook, M., Pargas, R., White, D.L., Chong, J., Chow, A., & Quigley, C. *Firefly Quest: Encouraging children and their families to learn about their local environment*. National Science Foundation (NSF) Advancing Informal STEM Learning (AISL). \$300,000.2016. Evaluator: 15%.

Casabianca, L., McNealy, T., Ackler, S., Corbin, V., **Quigley, C.,** & Marler, J. Science...It's a Girl Thing. National Institutes of Health. 1,170,275.00. Co-investigator 11%. 2016

Quigley, C.F., Herro, D., Cook, M., Casabianca, L., McNealy, T. STEAM Teaching: Transdisciplinary Teaching and Learning Practices for Middle School Teachers. Improving Teaching Quality, South Carolina Commission on Higher Education. \$124, 866. Principle investigator 15%. 2015

Cook, M., Chong, J., Chow, A., Pargas, R., White, D., **Quigley, C**. Firefly Quest: Encouraging Children and Families to Learn about Their Local Environment. National Science Foundation (NSF). \$300,000. 2015.Evaluator. 10%

Fisk, W., Che., S., Klar, H., **Quigley, C.F.** Spearman, M. Clemson University International Leaders in Education Program. *International Research and Exchange Program United States Department of Education*.

\$110,000. 2015. Co-investigator 10%. 2015

Burras, C., **Quigley, C.F.** & Herro, D. Full STEAM Ahead: Creating Transdisciplinary Middle School Teacher Leaders. Greenville Women Giving. \$95,000. 2015. 2015

Quigley, C.F. CAREER: CEEP: A Scalable Model for Teacher Education. NSF CAREER Grant. \$636,247. 2014

Quigley, C.F., Herro, D., Shedlock, A., Corbin, V., & Cook, M. Mapping Our Future: Developing High Quality Middle/High School Instructors. Improving Teacher Quality (ITQ). \$149,917. 2014

Quigley, C. F. CAREER: Thinking Globally—Acting Locally: Increasing Environmental Literacy through Understanding Cross Cultural Perspectives. NSF CAREER Grant. \$639,214. 2013

McMullen, K., Boyer, M., Quigley, C.F. Virtual Audio for STEM teaching. Institute for Educational Sciences. \$1,00,080. 2013

Oliviera, A., Vuille, M., **Quigley, C**. Teaching Climate Change through Scientific Modeling. NOAA. \$1,000,000. 2013.

Headley, K., Gillis, V., Allen, L., McNair, J., Bates, C., **Quigley, C.,** Che, S., Gilbert, J., Dogbey, J. Literacy Empowerment for Youth Development Education in Narok County, Kenya; Sponsored by USAID- US Agency for International Development. \$299,999.00. 2012

Quigley, C.F., Che., S.M., Dogbey, J., Oliveira, A., & Speziale, B. PIRE: A Synergistic Approach to Sustainable Environmental Relationships and Values. National Science Foundation. \$4,000,000. 2011

Moysey, S, **Quigley**, C., Visser, R. A Proposal for Enhancing environmental education in middle schools and colleges using serious games. Environmental Protection Agency. \$100,000.00. 2011

# HONORS AND AWARDS

ASTE Innovations in Science Pedagogy Award 2014 Excellence in Research Award, School of Education 2013 NASA Endeavor Teacher Educator, 2011-2012 Basu Equity Scholar- 2012 Clemson University Service Alliance Faculty Fellow, 2010-2011, 2012-2014, 2015-2016 University of Michigan National Center for Institutional Diversity Exemplary Diversity Scholar, 2010 Achasa Beechler Scholarship Award, 2010 E. Wayne Gross Recipient, 2008, 2009 Howard Hughes Medical Institute Summer Research Grant, 1997

# TEACHING

# Clemson

Graduate

ED 8710—STEAM Instructional Design (Summer 2016)

ED 8380—The Reflective Practitioner (Spring 2016)

ED ML 8340—Middle Grade Science Methods/Capstone (Spring

2016) EDF 9790—Introduction to Qualitative Inquiry (Fall 2015)

ED SC 8480—Current Literature in Science Teaching (Spring

2015) ED ML 8240—Middle Grades Science Methods (Spring

2015)

ED 8380—The Reflective Practitioner (Academic Year Course 2014-2015; Quality Matters certified)

