Rebecca R. Robichaux-Davis, Ph.D.

Professor of Mathematics Education Curriculum, Instruction, and Special Education 316 Allen Hall Mississippi State, Mississippi 39759 Office: (662) 325-7108 Fax: (662) 325-7857 Email: rrr102@msstate.edu

EDUCATION

Auburn University, Auburn, Alabama

Ph.D. in Mathematics Education, March 2000 Major: Secondary and Post-Secondary Mathematics Education Dissertation: The Spatial Visualization of Undergraduates Majoring in Particular Fields of Study and the Relationship of This Ability to Individual Background Characteristics

Master of Applied Mathematics, June 1999 Major: Discrete Mathematics, emphasis on Design Theory & Graph Theory Thesis: Constructing Cycle Systems Using Difference Methods

Louisiana State University, Baton Rouge, Louisiana

M.A. Mathematics Education, emphasis on Middle School Mathematics, August 1994 Minor: Applied Mathematics

Nicholls State University, Thibodaux, Louisiana

B.S. Secondary Mathematics Education, May 1991 Minors: Computer Science Education and Applied Mathematics

PROFESSIONAL EXPERIENCE

Mississippi State University, Starkville, Mississippi – August 2007 to Present

Professor, Elementary and Middle Level Mathematics Education, Department of Curriculum, Instruction, & Special Education, August 2018 to Present

Associate Professor, Elementary and Middle Level Mathematics Education, Department of Curriculum, Instruction, & Special Education, August 2011 to 2018

Assistant Professor, Elementary and Middle Level Mathematics Education, Department of Curriculum, Instruction, & Special Education, August 2007 to July 2011

Auburn University, Auburn, Alabama – January 2005 to July 2007

Research Fellow, Departments of Educational Leadership, Foundations and Technology & Curriculum & Teaching; Responsibilities included data collection, survey/test development, data analysis, report writing, data summarizing, and serving on doctoral dissertation committees

Independent Consultant, Auburn, Alabama – August 2005 to July 2007

Course developer for the Mississippi Department of Education's E-Learning for Educators Lead Teacher for the Leadership Program in Discrete Mathematics (Joint NSF Grant: Auburn

University & Rutgers University)

Mathematics Education & Educational Assessment Consultant for a Federal Mathematics & Science Project (MSP), Jefferson Parish, Louisiana

ACT Prep Mathematics Instructor, Nicholls State University

Mississippi University for Women, Columbus, Mississippi – January 2007 to May 2007

Adjunct Faculty Member, Supervision of Student Teachers in the Department of Education

<u>Southeastern Louisiana University, Hammond, Louisiana – August 2000 to January 2005</u> Assistant Professor, Department of Teaching and Learning

Auburn University, Auburn, Alabama – June 1997 to June 2000

Instructor, Department of Curriculum & Teaching, March 2000 to June 2000 Graduate Teaching Assistant, Department of Curriculum & Teaching, June 1997 to March 2000 Graduate Research Assistant, Office of Research and Graduate Studies, June 1999 to June 2000

U. S. Dept. of Defense, Navy Base Andros Island, Bahamas – August 1995 to March 1997

Middle School Mathematics and Science Teacher; K-8 Music and Computer Teacher, K-4 Mathematics Coordinator

<u>Scotlandville Magnet High School, Baton Rouge, Louisiana – August 1991 to May 1995</u> Secondary Mathematics and Computer Science Teacher

HONORS AND AWARDS

MSU College of Education Clyde Muse Service Award, 2016

Faculty Spotlight, MSU College of Education's 2016 Forward

MSU College of Educations' Lucinda Rose Outstanding Teaching Award, 2013

David C. Hull Faculty Leadership Program, 2011-2012

Tiffin State Pride Faculty Award (\$2,500), 2011

Dr. Janice I. Nicholson State Pride Faculty Award (\$2,500), 2010

Alumni Spotlight, Nicholls State University's Fall 2010 Voila, "Please don't call on me! – Alumna helps future teachers overcome anxiety about math"

Nicholls State University's College of Education Outstanding Alumnus, 2009

St. Joseph Elementary School Outstanding Alumnus Award, 2005

Featured College of Education Faculty, Southeastern Louisiana University Yearbook, *Le Souvenir* 2004, "*Educating a New Age: Robichaux*'s methods guide those who will educate others"

Louisiana Education Research Association Outstanding Dissertation Award, 2000

Former Student Awards

Chelsi Brasher - SOAR Community Foundation Teacher of Distinction, 2020

- Melanie Pittman National Associate for Alternative Certification Outstanding New Educator Award, 2015
- Lindsey Franklin The Mississippi Association of Colleges for Teacher Education Outstanding Intern Award, 2014

PUBLICATIONS

Peer Reviewed

- Özgün-Koca, S. A., Hagan, K., Robichaux-Davis, R. R., Bay-Williams, J. B. (2021). GPS: How does it grow? *Mathematics Teacher: Learning & Teaching PK-12, 114*(12), 973-976.
- Robichaux-Davis, R. R., Cheng-Yao, L., Bay-Williams, J. M. & Hamavid, A. (2021). GPS: Diving into dolphin data. *Mathematics Teacher: Learning & Teaching PK-12, 114*(11), 886-889.
- Edwards, C. M. & Robichaux-Davis, R. R. (2021). Old math? New math? Math! *Mathematics Teacher: Learning & Teaching PK-12, 114*(9), 654-656.
- Barlow, A. T., Edwards, C. M., Robichaux-Davis, R. R., & Sears, R. (2020). Enhancing and transforming virtual instruction. *Mathematics Teacher: Learning & Teaching PK-12, 113*(12), 972-982.
- Edwards, C. M. & Robichaux-Davis, R. R. (2020). Digital first: Not just an add-on. *Mathematics Teacher: Learning & Teaching PK-12, 113*(6), 442-443.
- Smith, R. W. & Robichaux-Davis, R. R. (2020). Assessing student preferences between on-site and online instruction during social distancing: Differences between undergraduate and graduate students. Advances in Social Sciences Research Journal, 7(5), 173-177
- Edwards, C., **Robichaux-Davis, R**., & Townsend, B. (2019). Investigating a super-bear. *Mathematics Teaching in the Middle School, 24*(7), 406-412.
- **Robichaux-Davis, R.** (2019). MTMS favorites: A framework for analyzing geometric pattern tasks. *Mathematics Teaching in the Middle School, 24*(5), 295.
- Rumack, A. & Robichaux-Davis, R. (2019). By way of introduction: Making math social. Mathematics Teaching in the Middle School, 24(4), 196.
- Forbes, S., Robichaux-Davis, R., Smith, W., Bruder, E., Unal, H. & Guarino, A. J. (2018). Inverse Relationship: Social integration and persistence in an introductory psychology course for secondary students. *Advances in Social Sciences Research Journal*, 5(10), 372-374

