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Associate Professor
Clemson University
Eugene T. Moore School of Education
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Professional Appointments:

Assistant Professor	Mathematics Education	Clemson University	2006-2012
Associate Professor	Mathematics Education	Clemson University	2012-present
Lecturer	Mathematics Education	University of Oklahoma	2005-2006
Public School Teacher	Mathematics	Del City High School	1999-2003

Academic Background:

May, 2005: Ph.D., University of Oklahoma
Norman, OK

Instructional Leadership and Academic Curriculum
Emphasis: Mathematics Education

August, 1997: Master of Science in Mathematics, Colorado State University
Ft. Collins, CO

Emphasis: Atmospheric Science

May, 1995: Bachelor of Science in Meteorology, University of Oklahoma
Norman, OK

Emphasis: Mathematics

Scholarship:

Publications:

Refereed Articles/Chapters:

Simpson, A., Che, S.M., and Bridges, W. (under review). *Students' gendered perceptions of single-sex and coeducational science classes in the United States.*

King, L.J., Che, S.M., & Woodson, A.N. (under review). *Educative-psychic violence: Articulating and resisting the ramifications of slavery math problems.*

Quigley, C., & Che, S.M. (in press). On the need to engage in constructive, productive, scientific discourses on highly controversial and emotionally charged topics. In L. Bryan & K. Tobin (Eds.), *13 Questions in Science Education.*

- Quigley, C., Che, S., Acheing, S. & Liaram, S. (in press). 'Women and the environment are together': Gender inequality in environmental resource management." *Environmental Education Research*.
- Kombe, D., Che, S.M., Kingree, K., Klar, H. (in press). What happened to single-sex education in South Carolina's middle schools? *South Carolina Association for Middle Level Education Journal*.
- Watt, A. & Che, S.M. (in press). Developing algebraic thinking through pattern trains. *Math Mate*.
- Simpson, A., & Che, M. (2016). A phenomenological study of middle grade female and male students' single-sex mathematical experiences. *Research in Middle Level Education Online*, 39(2), 1-13. doi: 10.1080/19404476.2016.1138727
- Kombe, D., Che, S.M., Carter, T.L., & Bridges, W. (2016). Student academic self-concept and perception of classroom environment in single-sex and coeducational middle grades mathematics classes. *School Science and Mathematics* 116(5), 265-275.
- Miller, Z. D., Quigley, C., Hallo, J. Seno, S., Dogbey, J., Che., M. (2016). Investigating Local Wildlife and Grazing Perspectives of Kenyan Community Members. *Journal of Environmental Management* 32, 44-52.
- Simpson, A., Che, S.M., and Bridges, W. (2015). Girls' and boys' science academic self-concept in single-sex and coeducational classes. *International Journal of Science and Mathematics Education*.
- Simpson, A., Mokalled, S., Ellenburg, L., & Che, S. M. (2015). A tool for rethinking teachers' questioning. *Mathematics Teaching in the Middle School* 20(5), 294-302.
- Quigley, C.F., Dogbey, J., Che, M. & Hallo, J. (2014). Shared Understandings: Environmental perspectives of Kenyan community members and teachers. *Environmental Education Research*. 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*. DOI: 10.1080/09500693.2014.940024.
- 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, DOI: 10.4018/ijmbl.2014010101.

Quigley, C. F, Dogbey, J., Che, M. & J., Hallo. (2014) Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members and Teachers. *Cultural Studies in Science Education*. DOI: 10.1007/s11422-014-9584-1.

Quigley, C. F, Dogbey, J, Che, M., Hallo, J & Womac, P. (2014). Through their lens: The potential of photovoice for understanding environmental perspectives among Kenyan teachers. *The Qualitative Report*. 19(18) 1-22.

Mathews, S. A., Spearman, M., & Che, S.M. (2013). Contradictions of democratic education: International perspectives on democracy in American schools. *The Journal of Social Studies Research*, 37(4) 185-193.

Che, S.M. & Wiegert, E. (2012). Problem-solving strategies of girls and boys in single-sex mathematics classrooms. *Educational Studies in Mathematics*, 79(2).

Sloop, B., & Che, S.M. (2011). Mathematical explorations: Probability with Efron dice. *Mathematics Teaching in the Middle School* 17(2), 116-123.

Che, S.M. & Wiegert, E. (2010). Single-sex mathematics classes at the middle grades: An analysis of instructional variations. *Women in Mathematics Education*.

