

# **James K. Dogbey**

Texas A&M University-Corpus Christi  
Science & Engineering, Mathematics & Statistics

Office: Center for Instruction 304, Office Phone: (361) 825-3159, Email: james.dogbey@tamucc.edu

## **Education**

PhD, University of South Florida, 2010.

MS, Wichita State University, 2004.

BS, University of Cape Coast, 2001.

## **Licensures and Certifications**

Certificate of Professional Development in Best Practices for Online Course Design, TAMUCC. (2015).

## **Professional Employment**

Assistant Professor, Texas A & M University - Corpus Christi. (August 2014 - Present).

Assistant Professor, Clemson University. (August 2010 - June 2014).

Graduate Instructor, University of South Florida. (August 2005 - June 2010).

Graduate Teaching Assistant, Wichita State University. (August 2003 - July 2005).

Teaching Assistant, University of Cape Coast. (August 2001 - July 2003).

## **Professional Memberships**

Coastal Council of Teachers of Mathematics  
Texas Council of Teachers of Mathematics  
Association of Mathematics Teacher Educators, USA  
National Council of Teachers of Mathematics, USA  
American Mathematical Society, USA  
Mathematical Association of Ghana, Ghana  
Florida Council of Teachers of Mathematics, USA

## **TEACHING**

### **Teaching Experience**

MATH 300, DEVELOPMENTAL MATHEMATICS  
MATH 5325, STRUC OF NUMBER CONCEPTS  
MATH 5328, STRUC OF PROBABILITY AND STATS  
MATH 5995, THESIS  
SMTE 1350, FUNDAMENTALS OF MATHEMATICS I  
SMTE 1351, FUNDAMENTALS OF MATH II  
SMTE 4382, BASIC MATH FROM AN ADV VIEWPNT

### **Teaching Awards and Honors**

Extraordinary Educator Award, Delta Alpha Pi Students Organization. (2012).

## SCHOLARLY AND CREATIVE ACTIVITIES

### Publications

#### Refereed

##### Journal Articles

Dogbey, J., Kumi-Yeboah, A., Dogbey, J. (2017). Dialogue Pedagogical Strategies Perceived to Enhance Online Interaction – Instructors Perspective. *International Journal of Online Pedagogy and Course Design*, 7(3), 70 – 85.

Dogbey, J., Dogbey, J. (2016). Depth of knowledge and context characteristics of the West African Examination Council's core mathematics assessment – the case of Ghana from 1993 - 2013. *Assessment in Education: Principles, Policy & Practice*. DOI : 10.1080/0969594X.2016.1192524.

Miller, Z. D., Quigley, C. F., Hallo, J., Dogbey, J., Che, M., Seno, S. (2016). Investigating Wildlife and Grazing Perspectives of Kenyan University Students. *Journal for Nature Conservation*, 32, 44 - 52.

Dogbey, J., Dogbey, J. (2016). The Impact of Financial Integration on Growth-Volatility Relationship – A Reappraisal. *The Global Journal of Management and Business Research*, 16 (1), 69-76.

Dogbey, J. (2015). Using Variables in School Mathematics: Do School Mathematics Curricula Provide Support for Teachers? *International Journal of Science and Mathematics Education: DOI 10.1007/s10763-015-9643-4*.

Quigley, C. F., Dogbey, J., Che, J., & Hallo, J. (2015). 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* 1-21.

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.

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.

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

Tyminski, A. M., & Dogbey, J. (2012). Developing the Common Denominator Fraction Division Algorithm. *Mathematics Teaching in the Middle School*, 19(4), 248-253.

Dogbey, J., & Kersaint, G. (2012). Treatment of Variables in Popular Middle-Grades Mathematics Textbooks in the USA: Trends from 1957 through 2009. *International Journal for Mathematics Teaching and Learning*, 2(1), 1-30.

Kersaint, G., Dogbey, J., Barber, J., & Kephart, D. (2011). The Effect of Access to an Online Tutorial Service on College Algebra Student Outcomes. *Mentoring & Tutoring: Partnership in Learning*, 19(1), 25 – 44.

Dogbey, J., Gyening, J., & Kersaint, G. (2011). Factoring Quadratic Trinomials: An Alternative Approach. *Learning and Teaching Mathematics*, 10, 44 - 45.

Smith, G., Gerretson, H., Olkun, S., Akkurt, Z., Dogbey, J. (2009). Cross-cultural comparison of the effect of causal narratives in solving mathematical word problems. In M. Tzekaki, M. Kaldrimidou & C. Sakonidis. (Eds.). *Proceedings of the 33rd Conference of the International Group for the Psychology of Mathematics Education*, Vol. 5, (pp. 145-152). Thessaloniki, Greece: IGPM.