- **Robichaux-Davis, R. R.** (2017). Lily pad doubling: Proportional reasoning development. *The Australian Mathematics Teacher*, *73*(2), 13-23.
- Smith, W., Robichaux-Davis, R. R., Parmentier, J., Esposito, M. K., & Guarino, A.J., (2016). Failing to adjust baseline differences: A common innumeracy error. *Basic Research Journal of Education Research and Review*, 4(1), 01-04.
- **Robichaux-Davis, R. R.**, & Guarino, A. J. (2016). Assessing elementary pre-service teachers' knowledge for teaching geometry. *International Journal of Mathematics and Statistics Invention*, 4(1), 9-11.
- Forbes, S. A., Esposito, K., Robichaux-Davis, R. R., & Guarino, A. J. (2015). Assessing the feasibility of a service learning activity to promote nutritional knowledge and behavior, *International Journal of Academic Research in Education*, 1(1), 16-20.
- **Robichaux, R. R.**, Rodrigue, P., & Guarino, A. J. (2013). Ameliorating pedagogical competencies in mathematics for secondary school teachers. *Creative Education*, 4(3), 194-195.
- **Robichaux, R. R. &** Guarino, A.J. (2013). Advancing mathematical content knowledge for in-service teachers. *Basic Research Journal of Education Research and Review, 2*(2), 23-25.
- Robichaux, R. R., Rodrigue, P., & Guarino, A. J. (2013). The amelioration of teachers' subject and pedagogical content knowledge in mathematics. *Scottish Journal of Arts, Social Sciences and Scientific Studies, 8*(2), 3-7.
- **Robichaux, R. R. &** Guarino, A. J. (2012). The impact of implementing a portfolio assessment system on pre-service teachers' daily teaching reflections on improvement, performance and professionalism. *Creative Education*, *3*(3), 290-292.
- **Robichaux, R. R.** & Guarino, A. J. (2012). Enhancing pre-service teachers' professionalism through daily teaching reflections. *Education Research International*, 2012, 1-3.
- **Robichaux, R. R.** & Guarino, A. J. (2011). Pre-service elementary teachers' mathematical content knowledge of division: Identifying computational and conceptual errors. *Contemporary Issues in Education Research*, *5*(1), 71-92.
- Robichaux, R. R. & Rodrigue, P. R. (2011). Dine on rich functional examples. Mathematics Teaching in the Middle School, 16(6), 368-373.
- Adams, O. L., Robichaux, R. R., & Guarino, A. J. (2010). More 'private' than private institutions: Public institutions of higher education and financial management. *Journal of Educational Research and Policy* Studies, 10(1), 1-16.
- Robichaux, R. R. & Rodrigue, P. R. (2010). Properties of polygons: Discoveries of what's possible and impossible. *Teaching Children Mathematics*, 16(9), 524-531.

- Smith, R. W., Curtis, W., Robichaux, R. R., & Guarino, A. J. (2008). Assessing math proficiency for 4th and 8th graders in a Louisiana school system: Very few children are falling behind. *Contemporary Issues in Education Research*, 1(2), 1-4.
- **Robichaux, R. R.** (2007). Predicting students' spatial visualization ability: A path analysis. *Contemporary Issues in Education Research*, 1(1), 2-11.
- **Robichaux, R. R.** & Rodrigue, P. R. (2006). Discovering Euler circuits and paths through a culturally relevant lesson. *Mathematics Teaching in the Middle School, 11*(7), 310-317.
- Adams, O. L., Guarino, A. J., Robichaux, R. R., & Edwards, T. (2004). A comparison of Outsourcing in higher education, 1998-99 and 2003-04. *Journal of Educational Research* & Policy Studies, 4(2), 90-109.
- Smith, R. W., Ross, M., & Robichaux, R. R. (2004). Creation and validation of a measure of leadership density in elementary and middle schools. *Journal of Research for Educational Leaders*, 2(2). Retrieved from <u>http://www.uiowa.edu/~jrel/jrel2.html</u>
- Robichaux, R. R. & Rodrigue, P. R. (2003). Using origami to promote geometric communication. *Mathematics Teaching in the Middle School, 9*(4), 222-229.
- Robichaux, R. R. (2003). The improvement of spatial visualization: A case study. *Journal of Integrative Psychology, 4*. Retrieved from <u>http://www.integrativepsychology.org/articles/vol4_article2.htm</u>
- Ross, M. E., Robichaux, R., Reed, C. J., McDonough, S., Shannon, D., Gorrell, J., & Miller, E. (2002). School reform: How are teaching and assessment affected? *The Professional Educator*, 24(2), 15-27.
- **Robichaux, R. R.** (2002). Predictors of spatial visualization: structural equations modeling test of background variables. *Journal of Integrative Psychology, 2.* Retrieved from <u>http://integrativepsychology.org/articles/vol2_article2.htm</u>

Other Publications

Robichaux, R. R. (1990). *ACT prep workshop: Prescription for success in mathematics*. ACT Prep Workshop Prescription for Success: Thibodaux, LA.

PRESENTATIONS

International/National

- Barlow, A. T., Adams, T. L., Madden, S. & Robichaux-Davis, R. R. (2020, June). You've got stories: Now it's time to write! Webinar presented as part of the National Council of Teaches of Mathematics' 100 Days of Professional Learning.
- Robichaux, R. R. (2008, December). *Instructional strategies for enhancing mathematical problem solving*, U. S. Department of Defense: AUTEC School, Andros Island, Bahamas.

Regional/State

- **Robichaux, R. R.** (2016, October). *Continuing to persevere with meaning: Meaningful mathematics,* Gulfport School District Grades K 6 Mathematics Teachers, Gulfport, Mississippi.
- **Robichaux, R. R.** (2016, October). *Continuing to persevere with meaning*, Picayune School District Grades K 6 Mathematics Teachers, Picayune, Mississippi.
- Robichaux, R. R. (2014, August). The core of the common core state standards for mathematics: Grades 2 -5, Louisville Municipal School District Grades 2 - 5 Mathematics Teachers, Louisville, Mississippi.
- **Robichaux, R. R.** (2014, June). By the numbers: The core of the common core state standards for mathematics, MSU PREPS Center, Louisville, Mississippi.
- Robichaux, R. R. (2014, January). Making sense of problems & persevering in solving them: Operations & algebraic thinking, Starkville School District Grades K-2 Mathematics Teachers, Starkville, Mississippi.
- Robichaux, R. R. (2014, January). *Reasoning abstractly & quantitatively: Operations & algebraic thinking*, Starkville School District Grades K-2 Mathematics Teachers, Starkville, Mississippi.
- Robichaux, R. R. (2014, February). Constructing viable arguments & critiquing the reasoning of others: Number & operations in base 10, Starkville School District Grades K-2 Mathematics Teachers, Starkville, Mississippi.
- **Robichaux, R. R.** (2014, March). *Modeling with mathematics & using appropriate tools strategically: Measurement*, Starkville School District Grades K-2 Mathematics Teachers, Starkville, Mississippi.
- Robichaux, R. R. (2014, April). *Attending to precision: Data*, Starkville School District Grades K-2 Mathematics Teachers, Starkville, Mississippi.
- Robichaux, R. R. (2014, April). Looking for & making use of structure and expressing regularity in repeated reasoning: Geometry, Starkville School District Grades K-2 Mathematics Teachers, Starkville, Mississippi.
- Robichaux, R. R. (2013, September). Common core mini-bytes: Embedding the 8 mathematical practices, Starkville School District Grades K-4 Mathematics Teachers, Starkville, Mississippi.
- Robichaux, R. R. (2009, February). Improving mathematical content knowledge and instructional strategy knowledge of the Mississippi mathematics framework grades 6-8: DOK levels 2 & 3, Columbus Municipal School District Middle School Mathematics Teachers, Columbus, Mississippi.

- Robichaux, R. R. (2009, February). Improving mathematical content knowledge and instructional strategy knowledge of the Mississippi mathematics framework: DOK Levels 2 & 3, Columbus Municipal School District: Franklin Academy Elementary School Mathematics Teachers, Columbus, Mississippi.
- Robichaux, R. R. (2009, February). Improving mathematical content knowledge and instructional strategy knowledge of the Mississippi mathematics framework grades K-2: DOK Levels 2 & 3, Louisville Municipal School District: Fair Elementary School, Louisville, Mississippi.
- Robichaux, R. R. (2009, February). Improving mathematical content knowledge and instructional strategy knowledge of the Mississippi mathematics framework grades 3-5: DOK Levels 2 & 3, Louisville Municipal School District: Louisville Elementary School, Louisville, Mississippi.
- Robichaux, R. R. (2003, January). *Standards-based activities for the elementary mathematics classroom*, Livingston Parish School System: Freshwater Elementary Mathematics Teachers, Denham Springs, Louisiana.
- Robichaux, R. R. (2000, December). Developing number sense and spatial sense through problem solving, St. Tammany Parish School System: Fontainebleau Junior High School, Mandeville, Louisiana.
- Robichaux, R. R. (2000, July). Using origami to enhance mathematics instruction, Louisiana Systemic Initiative Program (LaSIP): Nicholls State University, Thibodaux, Louisiana.
- Robichaux, R. R. (2000, June). Activities to promote spatial sense in the middle grades, East Alabama Regional In-service Center, Opelika, Alabama.
- Robichaux, R. R. (2000, February). *Charts, graphs, and tables across the curriculum*, Bullock County Schools, Union Springs, Alabama.
- **Robichaux, R. R.** (1999, June). *Using manipulatives in the mathematics classroom: Grades K-3*, Macon County Schools, Tuskegee, Alabama.
- **Robichaux, R. R.** (1999, June). *Using manipulatives in the mathematics classroom: Grades 4-7*, Macon County Schools, Tuskegee, Alabama.
- Robichaux, R. R. (1999, June). Using manipulatives in the mathematics classroom: Grades 8-12, Macon County Schools, Tuskegee, Alabama.