Wiegert, E., & Che, S.M. (2010). Single-sex classrooms in a southern charter middle school: Student, teacher, and parent perspectives. *Current Issues in Middle-Level Education* 15(1), 1-9.

Che, S. M. (2009). Giant pencils: Developing proportional reasoning. *Mathematics Teaching in the Middle School* 14(7), 404-408.

Che, S.M. (2008). Domestic and international power relations in a Cameroonian mission school system. *International Journal of Educational Development*, 28(6).

Che, S. M. (2007). Technical and vocational education in Cameroon and critical avenues for development. *Research in Comparative and International Education*, 2(4).

Handbook Chapter:

Che, S.M., Spearman, M., & Manizade, A. (2009). Constructive disequilibrium: Cognitive and emotional development through dissonant experiences in less-familiar destinations. In R. Lewin (Ed.), *Handbook of Practice and Research*

in Study Abroad: Higher Education and the Quest for Global Citizenship.
New York, NY: Routledge.

Books:

Utley, J., Reeder, S., & Che, S.M. (proposal under review). *Mathematics Openers: Making the Most of Start-of-Class Routines.*

Published Book Review:

Che, S. M. (2004). Complexity and the emergence of intelligence [Review of the book *Animal social complexity: Intelligence, culture, and individualized societies*]. *Complicity: An International Journal of Complexity and Education*. 1(1), 109-112.

Other Creative Products:

Collins, J., & O'Brien, N. (Eds.) (2003). *Greenwood Dictionary of Education*. Westport, CN. Greenwood Press. Contributed *additive reasoning, conservation, intuition in mathematics, logarithm, mathematical reasoning, multiplicative reasoning, rate of change, and reification.*

Presentations:

Invited Presentations:

Che, S.M., Patterson, J., Schoer, L., & Genero, N. (2014). *Classroom-based research collaboratives for advancing k-12 instructional strategies.* Presentation at the Institute for the Study of Instructional Strategies. Spartanburg, SC.

Che, S.M. & Carter, T. (2014). *Students' reasoning and problem solving strategies in single-sex mathematics classes.* Presentation at the Institute for the Study of Instructional Strategies. Spartanburg, SC.

Che, S.M. (2013). *Mathematical reasoning: Gender differences among children in single-sex public school classrooms.* Presentation at Wellesley College. Wellesley, MA.

Lindle, J.C., Barton, M., Che, M., & Cook, M. (2013). *The next five years: The future of mathematics and science education in South Carolina.* A panel discussion at the Moving from Standards to Practice: Leading Tomorrow's Mathematics and Science Education in South Carolina conference. Clemson, SC.

Manizade, A., Spearman, M., & Che, S.M. (2010). *Ensuring safety for study abroad participants in less-familiar destinations.* Panel presentation for the Standards in Practice: Beyond the Basics of Health, Safety and Security institute. Charlotte, NC.

Refereed International:

Che, S.M., & Simpson, A. (2015). *Discursive acts of power: A critical analysis of single-sex and coeducational mathematics classes*. Presentation at the annual meeting of the International Group for the Psychology of Mathematics Education, Hobart, Tasmania.

Simpson, A., & Che, S. M. (2015). *Use of I-poems to uncover adolescents' dynamic mathematics identity within single-sex and coeducational classes*. Presentation at the annual meeting of the International Group for the Psychology of Mathematics Education, Hobart, Tasmania.

Simpson, A., Kombe, D., Che, M., & Bridges, W. (2014). *Adolescent students' perceptions of mathematics and science as a gendered domain*. Poster presentation at the annual meeting of the International Group for the Psychology of Mathematics Education, Vancouver, Canada.

Carter, T., Kombe, D., & Che, S.M. (2014). *Student academic self-concept and perception of classroom environment in single-sex and coeducational middle grades mathematics classes*. Paper presentation at the Psychology of Mathematics Education annual meeting, Vancouver, British Columbia.

Che, S.M., & Bridges, W. (2013). *Single-sex mathematics classrooms in public schools: A critical analysis of discursive actions*. Poster presentation at the biennial meeting of the Congress of European Research in Mathematics Education, Antalya, Turkey.

Che, S.M., & Wiegert, E. (2012). *Gender and learning environment: An analysis of academic rigor and classroom discourse in all girls, all boys, and coeducational middle grades mathematics classrooms*. Paper presented at the 2012 meeting of the International Congress on Mathematics Education, Seoul, Korea.