Smith, G., Gerretson, H., Olkun, S., Yuan, Y., Dogbey, J., & Erdem, A. (2009). Stills, not full motion, for interactive spatial training: American, Turkish and Taiwanese female pre-service teachers learn spatial visualization. *Computers and Education*, 52(1), 201-209.

Smith, G., Olkun, S., Gerretson, H., Deryakulu, D., Dogbey, J., Erdem, A. (2008). Pre-service classroom teachers' learning of spatial skills through geometric transformations: U.S.A and Turkey. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2008* (pp. 5709-5713). Chesapeake, VA: AACE.

Dogbey, J. (2007). Using iPods for instruction. <http://www.principalspartnership.com/iPods.pdf>. *The Principals' Partnership*.

Kersaint, G., & Dogbey, J. (2007). Florida's Fourth Grade Student Mathematics Achievement: A Comparison with the Nation. *Dimensions in Mathematics*, 32(2).

## Presentations

Dogbey, J. (Author & Presenter), Kumi-Yeboah, A. (Author & Presenter), "(Accepted for April, 2017) Dialogue pedagogical strategies perceived to enhance online interaction –Instructors perspective. Paper to be presented at the 2017 annual meeting of the American Educational Research Association (AERA), San Antonio, TX.," American Educational Research Association (AERA), San Antonio, TX. (December 2016).

Dogbey, J. (Author & Presenter), "(Accepted for July, 2017) Developing Computational Fluency Through Productive Talk in the Math Classroom. Paper to be presented at the 2017," Conference for the Advancement of Mathematics Teaching, Fort Worth, TX. (December 2016).

Dogbey, J., "(Accepted for 2017, May). Historical Development of the Concepts of Variables in K-12 Mathematics Curriculum in the USA – The influence of Mathematics Education Reforms. Paper to be presented at the 2017," International Conference on Mathematics Textbook Research and Development (ICMT-2017), 7-11 May 2017,, Rio de Janeiro, Brazil. (December 2016).

Dogbey, J. (Author & Presenter), Dogbey, J. (Author & Presenter), "Depth of Knowledge and Context Characteristics of the West African Examination Council's Core Mathematics Assessment. Paper to be presented at the 13th International Congress on Mathematical Education (ICME-13). Hamburg, Germany.," ICME-13, International Congress on Mathematical Education, Hamburg, Germany. (July 2016).

Dogbey, J. (Author & Presenter), "Reforming Elementary School Mathematics Instruction Through Classroom Discourse and Cooperative Learning. Paper to be presented at the 13th International Congress on Mathematical Education (ICME-13). Hamburg, Germany.," ICME-13, International Congress on Mathematical Education, Germany. (July 2016).

Dogbey, J. (Author & Presenter), "Using Tangrams to Promote Spatial Reasoning and Critical Thinking in Elementary Classrooms. Paper presented at the 2016," ME by the SEa Conference, Coastal Council of Teachers of Mathematics, Corpus Christi, TX. (June 2016).

Dogbey, J. (Author & Presenter), "The Role of Discourse in Engaging Students and Pre-service Teachers in Mathematical Problem Solving," Costal Bend Mathematics & Statistics Symposium, Texas A&M University, Corpus Christi, TX. (March 26, 2016).

Dogbey, J. (Author & Presenter), "Common Denominator as a Conceptual Model for Developing Fluency in Fraction Division. Paper presented at the 2015," ME by the SEa Conference, Coastal Council of Teachers of Mathematics, Corpus Christi, TX. (June 19, 2015).

Dogbey, J. (Author & Presenter), "Helping Elementary School Students Develop Computational Fluency Through Math Talk. Paper presented at the 2015 ME by the SEa Conference," ME by the SEa Conference, Coastal Council of Teachers of Mathematics, Corpus Christi, TX. (June 19, 2015).

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

Quigley, C. F, Dogbey, J., Che, M., & Hallo, J., "Broadening the dialogue: Environmental Perspectives of Kenyan Teachers and Community Members.," Paper presented at the National Association of Research in Science Teaching (NARST), NARST, Pittsburg, PA. (April 2014).

Bannister, N., Dogbey, J., & Williams, C. L., "Enhancing Middle Grades Teacher Quality in Geometry and Cooperative Learning Instruction," Workshop presented as a part of the ITQ summer mathematics institute., Abbeville, South Carolina. (July 2013).

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

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

Quigley, C. F, Dogbey, J., Che, M., & Hallo, J., "Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members and Teachers," Paper presented at the National Association of Research in Science Teaching (NARST), Rio Grande, Puerto Rico. (April 2013).