CONFERENCES

Papers

- Byrd, K. O., Herron, S. S., Mohn, R. S., Robichaux-Davis, R., Shelley, K. (2020, October). Elementary pre-service teacher preparation to teach mathematics and science in an integrated stem framework. Paper presented at the annual meeting of the Mid-South Education Research Association, Virtual Conference.
- **Robichaux-Davis, R. R.** (2020, October). *Elementary pre-service teachers' understanding of concepts of number and operations*. Paper presented at the annual meeting of the Mid-South Education Research Association, Virtual Conference.
- **Robichaux-Davis, R. R.** (2019, November). *Elementary pre-service teachers' understanding of hierarchical relationships among quadrilaterals*. Paper presented at the annual meeting of the Mid-South Education Research Association, New Orleans, Louisiana.
- Middleton, H. & **Robichaux-Davis**, **R. R.** (2018, November). *The use of mathematically precise language & symbolism of students in an after-school program*. Paper presented at the annual meeting of the Mid-South Education Research Association, Pensacola, Florida.
- **Robichaux-Davis, R. R.**, Middleton, H, & Lessley, M. (2017, November). *The use of authentic contexts in elementary mathematics pedagogy to facilitate the mathematical practices.* Paper presented at the annual meeting of the Mid-South Education Research Association, Starkville, Mississippi.
- Middleton, H. & **Robichaux-Davis, R. R.** (2017, November). *Pre-service teachers' ability to identify story problem structures: A 10-year longitudinal study.* Paper presented at the annual meeting of the Mid-South Education Research Association, Starkville, Mississippi.
- Crissey, J. & Robichaux-Davis, R. R. (2017, November). Factors influencing geometry students' ability to compute area of polygons. Paper presented at the annual meeting of the Mid-South Education Research Association, Starkville, Mississippi.
- **Robichaux-Davis, R. R.** (2015, November). An investigation of elementary pre-service teachers' understanding of parallelogram. Paper presented at the annual meeting of the Mid-South Education Research Association, Lafayette, Louisiana.
- Pope, M., **Robichaux-Davis, R. R.**, & Cialone, J (2014, November). *Common core: Where's the science*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Knoxville, Tennessee.
- Brasher, C. & **Robichaux-Davis, R. R.** (2014, November). *Elementary pre-service teachers' beliefs about teaching mathematics.* Paper presented at the annual meeting of the Mid-South Educational Research Association, Knoxville, Tennessee.

- **Robichaux-Davis, R. R.** (2013, November). Assessing elementary pre-service teachers' proportional reasoning: A categorization of developmental levels. Paper presented at the annual meeting of the Mid-South Educational Research Association, Pensacola, Florida.
- Smith, W. A., Droddy, J., Robichaux, R. R., & Guarino, A. J. (2012, May). Relationship between high school experiences and first year college persistence. Paper presented at the annual meeting of the Association for Psychological Science, Chicago, Illinois.
- Robichaux, R. R., Franz, D. P., Hailey, L. A., & Jayroe, T. (2012, March). *Embracing the* common core standards for mathematical practice through clinically-based preparation of elementary education teacher candidates. Paper presented at the annual meeting of The National Association for Professional Development Schools, Las Vegas, Nevada.
- Byrd, K. & **Robichaux, R. R.** (2011, November). Assessing elementary pre-service teachers' knowledge for teaching geometry: Year 2. Paper presented at the annual meeting of the Mid-South Educational Research Association, Oxford, Mississippi.
- Pope, M., Scholtes, T., Robichaux, R. R., & Maynard, S. (2011, March). Content methods courses online: Making the right connections. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education, Nashville, Tennessee.
- Franz, D. P. & Robichaux, R. R. (2011, January). Early field experiences as an opportunity to formulate beliefs about misconceptions and motivation. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, California.
- **Robichaux, R. R.** & Byrd, K. (2010, November). *Assessing elementary pre-service teachers' knowledge for teaching geometry.* Paper presented at the annual meeting of the Mid-South Educational Research Association, Mobile, Alabama.
- **Robichaux, R. R.** (2010, October). Addressing diverse learning styles within on-line coursework. Paper presented at the annual meeting of the International Society for Exploring Teaching and Learning, Nashville, Tennessee.
- **Robichaux, R. R.** (2010, October). *Promoting interaction in distance education courses through the use of constructivist strategies.* Paper presented at the annual meeting of the International Society for Exploring Teaching and Learning, Nashville, Tennessee.
- **Robichaux, R. R.**, & Jayroe, T. (2010, March). *A framework for strengthening mathematical understanding through a PDS partnership*. Paper presented at the annual meeting of The National Association for Professional Development Schools, Orlando, Florida.
- Jayroe, T., Robichaux, R. R., Pope, M., & Coffey, K. (2010, March). Changing academic performance and promoting success (CAPPS): The PDS impact on educators. Paper presented at the annual meeting of The National Association for Professional Development Schools, Orlando, Florida.

- Jayroe, T., Robichaux, R. R., Pope, M., & Coffey, K. (2010, March). Changing academic performance and promoting success (CAPPS): The PDS impact on students. Paper presented at the annual meeting of The National Association for Professional Development Schools, Orlando, Florida.
- Pope, M., Robichaux, R. R., Scholtes, T., & Jayroe, T. (2010, March). The "give and take" of the university faculty, teacher candidate, and classroom teacher professional relationship.
 Paper presented at the annual meeting of The National Association for Professional Development Schools, Orlando, Florida.
- **Robichaux, R. R.** (2010, March). Assessing the relationship between elementary teachers' pedagogical beliefs and their mathematical knowledge for teaching. Paper presented at the annual meeting of the Louisiana Education Research Association, Lafayette, Louisiana.
- **Robichaux, R. R.** (2009, November). Assessing elementary teachers' beliefs and mathematical knowledge for teaching. Paper presented at the annual meeting of the Mid-South Educational Research Association, Baton Rouge, Louisiana.
- Droddy, J., Smith, W., **Robichaux, R. R.,** & Guarino, A. J. (2009, November). School accountability status, student core GPA and ACT as predictors for first-year college retention. Paper presented at the annual meeting of the Mid-South Educational Research Association, Baton Rouge, Louisiana.
- **Robichaux, R. R.** (2009, April). *Limitations of preservice elementary teachers' content knowledge: The complexities of whole number division*. Paper presented at the annual meeting of the American Education Research Association, San Diego, CA.
- Jayroe, T., Pope, M, & Robichaux, R. R. (2009, March). Maintaining professional development school partnerships: Sustaining best practices. Paper presented at the annual meeting of The National Association for Professional Development Schools, Daytona Beach, Florida.
- Jayroe, T., Robichaux, R. R., & Pope, M. (2009, March). Sustaining and increasing PDS partnerships in rural settings. Paper presented at the annual meeting of The National Association for Professional Development Schools, Daytona Beach, Florida.
- **Robichaux, R. R.** (2009, March). *Assessing K-3 teachers mathematical content & pedagogical content knowledge*. Paper presented at the annual meeting of the Louisiana Education Research Association, Lafayette, Louisiana.
- **Robichaux, R. R.** (2008, November). *Elementary pre-service teachers' misconceptions regarding the multiplication of proper fractions.* Paper presented at the annual meeting of the Mid-South Educational Research Association, Knoxville, Tennessee.
- Adams, O. L., Robichaux, R. R., & Guarino, A. J. (2008, April). More 'private' than private institutions: Public institutions of higher education and financial management. Paper presented at the annual meeting of The Allied Academies International Conference, Tunica, Mississippi.