Manizade, A. G., & Che, S. M. (2007). *Creating E-portfolio to Collect and Present the Evidence of Preservice Teachers' Content Knowledge and Pedagogical Content Knowledge Growth at the Secondary Level*. The 8th International Conference on Technology in Mathematics Teaching (ICTMT), Hradec Králové, Czech Republic.

Refereed National:

Kombe, D. & Che, S.M. (2016). *Academic rigor in single-sex and coeducational middle grades mathematics classes*. Presentation at the annual meeting of the Research Council on Mathematics Learning. Orlando, FL.

Che, S.M. & Bridges, W. (2015). *Classroom environments in single-sex and coeducational mathematics and science middle grades classes*. Presentation at the annual meeting of the School Science and Mathematics Association. Oklahoma City, OK.

- King, L., Woodson, A., & Che, S.M. (2015). *Educative Psychic Violence: Articulating and Resisting the Ramifications of Slavery Math Problems*. Paper presented at the annual meeting of the College and University Faculty Assembly (CUFA), New Orleans, LA. This paper received the Kipchoge Neftali Kirkland Social Justice Award for 2015.
- Quigley, C.F., Liaram, S. Achieng, S., Che, S. (2015). *Women and the environment are together': Gender inequality in environmental resource management*. Paper presented at the American Educational Research Association (AERA). Chicago, IL.
- King, L.J., Che, S.M., Woodson, A.N. (2015). *Educative-Psychic violence: Articulating and resisting the ramifications of slavery math problems*. Paper presented at the American Educational Research Association (AERA). Chicago, IL.
- Quigley, C.F., Achieng, S., Liaram, S., Che, S. (2015). *'Women are the saviors': Gender issues in environmental resource management*. NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Chicago, IL.
- Simpson, A., Che, S.M, Bridges, W. (2015). *Students' perceptions of science in single-sex and coeducational science classes in the United States*. NARST: A Worldwide Organization for Improving Science Teaching and Learning Through Research. Chicago, IL.
- Carter, T.L., Che, S.M., Bridges, W.C., Kombe, D. (2015). *Teacher-student interactions in single-sex and coeducational math classes*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Las Vegas, NV.
- Kombe, D., Che, S.M., Bridges, W.C. (2015). *Perceptions of mathematics and gender in middle school single-sex classrooms*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Las Vegas, NV.
- Quigley, C. F., Dogbey, J., Che, M., Hallo, J. (2014). *Broadening the dialogue: Environmental Perspectives of Kenyan Teachers and Community Members*. NARST International Conference. Pittsburg, PA.
- Simpson, A., & Che, M. (2014). *A phenomenological study of middle grade female and male students' single-sex mathematical experiences*. Paper presented at the annual meeting of the American Educational Research Association. Philadelphia, 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. Philadelphia, PA
- Kombe, D., Kingree, J., & Che, M. (2014). *Principals' Perception of Single-Sex Instruction, its Implementation and Impact on Public Middle Schools in South Carolina*. Poster presented at the annual meeting of the American Educational Research Association: Philadelphia, PA.
- Kombe, D., Simpson, A., & Che, M. (2014). *Single-sex Classes and Middle Grades Students' Mathematics Self Concept*. Poster presented at the annual meeting of the National Council of Teachers of Mathematics Research Conference: New Orleans, LA.
- Carter, T.L., Che, S.M., & Bridges, W. (2014). *Academic rigor in single-sex public education and coeducational classes*. Presentation at the annual meeting of the Research Council on Mathematics Learning, San Antonio, TX.
- Mokalled, S. & Che, S.M. (2014). *Cognitive rigor matrix and single-sex classes*. Presentation at the annual meeting of the Research Council on Mathematics Learning, San Antonio, TX.
- Che, S.M., & Bridges, W. (2013). *Academic self-concept and performance of students in single-sex math and science classes*. Presentation at the annual meeting of the School Science and Mathematics Association, San Antonio, TX.
- 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., Dogbey, J., Che, M., & Hallo, J. (April, 2013). *Through their lens: The potential of photovoice for documentation of environmental perspectives among Kenyan teachers*. A paper presented at the International Conference for National Association of Science Research and Teaching (NARST) Rio Grande, Puerto Rico.
- Quigley, C., Dogbey, J., Che, M., & Hallo, J. (April, 2013). *Through their lens: The potential of photovoice for documentation of environmental perspectives among Kenyan teachers*. A paper accepted for presentation at the International Conference for the American Educational Research Association (AERA) San Francisco, CA.
- Quigley, C., Dogbey, J., Che, M., Hallo, J. & Womac, P. (April, 2013). *Investigating local sustainable environmental perspectives of Kenyan*

community members and teachers. A paper accepted for presentation at the International Conference for the American Educational Research Association (AERA) San Francisco, CA.