Quigley, C. F, Dogbey, J., Che, M., Hallo, J., & Womac, P., "Through Their Lens: The Potential of Photovoice for Understanding Environmental Perspectives among Kenyan Teachers.," Paper presented at the National Association of Research in Science Teaching (NARST), Rio Grande, Puerto Rico. (April 2013).

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

Dogbey, J., "Preparing Middle and High School Teachers to Host International Teacher Leaders in Education," An Orientation organized for Host Teachers as a part of the ILEP Grant., IREX, Liberty, South Carolina. (January 2013).

Dogbey, J., "Trends in the Treatment of Variables in Middle Grades Mathematics Textbooks.," Paper presented at the 2012 NCTM Regional Conference and Exposition., Hartford Connecticut. (October 2012).

Dogbey, J., "The Concepts of Variable in Middle-Grades Mathematics Textbooks during Four Eras of Mathematics Education in the United States.," Paper presented at the 12th International Congress on Mathematical Education (ICME-12)., Seoul, Korea. (July 2012).

Bannister, N., Dogbey, J., & Williams, C. L., "Enhancing Middle Grades Teacher Quality in Algebra and Mathematics Classroom Discourse," Workshop presented as a part of the ITQ summer mathematics institute., Abbeville, South Carolina. (July 2012).

Dogbey, J., "Dealing with Variables: Do School Mathematics Curricula Provide Support for Teachers?," Paper presented at the RCML 2012 Conference, 39th Annual Meeting, Charlotte, North Carolina. (February 2012).

Dogbey, J., Gyening, J., & Kersaint, G., "Factoring Quadratic Trinomials: An Alternative Approach.," Paper presented at the RCML 2011 Conference, 38th Annual Meeting, Cincinnati, Ohio. (March 2011).

Kersaint, G., Dogbey, J., Kephart, D., & Barber, J., "The Effect of Access to an Online Tutorial Service on the Achievement and Attitudes of College Algebra Students," Paper presented at the AERA 2010 Annual Meeting., Denver, Colorado. (April 2010).

Smith, G., Gerretson, H., Olkun, S., Dogbey, J., & Akkurt, Z., "Cross-cultural comparison of the effect of causal narratives in solving mathematical word problems.," Paper presented at the International Group for the Psychology of Mathematics Education PME 33, Thessaloniki – Greece. (July 2009).

Dogbey, J., Johnson, G., & Joseph, C., Paper presented at the 2009 AMTE Annual Conference, Orlando, Florida. (February 2009).

Dogbey, J., & Cal, G., "Teaching for Conceptual Understanding: Exploring Area in Real Life Context," Paper presented at the 2008 FCTM Conference., Jacksonville, Florida. (October 2008).

Smith, G., Gerretson, H., Olkun, S., Dogbey, J., Deryakulu, D., & Erdem, A., "Pre-service classroom teachers' learning of spatial skills through geometric transformations: U.S.A and Turkey.," Paper presented at the World Conference on Educational Multimedia, Hypermedia and Telecommunications Volume 2008, Number 1 ED-MEDIA 2008--World Conference on Educational Multimedia, Hypermedia & Telecommunications. (January 2008).

Dogbey, J., Nagle, B., Beaudoin, C., & Shroeder, D., "Algebra: improving mathematics content knowledge of middle school and high school teachers through content expertise.," Workshop presented as a part of ACE summer institute., Florida Department of Education, Tampa FL. (July 2007).

Smith, G., Gerretson, H., Olkun, S., Dogbey, J., & Johnson, G., "Improving geometric transformation skills of elementary education pre-service teachers: Do spatial skills transfer and generalize?," Paper presented at the Second International Symposium of Mathematics and its Connection to the Arts and Sciences (MACAS2), University of Southern Denmark, Odense, Denmark. (May 2007).

Dogbey, J., & Johnson, G., "Teaching Elementary School Mathematics with Tangrams," Paper presented at the 2006 FCTM Conference., Orlando, Florida. (October 2006).

## **Contracts, Grants and Sponsored Research**

### **Grant**

Fisk, W. (Principal), Spearman, M. (Co-Principal), Dogbey, J. (Co-Principal), Klar, H. (Co-Principal), "Clemson University International Leaders in Education Program (CU\_ILEP)," Sponsored by U.S. Department of State, Federal, \$185,000.00. (January 2014 - May 2014).

Bannister, N. (Principal), Williams, C. L. (Co-Principal), Dogbey, J. (Co-Principal), "Improving Middle Grades Teacher Quality through the Clemson Mathematics Institute and Video Clu," Sponsored by Funded by the South Carolina Commission on Higher Education, Improving Teacher Quality Higher Education Grant Program, State, \$125,749.80. (July 2013 - May 2014).