- **Robichaux, R. R. &** Rodrigue, P. R. (2008, March). *A comparison of student teachers' reflective practices*. Paper presented at the annual meeting of the Louisiana Education Research Association, Lafayette, Louisiana.
- **Robichaux, R. R.** & Rodrigue, P.R. (2007, November). *The reflective practices of student teachers*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Hot Springs, Arkansas.
- Robichaux, R. R., Smith, W., & Guarino, A. J. (2007, August). *The impact of hurricane Katrina: Teachers' intent to remain in teaching.* Paper presented at the annual meeting of the American Psychological Association, San Francisco, California.
- **Robichaux, R. R.** & Paulette Rodrigue. (2007, March). *Utilizing the cooperative institutional research program survey (CIRP) to predict student integration, achievement, & persistence.* Paper presented at the annual meeting of the Louisiana Educational Research Association, Kenner, Louisiana.
- **Robichaux, R. R.** & Paulette Rodrigue. (2007, March) *Changes in content knowledge: Results of a preliminary investigation of the multidimensional content-based mathematics professional development program.* Paper presented at the annual meeting of the Louisiana Educational Research Association, Kenner, Louisiana.
- Adams, O. L., Robichaux, R. R., & Guarino, A. J. (2006, November). A comparison of managerial accounting practices in private liberal arts institutions and other higher education institutions. Paper presented at the Mid-South Educational Research Association Annual Conference, Birmingham, Alabama.
- **Robichaux, R. R. &** Guarino, A. J. (2006, August). *The mathematical anxieties and content knowledge of pre-service elementary teachers*. Paper presented at the annual meeting of the American Psychological Association, New Orleans, Louisiana.
- Smith R. W., Robichaux, R. R., & Guarino, A. J. (2006, May) Teacher retention: Why do K-12 teachers remain in teaching? Paper presented at the annual meeting of the Association for Psychological Science, New York, New York.
- Robichaux, R. R. & Guarino, A. J. (2006, May). Can elementary mathematics teachers identify computational and conceptual errors? Paper presented at the annual meeting of the Association for Psychological Science, New York, New York.
- Adams, O. L., Guarino, A.J., & Robichaux, R. R. (2006, May). *If you build it, will they come?: A study of college football stadium expansion.* Paper presented at the annual meeting of the North American Society for Sport Management, Kansas City, Missouri.
- Adams, O. L., **Robichaux, R. R.**, & Guarino, A. J. (2006, April). *Privatization of public higher education lends credibility to new reporting model.* Paper presented at the annual meeting of The Allied Academies International Conference, New Orleans, Louisiana.

- Robichaux, R. R., Smith R. W., & Guarino, A. J. (2006, April). *Factors related to teacher retention.* Paper presented at the annual meeting of The Allied Academies International Conference, New Orleans, Louisiana.
- **Robichaux, R. R.**, Smith, R. W., & Guarino, A. J. (2006, April). *The development and construct validity of the Teacher Intent to Remain Employed Survey*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, California.
- Robichaux, R. R. & Guarino, A. J. (2006, March). Can pre-service elementary teachers identify computational & conceptual errors in a percentage discount story problem? Paper presented at the annual meeting of the Louisiana Educational Research Association, Lafayette, Louisiana.
- Smith R. W., **Robichaux, R. R.**, & Guarino, A. J. (2006, March) *Principals' intent to remain in a leadership position for the next five years.* Paper presented at the annual meeting of the Louisiana Educational Research Association, Lafayette, Louisiana.
- **Robichaux, R. R.** & Guarino, A. J. (2006, February). *The mathematical content knowledge of pre-service elementary teachers concerning percentage discounts.* Paper presented at Southwest Educational Research Association, Austin, Texas.
- Guarino, A. J. & **Robichaux, R. R.** (2005, November). *Faculty evaluations on the internet: Construct and external validity.* Paper presented at the Mid-South Educational Research Association Annual Conference, Baton Rouge, Louisiana.
- **Robichaux, R. R.** & Guarino, A. J. (2005, May). *The relationship between pre-service elementary teachers' mathematical anxieties and mathematical content knowledge*. Paper presented at the annual meeting of the American Psychological Society, Los Angeles, California.
- Smith R. W., Robichaux, R. R., & Guarino, A. J. (2005, May). Factors related to teachers' intent to remain in the profession. Paper presented at the annual meeting of the American Psychological Society, Los Angeles, California.
- **Robichaux, R. R.** & Guarino, A. J. (2005, March). *The relationship between pre-service elementary teachers' mathematical anxieties and mathematical content knowledge.* Paper presented at the annual meeting of the Louisiana Educational Research Association, Shreveport, Louisiana.
- Smith R. W., Robichaux, R. R., & Guarino, A. J. (2005, March). Teachers' intent to remain in teaching for the next five years. Paper presented at the annual meeting of the Louisiana Educational Research Association, Shreveport, Louisiana.
- **Robichaux, R. R. &** Guarino, A. J. (2005, February). *Measuring pre-service teachers' content knowledge of fractions through the use of a simulated student response.* Paper presented at the annual meeting of the Southwest Educational Research Association, New Orleans, Louisiana.

- **Robichaux, R. R.** & Guarino, A. J. (2004, November). *Pre-service elementary teachers' ability to identify computational and conceptual errors in a division story problem.* Paper presented at the annual meeting of the Mid-South Educational Research Association, Gatlinburg, Tennessee.
- **Robichaux, R. R.** & Guarino, A. J. (2004, April). *The impact of implementing a portfolio* assessment system on student teachers' daily teaching reflections on improvement, performance and professionalism. Paper presented at the annual meeting of the American Educational Research Association, San Diego, California.
- **Robichaux, R. R.** & Guarino, A. J. (2003, November). *Can pre-service elementary teachers identify mathematical errors?* Paper presented at the annual meeting of the Mid-South Educational Research Association, Biloxi, Mississippi.
- Robichaux, R. R. (2003, October). *The impact of using Blackboard on pre-service teacher attitudes towards a mathematics methods course.* Paper presented at the Blackboard Southeast Users Group Conference, Orlando, Florida.
- Robichaux, R. R. & Guarino A. J. (2003, April). *In-service and pre-service teachers' ability to detect mathematical errors*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois.
- Missildine, M. L., Shannon, D. M., **Robichaux, R. R.,** & Taylor, T. (2003, February). An *investigation into the achievement goal orientation and self-regulated learning strategies* used by fourth and fifth graders in mathematics and language arts. Paper presented at the annual meeting of the Eastern Educational Research Association, Hilton Head, South Carolina.
- **Robichaux, R. R.** & Guarino, A. J. (2003, February). *The effects of an elementary mathematics methods course on mathematics content and pedagogical knowledge*. Paper presented at the annual meeting of the Louisiana Education Research Association, New Orleans, Louisiana.
- **Robichaux, R. R.** (2002, November). A pre-service teacher's utilization of spatial visualization activities: The continuation of a case study. Paper presented at the annual meeting of the Mid-South Educational Research Association, Chattanooga, Tennessee.
- Robichaux, R. R. (2002, March). Who's talking: A study of the amount of time spent talking by pre-service teachers and their students. Paper presented at the annual meeting of the Louisiana Education Research Association, Ruston, Louisiana.
- **Robichaux, R. R.** (2001, November). *Gender differences in pre-service teachers*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Little Rock, Arkansas.
- Robichaux, R. R. (2001, November). *The improvement of spatial visualization: A case study*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Little Rock, Arkansas.