Carter, T.L. & Che, S.M. (2013). *Gender matters: Examining teacher-student gender interaction in mathematics classroom discourse*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Tulsa, OK.

Che, S.M. & Bridges, W. (2013). *Academic rigor in all girls, all boys, and coed mathematics classes*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Tulsa, OK.

Che, S.M. (2012). *Critical classroom discourse analysis of single-sex mathematics and science classrooms*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Charlotte, NC.

Mathews, S. A., Spearman, M. and Che, S. M. (November 2011). “*Too Much Democracy is Also Not Good*”: *International Teachers' Perspectives of Democracy in U.S. Classrooms*. Presentation at the College and University Faculty Assembly (CUFA) of the National Council for the Social Studies.

Che, S.M. & Wiegert, E. (2011). *Classroom discourse analysis of single-sex mathematics and science classrooms*. Presentation at the annual meeting of the School Science and Mathematics Association, Colorado Springs, CO.

Che, S.M., Spearman, M., & Mathews, S.A. (2011). *Contesting neocolonialism: International teachers' professional identities during a U.S. professional development program*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Wiegert, E., & Che, S.M. (2011). *Classroom discourse in a standards-based classroom*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Cincinnati, OH.

Sloop, B., & Che, S.M. (2011). *Effects of a reform-based mathematics content course for elementary teachers*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Cincinnati, OH.

Che, S.M. (2011). *Secondary pre-service teachers' efforts at facilitating mathematical communication*. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.

Wiegert, E., & Che, S.M. (2010). *Discourse and academic rigor in single-sex mathematics classrooms*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Conway, AK.

- Wiegert, E., & Che, S.M. (2010). *Proportional reasoning in single-sex middle school classrooms: A longitudinal study*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Conway, AK.
- Wiegert, E., & Che, S.M. (2010). *Discourse and academic rigor in single-sex mathematics classrooms*. Presentation at the 14th Annual Conference of the Association of Mathematics Teacher Educators, Irvine, CA.
- Che, S.M. (2010). *Pre-service and In-service teachers' development of algebraic thinking and reasoning*. Presentation at the 14th Annual Conference of the Association of Mathematics Teacher Educators, Irvine, CA.
- Che, S.M., Wiegert, E., & Threlkeld, K. (2009). *Problem-solving strategies of girls and boys in single-sex mathematics classrooms*. Paper presented at the 31st Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education, Atlanta, GA.
- Che, S.M., & Wiegert, E. (2009). *Proportional reasoning problem-solving strategies of middle-grades girls and boys*. Presentation at the annual meeting of the National Council of Teachers of Mathematics, Washington, D.C.
- Che, S.M. (2009). *Preparation of GED and Adult Students: A Comparison of Performance on GED and HSAP Items*. Poster presented at the annual meeting of the Research Pre-session of the National Council of Teachers of Mathematics, Washington, D.C.
- Che, S.M., & Wiegert, E. (2009). *Emergent Proportional Reasoning: Investigating Learners' Strategies in Single-Sex Mathematics Classrooms*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Rome, GA.
- Che, S.M., & Wiegert, E. (2009). *International Research on Gender and Education: U.S. Trends and Some Research Directions*. Presentation at the annual meeting of the Comparative and International Education Society, Charleston, SC.
- Che, S.M., Wiegert, E., Lorrick, S., & Abel, S. (2009). *Mathematics Teaching and Learning in a Single-Gender Environment*. Presentation at the 13th annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Che, S.M., & Wiegert, E. (2008). *Single-Gendered Classrooms in a Southern Charter School*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