ED ML 8140- Middle Grades Science Methods/Practicum (Fall 2014)

ED ML 8340-Environmental Sciences for Teachers (Fall 2014; ENCORE

certified) ED ML 8380—The Young Adolescent Learner (Summer 2014)

ED 8380- Project-based Learning (Summer 2014; Quality Matters

certified) ED F 838- The Early Adolescent (Summer 2013)

ED F 979- Introduction to Qualitative Inquiry (Spring

2013) ED F 977—Emergent Methodologies (Fall 2012)

ED ML 814—Middle Grades Science Methods/Practicum (Fall 2012)

ED F 808— Tests and Measures (Summer session 2 2012)

HON H499—Creative Inquiry Honors (Fall 2011; Spring 2012; Fall 2013; Spring 2014; Fall 2014)

EDSEC 814—Middle Grades Science Methods (Spring 2012)

ED F 879—Introduction to Qualitative Inquiry (Spring

2012) ED F 808—Tests and Measures (Fall 2011)

EDSEC 824—Middle Grades Science Methods/Practicum (Fall 2011)

EDSEC 738—Lessons from Water: Environmental Science Course (Fall 2011)

EDSEC 738—Understanding the Ecological World through Scientific Inquiry (Fall 2010)

EDSEC 814—Middle Grades Science Methods/Practicum (Fall 2010)

EDSEC 824—Middle Grades Science Methods/Student Teaching (Spring 2011) EDF 974—Qualitative Inquiry Topics Course: Emerging Methods (Summer 2011) EDF 808—Tests and Measurement (Summer 2011)

# University Study Abroad Consortium (USAC)

<u>Undergraduate</u> Costa Rica Today: An Environmental Study of Place (Summer Session 1 2012; January Session 2014)

# **Indiana University**

<u>Undergraduate</u> Q200—Introduction to Scientific Inquiry (Fall 2009, Spring 2010) M550— Classroom Management (Fall 2008) M334—Secondary Science Methods (Fall 2007, Spring 2008)

# **GRADUATE COMMITTEES Ph.D.**

<u>Chair</u> Nikeetha DSouza –admitted 2014 Heidi Cian -admitted 2015

<u>Committee Member</u> Jennifer Cribbs-defended May 2012 Leasa Evinger -defended May 2014 Kimberly Poole -defended August 2014 Katie Woodlieff -defended August 2014 Kim Jedlicka -defended December 2014 Amber Simpson -defended April 2015 Kristin Walker –defended August 2015 Leigh Haltiwanger -ABD Jacque Taylor -in progress Adeynaju Odutola -in progress Renee Lyons -in progress Altheia Richardson- in progress

# M.A.

<u>Committee Member</u> Kimberly Pierce -May 2012 Rebecca Deary -May 2013 Megan Steele-August 2014

# M.A.T.

Chair Brittany Adams -Spring 2011 Norm Burdette -Spring 2011 Amy Dye -Spring 2011 Patrick Dunn-Spring 2011 Kelsey Rice-Spring 2011 Claire Berg-Spring 2011 Denise Riddle-Spring 2012 Stephen Hajosy -Spring 2012 Heather Mills -Spring 2012 Robin Pope -Spring 2012 Ashley Thomasson -Spring 2012

Heather Watson - Spring 2012 Anthony Ragusa - Spring 2012 Amy Schaible - Spring 2012 Caitlin Goss- Summer 2012 JR Adkins – Spring 2013 Anna Carter - Spring 2013 Brent Carey - Spring 2013 Thooyaa Prabhakar -Spring 2013 Kimberly Sherman - Spring 2013 Ginger Dreo -Summer 2013 Amanda Banks - Spring 2014 Amanda Foster - Spring 2014 Michael Simpson – Spring 2014 Kathy Powers - Spring 2014 Cara Schedelos – Spring 2014 Jeffrey Hennessey –Spring 2014 Laura Hayes - Spring 2014 Elia Arenas – Spring 2015 Kendall Gallager - Spring 2015 Matthew Giacolone -- Spring 2015 Chris Hendrix-Spring 2015 Amanda Keenum - Spring 2015 James DuPre-Spring 2016 Drayton Garrett-Spring 2016 Jenna Hudak-Spring 2016 Kelly Irving- Spring 2016 Stephen Jackson-Spring 2016 Emily Nelson-Spring 2016 Tommy Nielson-Spring 2016 Savannah Singleton-Spring 2016