- Reed, C. J., McDonough, S., Ross, M., & **Robichaux, R. R.** (2001, April). *Principals' perceptions* of the impact of high stakes testing on empowerment. Paper presented at the annual meeting of the American Educational Research Association, Seattle, Washington.
- **Robichaux, R. R.** (2001, March). *The teaching strategies & homework assignments of teachers involved in a reform initiative as perceived by their students.* Paper presented at the annual meeting of the Louisiana Education Research Association, Baton Rouge, Louisiana.
- **Robichaux, R. R.** & Guarino, A. J. (2000, November). *Predictors of visualization: A structural equation model.* Paper presented at the annual meeting of the Mid-South Educational Research Association, Bowling Green, Kentucky.
- **Robichaux, R. R.** (2000, August). *A characterization of selected undergraduates' spatial visualization.* Paper presented at the annual meeting of the American Psychological Association, Washington, D.C.
- **Robichaux, R. R.** (2000, February). A comparison of the spatial visualization of undergraduates majoring in architecture, mathematics, mathematics education, and mechanical engineering and the relationship of this ability to their background characteristics. Paper presented at the annual meeting of the Louisiana Educational Research Association, Lafayette, Louisiana.

Posters

- Robichaux-Davis, R. R., Gammill, A., & Taylor, H. (2016, April). *Realizing the mathematical Practices through participation in DREAMS: An investigation of the use of authentic contexts for learning elementary mathematics.* Poster presented at the annual Mississippi State University College of Education Faculty/Student Research Forum, Starkville, Mississippi.
- **Robichaux-Davis, R. R.** (2015, November). *Elementary and middle level mathematics teacher preparation.* Poster presented at the annual meeting of the Mid-South Education Research Association, Lafayette, Louisiana.
- Pope, M., **Robichaux-Davis, R. R.**, & Cialone, J. (2014, November). *Common core: Where's the science?* Poster presented at the annual meeting of the Mid-South Educational Research Association, Knoxville, Tennessee.
- Brasher, C. & **Robichaux-Davis, R. R.** (2014, November). *Elementary pre-service teachers' beliefs about teaching mathematics.* Poster presented at the annual meeting of the Mid-South Educational Research Association, Knoxville, Tennessee.
- Franklin, L. & Robichaux, R. R. (2013, April). A comparison of geometric understandings of middle school students enrolled in an after-school program. Poster presented at the annual Mississippi State University College of Education Faculty/Student Research Forum, Starkville, Mississippi.

- Robichaux, R. R. (2009, March). Assessing elementary teachers mathematical content & pedagogical content knowledge. Poster session presented at the annual College of Education Faculty/Student Research Forum, Mississippi State University, Mississippi.
- **Robichaux, R. R.** (2008, April). Assessing the mathematical content knowledge, instructional strategy knowledge, and beliefs of K-8 Mississippi teachers. Poster session presented at the first annual College of Education Faculty/Student Research Forum, Mississippi State University, Mississippi.
- **Robichaux, R. R.**, Smith, W., & Guarino, A. J. (2007, April). The development and refinement of *the teacher intent to remain employed survey*. Poster presented at the annual meeting of the American Educational Research Association, Chicago, Illinois.
- **Robichaux, R. R.** (2004, March). Fourth graders' mathematical misconceptions regarding measurement. Poster session presented at the annual meeting of the Louisiana Education Research Association, Baton Rouge, Louisiana.

Presentations

- Robichaux-Davis, R. R. (2021, April). Using a 3-Phase Origami Instructional Routine to Build Conceptual Understanding of Geometry. Pre-recorded session presented at the Annual Meeting of the National Council of Teachers of Mathematics, Virtual.
- **Robichaux-Davis, R. R.** (2021, February). *Every Who Down in Whoville Liked Math a Lot and Who Would Think Not?* On-Demand pre-recorded session presented at the spring central regional meeting of the National Council of Teachers of Mathematics, Virtual.
- **Robichaux-Davis, R. R.** (2020, November). *Every Who Down in Whoville Liked Math a Lot and Who Would Think Not?* On-Demand pre-recorded session presented at the annual fall southern regional meeting of the National Council of Teachers of Mathematics, Virtual.
- Robichaux-Davis, R. R., (2019, October). Building rational number sense through "The Grapes of Math" and more! Session presented at the annual meeting of the Iowa Council of Teachers of Mathematics, Des Moines, Iowa.
- **Robichaux-Davis, R. R.** (2019, February). "Odd Man Out" Similarities and Differences between Expressions and Equations. Session presented at the annual Winter Conference of the Mississippi Association of Middle Level Educators, Hattiesburg, Mississippi.
- Robichaux-Davis, R. R. (2018, February). Solving proportions with understanding. Session presented at the IMPACT2 Winter Conference, Starkville, Mississippi.
- Robichaux-Davis, R. R. (2018, February). Let's get rational with rational numbers! Session presented at the IMPACT2 Winter Conference, Starkville, Mississippi.
- Robichaux-Davis, R. R. (2018, February). Odd man out: Similarities and differences between algebraic expressions & equations. Session presented at the IMPACT2 Winter Conference, Starkville, Mississippi.

- Robichaux-Davis, R. R. (2018, February). *A is for area & angles!* Session presented at the IMPACT2 Winter Conference, Starkville, Mississippi.
- **Robichaux-Davis, R. R.** (2018, February). *Measures of center & theoretical probability: What do they "probably mean"?* Session presented at the IMPACT2 Winter Conference, Starkville, Mississippi.
- Robichaux-Davis, R. R., (2017, October). *Explorations with pentomino manipulatives: Addressing both mathematical content & practice standards*. Session presented at the annual meeting of the Mississippi Council of Teachers of Mathematics, Madison, Mississippi.
- Robichaux-Davis, R. R. & Lessley, M. (2017, October). Analyzing patterns through "The Grapes of Math" and more!. Session presented at the annual meeting of the Mississippi Association of Middle Level Educators, Bay St. Louis, Mississippi.
- Robichaux-Davis, R. R. & Middleton, H. (2017, October). Understanding geometry and measurement through origami. Session presented at the annual meeting of the Mississippi Association of Middle Level Educators, Bay St. Louis, Mississippi.
- Crissey, J. V. & Robichaux-Davis, R. R., (2017, October). Factors influencing geometry students' ability to compute area of polygons. Session presented at the annual meeting of the Mississippi Council of Teachers of Mathematics, Madison, Mississippi.
- Robichaux-Davis, R. R. (2017, April). Bringing joy to the teaching of mathematics: The zeroth mathematical principle. Session Presented at the annual Mississippi State University College of Education Faculty/Student Research Forum, Starkville, Mississippi.
- **Robichaux-Davis, R. R.**, Connelly, R., & Snow, M (2017, April). *How the NCTM journals changed my life: Making the most of the printed page & beyond.* Session presented at the annual meeting of the National Council of Teachers of Mathematics, San Antonio, Texas.
- Chavez, O., **Robichaux-Davis**, **R. R.**, & Wilburne, J. (2017, April). *Writing research for teachers: Putting results into practice*. Session presented at the annual research conference of the National Council of Teachers of Mathematics, San Antonio, Texas.
- **Robichaux-Davis, R. R.** (2017, February). *Dinner table patterns for grades 3 6*. Session presented at the IMPACT2 Winter Conference, Biloxi, Mississippi.
- **Robichaux-Davis, R. R.** (2017, February). *It's a bit dicey for grades* K 2. Session presented at the IMPACT2 Winter Conference, Biloxi, Mississippi.
- **Robichaux-Davis, R. R.** (2017, February). *Promoting mathematically precise language through explorations with pentominos*. Session presented at the annual meeting of the Mississippi Association of Middle Level Educators, Jackson, Mississippi.