- Che, S.M., & Wiegert, E. (2008). *Boys' and Girls' Problem-Solving Strategies in Single-Gendered Classrooms*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Oklahoma City, OK.
- Che, S.M., & Manizade, A. (2007). *What About the Other Half? Mathematical Thinking and the GED*. Presentation at the 29th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education, Lake Tahoe, NV.
- Che, S.M. (2007). *One View of the Terrain of Education and Mathematics in South Carolina: School Choice and Ability Tracking*. Presentation at the annual meeting of the Research Council on Mathematics Learning, 2007, Cleveland, OH.
- Che, S.M. (2007). *A Jar of Marbles: A Critical View of International Relations and Their Influence on the Conduct of a Study in Cameroon*. Paper presented at the annual meeting of the Comparative and International Education Society conference, Baltimore, MD.
- Che, S. M. (2006). *Cameroonian Mathematics Teachers' Discussions of Culture, Mathematics, and Western Influence*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Las Vegas, Nevada.
- Che, S. M. (2006). *Culture, Education, and Mathematics in Post-Colonial Cameroon*. Paper presented at the annual meeting of the American Educational Research Association (AERA), San Francisco.
- Che, S. M. (2004). *Whose Opportunity? Western Education in a Non-Western Context*. Paper presented at the 2004 Patterson Research Conference, Washington, D.C.
- Che, S. M. (2004). *Challenge and Possibility: A Proposal for an Exploration of Mathematics Teacher Cultures in Cameroon*. Presentation at the annual meeting of the Research Council on Mathematics Learning, Oklahoma City, OK.
- Matney, G., Che, S.M., & Arbuckle, B. (2003). *Exploring the Ramifications of Enacting the Spirit of Problem Centered Learning in a Standardized Environment*. Paper presented at the annual meeting of the Curriculum and Pedagogy Conference, Decatur, GA.
- Che, S. M. (2003). *Ramifications of Educating from an Imposed Framework*. Paper presented at the annual meeting of the Society of Philosophy and History of Education, San Antonio, TX.

Che, S. M. (2003). *Resistance to Instructional Imperialism*. Paper presented at the annual meeting of the Comparative and International Education Society, New Orleans, LA.

State/Regional Presentations:

Shipman, M., & Che, S.M. (2013). *Middle grades geometry in the common core*. Presentation at the annual meeting of the South Carolina Council of Teachers of Mathematics, Greenville, SC.

Simpson, A., Mokalled, S., & Che, S.M. (2013). *Utilize the cognitive rigor matrix to pose questions and mathematical tasks*. Presentation at the annual meeting of the South Carolina Council of Teachers of Mathematics, Greenville, SC.

Che, S.M. (2010). *Common Core State Standards and NCTM in South Carolina*. Presentation at the annual meeting of the South Carolina Council of Teachers of Mathematics, Greenville, SC.

Che, S.M. (2010). *Re-thinking algebraic content knowledge for secondary in-service and pre-service teachers*. Presentation at the annual meeting of the South Carolina Council of Teachers of Mathematics, Greenville, SC.

Hoffman, A., & Che, S.M. (2010). *Developing algebraic thinking using pattern trains*. Presentation accepted for the annual meeting of the South Carolina Council of Teachers of Mathematics, Greenville, SC.

Che, S.M. (2010). *Secondary School Teacher Education in Mathematics*. Presentation at the annual meeting of the South Carolina Mathematical Association of Two Year Colleges, Columbia, SC.

Che, S.M. (2009). *Algebraic Generalizations and Student Learning*. Presentation accepted for the annual meeting of the South Carolina Council of Teachers of Mathematics, Columbia, SC.

Che, S.M. (2009). *Single-gender Classrooms in a Southern Charter School*. Presentation at the annual meeting of the South Carolina Educators for the Practical Use of Research, Columbia, SC.

MacArthur, M., Martin, L.A., Threlkeld, K., Che, S.M., Coker, T., Hedetnimi, T. (2008). *Name That Strategy: Problem-Centered Learning in Mathematics*. Presentation at the annual meeting of the South Carolina Council of Teachers of Mathematics, Charleston, SC.

Che, S.M. (2007). *Co-constructing Classroom Environments that Support Mathematics Thinking: First Day Activities*. Paper accepted for presentation at the annual meeting of the South Carolina Council of Teachers of Mathematics, Greenville, SC.

Che, S. M., & Manizade, A. (2006). *Identity, Dispositions, and Avenues for Change*. Presentation at the annual meeting of the South Carolina Association of Teacher Educators, Myrtle Beach, SC.

Che, S. M. (2002). *Engaging Students Through Problem-Centered Learning*. Presented at the annual meeting of the Oklahoma Association of Colleges of Teacher Education, Edmond, OK.