Quigley, C. F. (Principal), Che, M. (Co-Principal), Dogbey, J. (Co-Principal), & Hallo, J. (Co-Principal), "HEHD Interdisciplinary Research Innovation Grant. Thinking Globally—Acting Locally: Interactive Mobile Exhibit from Kenya to South Carolina. \$20,000. 2013 Funded.," Sponsored by Clemson University, Local, \$20,000.00. (September 2013 - December 2013).

Fisk, W. (Principal), Spearman, M. (Co-Principal), Che, M. (Co-Principal), Dogbey, J. (Co-Principal), Klar, H. (Co-Principal), "Clemson University International Leaders in Education Program", " Sponsored by U.S. Department of State, Federal, \$185,000.00. (January 2013 - May 2013).

Bannister, N. (Principal), Williams, C. L. (Co-Principal), Dogbey, J. (Co-Principal), "Improving Middle Grades Teacher Quality through the Clemson Mathematics Institute and Video Club," Sponsored by Funded by the South Carolina Commission on Higher Education, Improving Teacher Quality Higher Education Grant Program, State, \$88,000.00. (June 2012 - May 2013).

Quigley, C. F. (Principal), Che, M. (Co-Principal), Dogbey, J. (Co-Principal), & Hallo, J. (Co-Principal), "HEHD Interdisciplinary Research Innovation Grant Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members, Teachers, and Students.," Sponsored by Clemson University, Local, \$49,997.00. (September 2012 - December 2012).

Quigley, C. F. (Principal), Che, M. (Co-Principal), & Dogbey, J., "Investigating Local Sustainable Environmental Perspectives of Kenyan Community Members, Teachers and Students. University Research Grant Council," Sponsored by Clemson University, Local, \$9,995.00. (September 2012 - December 2012).

Fisk, W. (Principal), Spearman, M. (Co-Principal), Che, M. (Co-Principal), Dogbey, J. (Co-Principal), Klar, H. (Co-Principal), "Clemson University International Leaders in Education Program", " Sponsored by U.S. Department of State, Federal, \$185,819.00. (January 2012 - May 2012).

Fisk, W. (Principal), Mathews, S. (Co-Principal), Spearman, M. (Co-Principal), Che, M. (Co-Principal), Dogbey, J. (Co-Principal), "Clemson University International Leaders in Education Program", " Sponsored by U.S. Department of State, Federal, \$170,122.00. (January 2011 - May 2011).

## **Scholarly and Creative Awards and Honors**

USF Provost Scholarship in the amount of \$15,000, USF Provost Office. (2005).

Best Student in Mathematics and Science Education, University of Cape Coast, Ghana. (2001).

## **SERVICE**

### **Department**

Committee Member, Mathematics Education Committee. (March 2015 - Present).  
Committee Member, Online Course Approval Committee. (November 2014 - Present).  
Committee Member, Family Math Night. (October 2016).  
Committee Chair, Hiring Committee for Visiting Assistant Professor. (April 2016 - June 2016).  
Committee Member, Family Math Night. (March 2016).  
Attendee, Meeting, Island Day. (2015).  
Committee Member, Family Math Night. (March 2015).  
Attendee, Meeting, IDiscoverysafari 2015 Exhibitor for Math & Stats Dept. (February 2015).

### **University**

Committee Member, Inclusive Excellence Committee. (2015 - 2017).

### **Professional**

Officer, Treasurer, Coastal Council of Teachers of Mathematics. (August 2016 - Present).  
Reviewer, Journal Article, International Journal of Learning, Teaching and Educational Research. (September 2014 - Present).  
Reviewer, Journal Article, Computers & Education Journal. (2009 - Present).  
Reviewer, Conference Paper, 13th International Congress on Mathematical Education, 2016 Hamburg, Germany (ICME – 13). (December 2015).  
Reviewer, Journal Article, MathMate Journal. (2013 - 2014).  
Editor, Journal Editor, Mathematics Explorations section of the Mathematics Teaching in the Middle School, a journal of the National Council of Teachers of Mathematics (NCTM). (2009 - 2013).  
Reviewer, Ad Hoc Reviewer, Panel Review Member 2012: Panel for the selection of International Leaders in Education Program Fellows- a program sponsored by the U.S. Department of State through the International Research and Exchanges Board. (2012).  
Reviewer, Conference Paper, Research Council of Mathematics Learning, 39th Annual Meeting, North Carolina. (2012).  
Reviewer, Ad Hoc Reviewer, Panel Review Member 2011: Panel for the selection of International Leaders in Education Program Fellows- a program sponsored by the U.S. Department of State through the International Research and Exchanges Board. (2011).  
AMTE Conference Program Chair Assistant, 2006: Helped prepared the 2006 Association of Mathematics Teacher Educators, USA Conference Booklet (Under the supervision of Dr Gladis Kersaint - the 2006 AMTE Conference Chair). (2006).