- **Robichaux-Davis, R. R.**, Davis, J. B., & Pope, M. (2016, April). *Duck, duck, goose by the numbers*. Session presented at the annual meeting of the National Science Teachers Association, Nashville, Tennessee.
- **Robichaux-Davis, R. R.** (2014, November). *Developing proportional reasoning skills in the middle level math classroom.* Session presented at the annual meeting of the Association of Middle Level Education, Nashville, Tennessee.
- **Robichaux, R. R.** & Rodrigue, P. R. (2012, October). *Proportional reasoning: Transitioning from additive to multiplicative thinking.* Session presented at the annual meeting of the National Council of Teachers of Mathematics, Dallas, Texas.
- Franz, D. P., Robichaux, R. R., & Harpole, S. (2012, October). Where is the math in a mine? Session presented at the annual meeting of the National Council of Teachers of Mathematics, Dallas, Texas.
- **Robichaux, R. R.** (2011, May). *Field experience in a foundation math course for elementary pre -service teachers.* Session presented at the annual symposium of the Mississippi Association of Mathematics Teacher Educators, Starkville, Mississippi.
- Robichaux, R. R. (2011, April). From comic strips to string and straws: Enhancing spatial skills. Session presented at the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, Indiana.
- **Robichaux, R. R.** & Rodrigue, P. R. (2009, November). Using culturally relevant contexts to develop mathematical understanding. Session presented at the annual southern regional meeting of the National Council of Teachers of Mathematics, Nashville, Tennessee.
- **Robichaux, R. R.** & Rodrigue, P. R. (2009, April). *Mathematics CAN make sense every day through communication and connections across the curriculum*. Session presented at the annual meeting of the National Council of Teachers of Mathematics, Washington D.C.
- Robichaux, R. R. & Rodrigue, P. R. (2008, November). *Folding your way through the framework*. Session presented at the annual meeting of the Mississippi Council of Teachers of Mathematics, Biloxi, Mississippi.
- Robichaux, R. R. (2008, April). One of these things is not like the other. Session presented at the Spring 2008 K-12 Leadership Program in Discrete Mathematics Conference, Rutgers University, Piscataway, New Jersey.
- **Robichaux, R. R.** & Rodrigue, P. R. (2007, October). *Problem solving through culturally relevant contexts*. Session presented at the annual meeting of the Mississippi Council of Teachers of Mathematics, Columbus, Mississippi.
- **Robichaux, R. R.** & Guarino, A. J. (2005, October). *Helping pre-service elementary school teachers overcome mathematical anxiety.* Session presented at the annual meeting of the National Council of Teachers of Mathematics, Birmingham, Alabama.

- **Robichaux, R. R.** & Guarino, A. J. (2005, April). *Mathematical misconceptions of pre-service elementary school teachers*. Session presented at the annual meeting of the National Council of Teachers of Mathematics, Anaheim, California.
- Wells, F. & Robichaux, R. R. (2004, October). Activities to make the connections standard come alive in your classroom. Session presented at the annual southern regional meeting of the National Council of Teachers of Mathematics, New Orleans, Louisiana.
- Robichaux, R. R. & Rodrigue, P. R. (2004, October). *Problem solving with a cajun flavor: An investigation of Eulerian paths and cycles*. Session presented at the annual southern regional meeting of the National Council of Teachers of Mathematics, New Orleans, Louisiana.
- **Robichaux, R. R.** & Guarino, A. J. (2004, October). *Improving the mathematical content knowledge of elementary pre-service teachers*. Session presented at the annual eastern regional meeting of the National Council of Teachers of Mathematics, Baltimore, Maryland.
- **Robichaux, R. R. &** Guarino, A. J. (2004, October). *Combating the mathematics anxiety of elementary pre-service teachers*. Session presented at the annual eastern regional meeting of the National Council of Teachers of Mathematics, Baltimore, Maryland.
- Robichaux, R. R. & Rodrigue, P. R. (2003, November). *Folding your way through the standards*. Session presented at the annual meeting of the Louisiana Association of Teachers of Mathematics, Lafayette, Louisiana.
- Robichaux, R. R. & Rodrigue, P. R. (2002, November). *Problem solving with a Cajun flavor*. Session presented at the annual meeting of the Louisiana Association of Teachers of Mathematics, Baton Rouge, Louisiana.
- **Robichaux, R. R.** & Rodrigue, P. R. (2002, November). *Fibonacci fun!!* Session presented at the annual meeting of the Louisiana Association of Teachers of Mathematics, Baton Rouge, Louisiana.
- Barlow, A. T. & Robichaux, R. R. (2002, October). Let's make some fractals. Session presented at the annual southern regional meeting of the National Council of Teachers of Mathematics, Biloxi, Mississippi.
- **Robichaux, R. R.** & Rodrigue, P. R. (2002, October). *Promoting spatial sense through motivational activities*. Session presented at the annual southern regional meeting of the National Council of Teachers of Mathematics, Biloxi, Mississippi.
- **Robichaux, R. R.** (2001, November). *Using unit origami to promote geometric thinking*. Session presented at the annual meeting of the Louisiana Association of Teachers of Mathematics, Alexandria, Louisiana.
- **Robichaux, R. R.** (2001, November). *Let's make some fractals*. Session presented at the annual meeting of the Louisiana Association of Teachers of Mathematics, Alexandria, Louisiana.

- **Robichaux, R. R.** & Rodrigue, P. R. (2000, December). *Promoting spatial ability in the middle grades*. Session presented at the annual meeting of the Louisiana Association of Teachers of Mathematics, Lafayette, Louisiana.
- Robichaux, R. R. & Rodrigue, P. R. (1999, October). *Promoting spatial sense through origami activities*. Session presented at the annual meeting of the Louisiana Association of Teachers of Mathematics, New Orleans, Louisiana.
- Robichaux, R. R. & Rodrigue, P. R. (1998, October). *Concept mapping: Making connections in mathematics*. Session presented at the annual central regional meeting of the National Council of Teachers of Mathematics, Louisville, Kentucky.
- **Robichaux, R. R.** & Rodrigue, P. R. (1997, October). *Another look at using manipulatives in the math classroom: Ideas & activities.* Session presented at the annual southern regional meeting of the National Council of Teachers of Mathematics, Memphis, Tennessee.
- **Robichaux, R. R. &** Rodrigue, P. R. (1997, January). *Exploring patterns & pattern blocks: A hands-on approach*. Session presented at the annual southern regional meeting of the National Council of Teachers of Mathematics, New Orleans, Louisiana.

Refereed Conference Proceedings

- **Robichaux, R. R.**, Franz, D. P., Hailey, L. A., & Jayroe, T. (2012). Embracing the common core standards for mathematical practice through clinically-based preparation of elementary education teacher candidates. *Proceedings of the 12th annual meeting of the National Association of Professional Development Schools* (pp. 53-54), Las Vegas, Nevada: NAPDS.
- Pope, M., Scholtes, T., Robichaux, R. R., & Maynard, S. (2011). Content methods courses online: Making the right connections. In M. Koehler & P. Mishra (Eds.), *Proceedings of the Society for Information Technology & Teacher Education International Conference 2011* (pp. 3972-3930). Chesapeake, VA:AACE.
- Pope, M., Robichaux, R. R., Scholtes, T., & Jayroe, T. (2010). The "give and take" of the university faculty, teacher candidate, and classroom teacher professional relationship. *Proceedings of the 11th annual meeting of the National Association of Professional Development Schools, 9*, 52, Orlando, Florida: NAPDS.
- Jayroe, T., Robichaux, R. R., Pope, M., & Coffey, K. (2010). Changing academic performance and promoting success (CAPPS): The PDS impact on educators. *Proceedings of the 11th* annual meeting of the National Association of Professional Development Schools, 9, 69, Orlando, Florida: NAPDS.
- Jayroe, T., Robichaux, R. R., Pope, M., & Coffey, K. (2010). Changing academic performance and promoting success (CAPPS): The PDS impact on students. Proceedings of the 11th annual meeting of the National Association of Professional Development Schools, 9, 102-103, Orlando, Florida: NAPDS.

- **Robichaux, R. R.** & Jayroe, T., (2010). A framework for strengthening mathematical understanding through a PDS partnership. *Proceedings of the 11th annual meeting of the National Association of Professional Development Schools, 9*, 125, Orlando, Florida: NAPDS.
- Jayroe, T., Robichaux, R. R., & Pope, M. (2009). Sustaining and increasing PDS partnerships in rural settings. Proceedings of the 10th annual meeting of the National Association of Professional Development Schools, 8, 156, Daytona Beach, Florida: NAPDS.
- Jayroe, T., Pope, M., & Robichaux, R. R. (2009). Maintaining professional development school partnerships: Sustaining best practices. Proceedings of the 10th annual meeting of the National Association of Professional Development Schools, 8, 100-101, Daytona Beach, Florida: NAPDS.