Funded Grants:

Sitaraman, M., Marion, R. Che, S.M., Cook, M. Kraemer, E. (2016). "IUSE: Understanding and Propagating the Essence of Successful Computing Education Projects," awarded by the National Science Foundation. \$50,000. Funded August 2016.

Cridland-Hughes, S. & Che, S. (2016). "Single-sex Academic Classrooms in Public Co-Educational Schools: What is this Experience Like for Students?" awarded by the University Research Grants Committee, Clemson University. \$8870. Funded June 2016.

Fisk, W. (PI), Spearman, M. (Co-PI), Che, S.M. (Co-PI), Warner, M.M. (Co-PI), Klar, H. (Co-PI), Quigley, C.F. (Co-PI). "Clemson University International Leaders in Education Program" awarded by the U.S. Department of State. \$174,327. Funded September 2014.

Quigley, C.F., Che, S.M., Dogbey, J., Hallo, J. (2013). "Thinking Globally—Acting Locally: Interactive Mobile Exhibit from Kenya to South Carolina." HEHD Interdisciplinary Research Innovation Grant. \$20,000.

Che, S.M. (PI), Williams, C. (Co-PI), and Sinwell, N.B. (Co-PI). (2012). "iPad Technology in Middle Grades Mathematics: Meeting the Need for Highly Qualified Mathematics Teachers", an Improving Teacher Quality grant funded by the South Carolina Commission on Higher Education. \$61,056.

Quigley, C., Che, S., Dogbey, J. (2012). "Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members, Teachers and Students." University Research Grant Council. \$9995.

Quigley, C.F., Che, S., Dogbey, J., Hallo, J. (2012). "Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members, Teachers, and Students." HEHD Interdisciplinary Research Innovation Grant. \$49,997.

Che, S.M. (PI) and Bridges, W. (Co-PI). "Impact of Single-Sex Public Educational Environments on Mathematics and Science Classroom Environment, Student Academic Performance, and Student Self-Concept"

awarded by the National Science Foundation. \$524,667. Funded September 2011.

Padilla, M. (PI), Benson, L.C. (Co-PI), Cooper, M.M. (Co-PI), Cook, M.P. (Co-PI), Che, S.M. (Co-PI). "Tigers Teach Noyce Scholarship" awarded by the National Science Foundation. \$1,199,887. Funded August 2011.

Che, S.M. (PI) and Williams, C. (Co-PI). "Meeting the Need for Highly Qualified Mathematics Teachers", an Improving Teacher Quality grant funded by the South Carolina Commission on Higher Education. \$339,266. Awarded Spring 2008, Spring 2009, Spring 2010, Spring 2011.

Fisk, W. (PI), Spearman, M. (Co-PI), Che, S.M. (Co-PI), Dogbey, J. (Co-PI), Klar, H. (Co-PI). "Clemson University International Leaders in Education Program" awarded by the U.S. Department of State. \$185,819. Funded September 2011.

Fisk, W. (PI), Mathews, S.A. (Co-PI), Spearman, M. (Co-PI), Che, S.M. (Co-PI). "Clemson University International Leaders in Education Program" awarded by the U.S. Department of State. \$170,122. Funded September 2010.

Fisk, W. (PI), McGaha, J. (Co-PI), Che, S.M. (Co-PI), Mathews, S. (Co-PI), Spearman, M. (Co-PI). "Clemson University International Leaders in Education Program" awarded by the U.S. Department of State. \$160,423. Funded August 2009.

Che, S.M. (PI), McKnew, M. (Co-PI), McKnew, J. (Co-PI), Minor, J. (Co-PI), Brandon, S. (Co-PI). "Encouraging Engineering and Technical Careers: A Curriculum to Incorporate FIRST LEGO League Teams into Math and Science Education at the Elementary School Level" awarded by Clemson University Creative Inquiry. \$2400. Funded Fall 2008.

Che, S.M. (PI), Wiegert, E. (Co-PI). "Single-Gendered Classrooms and Mathematics Learning", awarded by the Clemson University Research Investment Fund. \$13,000. Awarded Spring 2008.

Manizade, A. (PI), Che, M. (Co-PI), and Spearman, M. (Co-PI). "Improving Teachers' Pedagogical Content Knowledge of Mathematics through International Experiences", awarded by the Clemson University International Program Development. \$5000. Awarded Summer 2007.