### SERVICE ACTIVITIES

# International/National

CSSE Forum Best Paper Committee (2016) NARST Basu Scholars Symposium coordinator (2015) NARST Equity and Ethics Pre-conference coordinator (2015-2016) AERA Qualitative Inquiry SIG Newsletter Editor (2015-2017) AERA Division G (Social Contexts in Education) Mentoring Pre-Conference Mentor (2015) Strand coordinator for Strand 14 (Environmental Education), NARST (2015-2017) Strand coordinator for Strand 2 (Elementary Teaching and Learning), NARST (2013-2015) Committee Member, Equity and Ethics Committee, NARST Elected Position (2012-2015) Editorial board for Cultural Studies of Science Education (2013-present) Editorial board for International Journal of Science and Environmental Education (2013-2016)

## **Invited Reviewer of Manuscripts and Grant Proposals**

Environmental Education Research (October 2015; September 2015; March 2016) International Journal of Science Education and Environmental Science (July, 2010; January 2011, March 2011, September 2011; January 2012; March 2012; March 2013; May 2013; June 2014; September 2015) International Journal of Science Education (September 2011; November 2011; August 2013; August 2014; September 2014; May 2015; July 2015; September 2015; January 2016; March 2016 ) International Journal of Qualitative Studies in Education (May 2011; June 2013; July 2015)

Language, Culture and Curricula (August, 2010, February, 2011; September 2011; January 2014)

Mind Culture and Activity (September 2011; January 2012; May 2015)

Science Education (September 2011; January 2012; March 2013; April 2014; May 2015)

Journal of Research in Science Teaching (January 2013; March 2013; July 2013; September 2013; March

2014; May 2014; July 2014; Special Issue Review September 2014; October 2014; November 2014; March 2015; April 2015; August 2015; January 2016; March 2016)

2015, April 2015, August 2015, January 2016, March

Journal of Teacher Education (March 2016)

National Science Foundation (2012, 2013, 2014, 2015)

Qualitative Inquiry (April 2013; May 2014; June 2015; July 2015) Symposium Chair, American

Educational Research Association—AERA (2015)

Proposal Reviewer, National Association for Research in Science Teaching—NARST (2009, 2010, 2011, 2012, 2013, 2014, 2015)

Proposal Reviewer, Association for Science Teacher Education—ASTE (2009, 2010, 2011, 2013, 2016) Proposal Reviewer, American Educational Research Association—AERA (2010, 2011, 2012, 2013, 2015) Committee Member, American Educational Research Association (AERA) Affirmative Action Committee (2009-2010)

Discussant, American Educational Regional Association, Chair for Science Education and Chair of Gender Issues, International conference, Vancouver, BC 2012

Discussant, American Educational Regional Association, Chair for Gender Issues Roundtable, Denver, CO 2010

Presider, National Association for Research in Science Teaching (2011), Orlando, FL

Presider, Association for Science Teacher Educators (2008)- presided at conference, St. Louis, MO

Presider, National Association for Research in Science Teaching (2009), Long Beach, CA

# University

Social Studies Education Search Committee member, 2016

Faculty Senator, 2015-2018 STEAM Steering Committee, 2015-present Faculty Senate Policy Committee, 2015-2018 Faculty Senate Executive Advisory Committee, 2015-2018 Learning Module Systems Committee, 2014-2015 Faculty Senate Alternate, 2014-2016 SPA/CAEP Program Coordinator- 2014-2016 Curriculum Committee, 2012-2015 School of Education Transition Planning Team- 2012-2014 HEHD Research Committee- 2012-2014 Search Committee for Arts and Creative Education-2011-2012 Immersion Committee Member-2010 NCATE/SPA Program Coordinator for Middle Grades MAT Program- 2010-2011 STEM Initiatives Committee-2011 Uhuru Child Student Organization Advisor- 2013- present

# **PROFESSIONAL AFFILIATIONS**

American Association of University Professors (AAUP), 2015- present North American Association for Environmental Education (NAAEE), 2014- present American Educational Research Association (AERA), 2008-present National Association of Research in Science Teaching (NARST), 2008-present Association for Science Teacher Education (ASTE), 2008-present National Science Teachers Association (NSTA), 2001-present Hoosier Association of Science Teachers (HASTI), 2002-2010