SCHOLARSHIP

Proposals Submitted: 17 (7	Unfunded)
Proposals Funded:	\$5,272,283
Proposals Pending:	\$2,109,839
Total:	\$7,382,122

Funded

In Progress

Title: Transforming the Education System for Teachers and Students in Liberia (TESTS) Funded: \$2,109,839

Investigators: Bryan Farrell (PI), Cathy Curtis, **Rebecca Robichaux-Davis**, Kristin Javorsky, Eric Moyen & Myra Pannell, Co-PIs

Source: United States Agency for International Development (USAID) Timeline: February 2021 – February 2026

Funded

Completed

Title: In-depth Mathematical Practices and Content Teacher Training -IMPACT2 Funding: \$1,200,000 Investigators: Helen (Re-C) Carter & **Dr. Rebecca R. Robichaux-Davis**, Co-PIs

Source: Department of Education Mathematics-Science Partnership (MSP) Program Timeline: 3-Year Project, October 2015 – September 2018

Title: Dillard's Reading, Enrichment, Arts, Mathematics, and Science – DREAMS Funding: \$1,900,000

Investigators: Dr. Terry Jayroe (PI), Dr. Donna Shea, **Dr. Rebecca Robichaux-Davis**, & Dr. Angela Mulkana, Co-PIs

Source: 21st Century Community Learning Centers Grant Program, Mississippi Department of Education

Timeline: September 2013 – August 2018

Title: Realizing the Mathematical Practices through Participation in DREAMS: An Investigation of the Use of Authentic Contexts for Learning Elementary Mathematics

Funding: \$2,000

Investigator: Dr. Rebecca R. Robichaux-Davis

Source: MSU ORED Undergraduate Research Program

Timeline: January 2016 – December 2016

Title: Addressing the Common Core State Standards for Mathematics through Wildlife Science and Conservation: The Impact on Student Achievement of Authentic Curricula (Project ISAAC)

Funding: \$2,000

Investigators: **Dr. Rebecca R. Robichaux (PI),** Dr. J. Brian Davis (College of Forest Resources), Dr. Margaret Pope, & Dr. Teresa Jayroe, Co-PIs

Source: MSU ORED Cross College Research Program

Timeline: January 2013 – December 2013

Title: Enhancing K-12 Science and Mathematics Preparation 2011

Funding: \$100,000

Investigators: Dr. Sandra Harpole, Dr. Richard Blackbourn, Dr. Dana P. Franz, & Dr. Rebecca R. Robichaux, Co-PIs

Source: Mississippi State Department of Education Timeline: January 2011 – December 2011

Title: CAPPS: Changing Academic Performance and Promoting Success Funding: \$1,873,286

Investigators: Dr. Anna Dill, Dr. Teresa Jayroe, **Dr. Rebecca R. Robichaux**, Dr. Margaret Pope, Dr. Kent Coffey, & Dr. Susie Burroughs, Co-PIs

Source: 21st Century Community Learning Centers Grant Program, Mississippi Department of Education

Timeline: September 2009 - August 2014

Title: Enhancing K-12 Science and Mathematics Preparation 2010 Funding: \$285,000 Investigators: Dr. Sandra Harpole, Dr. Richard Blackbourn, Dr. Dana P. Franz, & **Dr. Rebecca R. Robichaux**, Co-PIs Source: Mississippi State Department of Education

Timeline: January 2010 – December 2010

Title: Assessing the Mathematical Content Knowledge, Knowledge of Instructional Strategies, and Changing Beliefs of K-8 Mississippi Teachers
Funding: \$9,997
Investigator: Dr. Rebecca R. Robichaux-Davis, PI
Source: MSU ORED Research Initiation Program
Timeline: January 2008 – December 2009

Unfunded

Title: SMILE: STEM Majors Innovating & Leading Exponentially
Funding: \$5,000,000
Investigators: Dr. Rebecca R. Robichaux-Davis (PI), Dr. Clay Armstrong & Dr. Rodney Pearson, Co-PIs
Source: National Science Foundation S-STEM Track 3
Timeline: January 2018 – December 2023
Title: Media SmartHD (Health Disparities): A Science-Based Health Literacy Program
Investigators: Dr. Holli Seitz, PI, Dr. Ginger Cross, Dr. Rebecca R. Robichaux-Davis, Dr. Julie Parker, Dr. Lori Elmore-Staton, & Dr. David Buys, Co-PIs
Source: National Institute of Health
Timeline: Submitted June 2016, 5-Year Project (\$1,294,343)
Title: Raising Academic Interest for Success in Education – RAISE
Investigators: Dr. Terry Jayroe, Dr. Janet McCarra, Dr. Rebecca R. Robichaux, Dr. Margaret
Pope, Dr. Kathy Gilliland, Dr. Joann Beriswell, Dr. Matt Bogan & Ms. Iva Ballard, Co-PIs

Source: 21st Century Community Learning Centers Grant Program of the Mississippi Department of Education

Timeline: Submitted March 2012, 5-Year Project (\$1,900,000)

Title: Transforming Pre-Service Teacher Education through Industry Experiences Investigators: Dr. Sandra Harpole, Dr. Dana P. Franz, & **Dr. Rebecca R. Robichaux**, Co-PIs Source: National Science Foundation Timeline: Submitted February 2011, 2-Year Project

Title: Project TEAM: Transition from Elementary to Abstract Mathematics Investigators: Dr. Sandra Harpole, Dr. Dana P. Franz, Dr. Bruce Ebanks, Dr. Rebecca R. Robichaux, & Dr. Seth Oppenheimer, Co-PIs Source: National Science Foundation Timeline: Submitted October 2010, 5-Year Project (\$10,000,000)

Title: Enhancing K-12 Science and Mathematics Preparation Investigators: Dr. Sandra Harpole, Dr. Dana P. Franz, and **Dr. Rebecca R. Robichaux**, Co-PIs Source: Institutions of Higher Learning – No Child Left Behind Act: Improving Teaching Quality State Grant Timeline: Submitted November 2010, 1-Year Project

Title: Problem Solving and Critical Thinking with Discrete Mathematics: Enhancing DOK (Depth of Knowledge)

Investigator: Dr. Rebecca R. Robichaux, PI

Source: Motorola Foundation Innovation Generation Grant Program

Timeline: Submitted February 2008, 1-Year Project (\$96,818)

Title: Strengthening DOK: Critical Thinking and Problem Solving with Discrete Mathematics Investigator: **Dr. Rebecca R. Robichaux**, PI

Source: Institutions of Higher Learning – No Child Left Behind Act: Improving Teaching Quality State Grant

Timeline: Submitted December 2007, 1-Year Project (\$118,761)

Teaching Materials Developed – Scholarship of Engagement

IMPACT2: In-depth Mathematical Practices and Content Teacher Training

- Two Videos with Accompanying Student Handouts available through MSU Extension Service: *Strategies for Base-10 Concepts* and *Growing Patterns*
- Grades K 2 Mathematics Activities & Student Recording Sheets: Keep It Balanced: Domino Pairs; Properties of Numbers: Domino Sort; Broken Candy Bars: Number Decomposition; M&M Counts: Place Value Concepts; Hundreds Charts Happenings: Arithmetic Patterns; Ribbon Shapes: Geometric Properties of Polygons; Cutting Cakes: 2 and 4 Fair Shares Using Geoboards; Ribbons & Rods: Measuring Length; Counting Fish, Grapes, Ants & Humps: Activities based on *The Grapes of Math* by G. Tang
- Grades 3 5 Mathematics Activities & Student Recording Sheets: Fraction Relativity: Area, Length & Set Models; Tangram Fraction Values; Bully's Fraction Fun: Multiplying & Dividing Fraction with Meaning; Ribbon Shapes: Geometric Properties of Polygons; By the Layer: Cuisenaire Rods & Volume; Origami Angles: No Protractors; Counting Fish, Grapes, Ants & Humps: Activities based on *The Grapes of Math* by G. Tang
- Grades 6 8 Mathematics Activities & Student Recording Sheets: Probability with Skittles; Congruent Rectangles: Ratio Tables; Pentomino Explorations: Area, Perimeter, Rectangle Decomposition, Proportional Reasoning; Growing Patterns – Fish, Grapes, Ants & Humps: Activities based on *The Grapes of Math* by G. Tang
- Mississippi Math Activities & Student Recording Sheets: Mississippi COW (Challenge of the Week), 26 Grades K-3 Challenges and 26 Grades 4 8 Challenges based on *M is for Magnolia* by Michael Shoulders; Mississippi by the Numbers, 21 Grades K 3 Challenges and 21 Grades 4 8 Challenges based on *1 Mississippi, 2 Mississippi* by Michael Shoulders; Tangram State Symbol Puzzles; Letter Count Words for Grades K 2 : State Symbols; Fraction Words for Grades 3 6: State Symbols
- Davis Wade Stadium at Scott Field by the Numbers Field Trip Activity
- Pre/Post Assessment of Content Knowledge of K-8th Grade Mathematics