Manizade, A. (PI), Che, M. (Co-PI), and Spearman, M. (Co-PI). "Improving Teachers' Pedagogical Content Knowledge of Mathematics: Exploring International Teaching Models", awarded by the Russian Area Studies Committee of Clemson University. \$5300.00. Awarded Spring 2007.

Manizade, A. (PI), Che, M. (PI), and Flowers, T. (Co-PI). “Improving Mathematical Content and Understanding of G.E.D. Students”, awarded by Clemson University Creative Inquiry. \$10,000. Awarded Spring 2007.

Che, S.M. (PI), Manizade, A. (Co-PI), and Bregger, L. (Co-PI). “Depth and Breadth of the Influence of International Thought on American Scholars”, awarded by the Clemson University Citizens of the World Program. \$700. Spring 2007.

Che, S.M. (PI). “Making the Case for Staying in School: A Study of GED Students and the Mathematics Portion of the GED Examination”, awarded by Clemson University College of HEHD. \$6085. Spring 2007.

Teaching and Advising:

Clemson University: August, 2006 to present
Eugene T. Moore School of Education
Department of Teaching and Learning

Courses taught:

ED 901, Historical and Cultural Foundations of Mathematics Education (Fall, 2008)
EDF 879, Qualitative Research (Spring, 2008, co-teacher)
EDSEC 862, Teaching Secondary Mathematics (Fall, 2012)
ED 860, Action Research (Summer, 2007)
ED 851, International Education in P-12 Contexts (Spring, 2013; Spring 2015)
EDSEC 847, Current Literature in Mathematics Education (Spring, 2013)
EDSEC 842, Advanced Studies in the Teaching of Secondary School Mathematics (Fall, 2009)
EDSEC 803, Advanced Methods of Teaching in the Secondary School (Spring, 2007)
ED 738, Problem-Centered Learning Environments (Spring, 2008)
ED 738, Teaching and Learning Across the World (Spring, 2010; Spring 2011; Spring 2012; Spring 2013)
MATH 7060, Probability and Statistics for Middle Grades Teachers (Spring 2014)
MTHSC 750, Modern Algebra for Secondary Teachers (Minimester A, 2011)
MTHSC 714, Foundations of Mathematics for Middle Grades Teachers (Summer, 2008)
MTHSC 713, Algebra for Middle Grades Teachers (Summer, 2009; Summer, 2010; Summer 2014)
ED 641, Middle Grades Curriculum (Fall, 2006; Fall 2007)
EDSEC 456, Secondary Mathematics Capstone Seminar (Spring, 2007; Spring, 2008; Spring 2009; Spring 2010; Spring 2011; Spring 2015)
EDSEC 446, Student Teaching Supervision for Secondary Mathematics (Spring, 2009; Spring 2010; Spring 2014)
EDSEC 426, Teaching Secondary Mathematics (Fall, 2009; Fall 2010; Fall 2012)

EDSEC 326, Junior Level Field Experience (Fall, 2008; Fall 2014; Fall 2015)
*EDSEC 226, Algebra from a Professional Perspective (Fall, 2010; Fall 2011;
Fall 2014; Fall 2015)*

University of Oklahoma: August, 2004 to May, 2006

College of Education, Department of Instructional Leadership and Academic Curriculum

Courses taught:

*EDMA 3001, Mathematics Education Field Experience Mentoring II (Fall, 2006;
Fall, 2005)*

*EDMA 3053, Problem-Centered Learning Environments (Spring, 2006; Fall,
2005; Spring, 2005; Fall, 2004; Spring, 2004)*

EDMA 3153, Early Mathematical Concepts (Fall, 2005)

*EDMA 4001, Mathematics Education Field Experience Mentoring III (Spring,
2006; Spring, 2005)*

*MATH 4232, Specialized Topics and Methods—A Teacher's Course (Spring,
2005)*

*EDMA 4242, Fundamental Concepts and Methods of Teaching Secondary
Mathematics (Spring, 2006; Spring, 2005)*

University of Oklahoma: August, 2003 to May, 2004

College of Arts and Science, Department of Mathematics

Courses taught:

MATH 2213, Mathematical Systems (Fall, 2003)

MATH 3213, Data Analysis and Geometric Systems (Fall, 2003)

Advising:

Membership on Doctoral Committees:

Anna Mukhongo, completed Spring 2010

Angie Rogers, completed Spring 2010

Carol Wade, completed Spring 2011

Synthia Cooper, Fall 2008 to present

Ben Sloop, completed Summer 2011

Marge Bright, completed Winter 2011

Jennifer Cribbs, completed Spring 2012

Ercan Dede, anticipated completion December 2016

Committee Chair:

Amber Simpson, completed May 2015

Traci Carter

Karen Threlkeld, completed August 2015

Dennis Kombe, completed August 2016

Sheliah Durham (co-chair), completed December 2015

M.Ed. Committee Chair:

Jason Fellers, Secondary Mathematics, completed Summer 2010

Megan Shipman, Teaching and Learning, completed Summer 2013

Matthew Schuette, Teaching and Learning, completed December 2015

Membership on M.Ed. Committees:

Todd Cherner, completed Spring 2008

Tiffany Cranston Coker, completed Spring 2008

Jan Burroughs, completed Spring 2007

Becky James, completed Summer 2010

Michael Mains, completed Summer 2010

Megan Steele, completed Summer 2014

Undergraduate Honors Thesis:

Stefani Mokalled, completed 2015

Honors and Awards:

Recipient, with LaGarrett King and Ashley Woodson, of the Kipchoge Neftali Kirkland Social Justice Award for 2015. Presented by the College and University Faculty Assembly for the paper, *Educative Psychic Violence: Articulating and Resisting the Ramifications of Slavery Math Problems*.

Recipient of the Eugene T. Moore School of Education Excellence in Teaching Award, Spring, 2009.

Mokalled, S., & Che, S.M. (2013). *Cognitive rigor of questions asked in single-sex and coeducational classes*. Poster presented at the HEHD Research Forum. Award winner for Undergraduate Research Poster.

Service:

Service to Field of Scholarship, National Level

Member, RCML Nominations Committee, 2015-2016

Editor, RCML Conference Proceedings, 2014-2015

School Science and Mathematics Association Elections Committee Member, 2014-2017

Co-editor, RCML Conference Proceedings, 2013-2014

Research Council on Mathematics Learning (RCML) Secretary, 2011-2013

Research Council on Mathematics Learning (RCML) Program Chair, 2011-2012

Research Council on Mathematics Learning (RCML) Conference Committee member, 2010-2011

AERA Post-Colonial SIG Awards Committee (2008-2009)

Guest manuscript reviewer for Mathematics Teaching in the Middle Grades, 2008-present

Invited manuscript reviewer for Comparative Education Review, the gold-standard journal in international education, 2011

Service to Profession, State Level

South Carolina Educational Policy Fellows Program participant, 2011-2012

South Carolina Council of Teachers of Mathematics Government Relations Representative, 2010-2014
South Carolina Council of Teachers of Mathematics Advisory Assembly Member, 2008-2012
South Carolina Association of Mathematics Teacher Educators, President, 2010-2012
South Carolina Association of Mathematics Teacher Educators, president elect, 2009-2010
Member of the Publicity Committee for the South Carolina Association of Teacher Educators (SCATE, 2007)
Facilitator for Professional Development workshops for several local public school districts

University Service:

Member, Grievance Board, 2016-present
Member, School of Education Strategic Planning Committee, 2015-present
Member, Women's Commission Ad-Hoc Committee for the Establishment of Child Care, 2015-present
Member, Race and the University Steering Committee, 2015-present
Grievance Counselor, 2015-2016
Chair, TPR rewrite committee, Department of Teaching and Learning, 2014-2015
Member, Curriculum Committee, Department of Teacher Education, 2014-2015
Faculty Senator, HEHD, 2012-2015
Member of the President's Commission on Women, 2011-2015
Faculty Senate Alternate for HEHD, 2011-2012
Chair, Department of Teacher Education Graduate Advisory Committee, 2010-2011
Faculty Research Forum presenter, Fall 2010
Member, Eugene T. Moore School of Education Diversity Committee (2009-present)
Member, Department of Teacher Education Graduate Advisory Committee (2007-2011)
Member, Eugene T. Moore School of Education SPA Task Force (2007-2009)
Member, Eugene T. Moore School of Education Diversity Committee (2007-2008)
One Clemson experience for incoming Freshmen: Curriculum Sub-Committee (2007, 2008)
Member and chair of numerous faculty search committees
Member, SoE Founding Dean search committee