DREAMS: Dillard's Reading Enrichments Arts, Mathematics, and Science

- After-School Mathematics Activities and Student Recording Sheets for 30 weeks, 4 days per week, 1 activity per day for each grade level: K through 4th grade for 3 Academic Years (2013-2014, 2014-2015, & 2015-2016)
- Summer Program Mathematics Activities for 20 Days, 1 Activity with accompanying student recording sheet for each grade level: K 4th grade for 3 Summers (2014, 2015, 2016)
- Family Engagement Activities: 2 Activities with accompanying materials per academic year per grade level, K 4th (2013 2014, 2014 2015, 2015 2016)
- Enrichment Activities and Student Recording Sheets for 30 weeks, 1 per week for each grade level 1st 4th for 3 Academic Years (2013 2014, 2014 2015, 2015 2016)

Realizing the Mathematical Practices through Participation in DREAMS: An Investigation of the Use of Authentic Contexts for Learning Elementary Mathematics

- Pre/Post Assessment for 3rd grade Multiplying & Dividing within 100; 2-Step Problems using the 4 Operations; Growing Patterns; Identification of Fractions; Fraction Equivalence; Length to the nearest ¼ inch; Scaled Picture & Bar Graphs; Area of Rectangles & Rectilinear Spaces; Perimeter; Quadrilaterals Properties & Hierarchy
- Pre/Post Assessment for 4th grade Multiplying Multi-digit Whole Numbers; Divisibility within 100; Distinguishing between Prime & Composite Numbers; Fraction Equivalence; Comparing Fractions; Decomposition of Fractions; Multiplying Fractions by Whole Numbers; Perimeter & Area of Rectangles; Angle Measurements; Line Symmetry
- 10 Activities for 3rd Grade: Streets, Avenues & Stop Lights in Louisville; Quilts, Candy & Eggs; Buzz's Broken Ruler; Quasimodo's Quadrilateral Confetti; Chicken Little's Farm; Same or Different Fractions; Mickey's Fish; Animal Mosaics; Pluto's Patterns; Flit's Flower Gardens
- 10 Activities for 4th Grade: How Many Tiles?; Pieces of Cake; Aladdin's Magic Carpets; Simba's Shape Symmetry; Mickey's Barnyard Pens; More or Less than ½ of a Cake; Origami Angles; Cake Slices: Now and Later; How Many Rectangles, Squares & Triangles?; Lilo's Lemonade

Project ISACC: Addressing the Common Core State Standards for Mathematics through Wildlife Science and Conservation: The Impact on Student Achievement of Authentic Curricula

 14 Math & Science Integrated Activities for Grades 5 – 8: Woodpecker Trail & Goose Overlook Observations: Noxubee Refuge Data Collection; Bluff Lake Board Walk & Invertebrate Water Samples: Noxubee Refuge Explorations; Where Do the Hens Hang Out?; Food Abundance; A Day in the Life of a Duck; Tangram Nests; Wild Wetland Problem Solving; Migration Math; Hatching the Egg; Building a Wood Duck Nest Box; Wetland Stress; Checking Nests for Eggs; Traveling Around the Swamp; Coloring the Noxubee Refuge

CAPPS: Changing Academic Performance and Promoting Success

- Pre/Post Assessments for Grade 6, Grade 7, Pre-Algebra, Algebra I, Algebra II, Geometry and Transition to Algebra (2009)
- After-School Mathematics Activities and Student Recording Sheets for 30 weeks, 4 days per week, 1 activity per day for each grade level: 6 – 10 for 2 Academic Years (2009-2010, 2010-2011)
- Summer Program Mathematics Activities for 20 Days, 1 Activity with accompanying student recording sheet for each grade band: 5th/6th & 7th/8th for 4 Summers (2009, 2010, 2011, 2012)
- Enrichment Activities and Student Recording Sheets for 30 weeks, 1 per week for each grade band: 5th/6th & 7th/8th for 2 Academic Years (2009-2010, 2010-2011)

Other Scholarly Activities: No Cost Research

Investigating the understanding of story problem structures of pre-service elementary education majors through a 10-year longitudinal study

Investigating the geometry content knowledge and pedagogical content knowledge of pre-service teachers, with specific focus on the understandings and misconceptions concerning the hierarchy of quadrilaterals

Investigating the impact of various pedagogical strategies on the mathematics anxiety of underperforming, at-risk college freshmen enrolled

Investigating the content knowledge of pre-service elementary teachers with regards to fraction concepts, operations on fractions, and rational number concepts

TEACHING

Department

Courses Taught:

*EDE 3523, Foundations of Elementary and Middle Level Mathematics Education, Spring 2011 – Present

*EDE 4123, Teaching Elementary and Middle Level Mathematics, Fall 2007 – Present

*EDE 8763, Elementary and Middle Level Mathematics Education, Summer 2011 – Present

*EDE 8990, Special Topics in EDE – Elementary/Middle Level Pedagogy for Discrete Mathematics, Summer 2021

*EDE 8543, *Experiences in Elementary & Middle Level Mathematics Education*, Summer 2009 *EDE 8123, *Foundations for Teaching Middle Level Mathematics*, Summer 2012 – Summer 2013 EDE 4990, *International Exploration in Education – Study Abroad*, May 2017

* Professor of Record for all Elementary/Middle Level Mathematics Education Courses

Supervise Elementary Education and Secondary Mathematics Education interns; Chair and serve on Master's, Specialist's & Doctoral degree committees;

University

LSK 1102, Academic Math Strategies, Fall 2015 – Fall 2016 LSK 1043, Life Skills for the Student Athlete, Summer 2018 – Present FYE 1001, True Maroon, Fall 2016 – Present

Mentoring and Advising

Graduate Advising Chair approximately 4 Master's Committees per semester Serve on approximately 2 Master's Committees per semester

Chair of Specialist Committees

• Jennifer Virden

Chair of Doctoral Committees

- Angela Mulkana, graduated December 2015
- Sarah Parker

Serve on Doctoral Committees

- Elizabeth Repsher, graduated December 2016
- Heather Wood
- Ben Jordan

Undergraduate Advising

Advise approximately 25 undergraduate elementary education majors per semester

Mentoring – Mathematics Education Instructors

- Mary Katherine Entrekin Morgan, 2020-2021
- Rebecca MeCaskey, 2020-2021
- Kim Smith, 2018-2019
- Sarah Parker, 2017-2018
- Chelsi Brasher, 2014-2015
- Jennifer Virden, 2012-2013

Other – Teaching at Other Institutions

Southeastern Louisiana University, Hammond, Louisiana: August 2000 – December 2004 Courses Taught:

EDUC 320 (3 credit hours – undergraduate), Foundations of Mathematics Education EDUC 321 (3 credit hours – undergraduate), Elementary Mathematics Methods EDUC 328 (3 credit hours – undergraduate), Middle School Mathematics Methods EDUC 407 (3 credit hours – undergraduate/graduate), Tests and Measurement EDUC 650 (3 credit hours - graduate), Mathematics in the Elementary School

Facilitated the development of three new professional development schools at Hammond Westside Primary and Upper and Martha Vineyard Elementary School by teaching university courses on their campuses, meeting with principals and teachers of these schools to collaborate on issues related to partnership schools, and providing assistance to candidates' mentor teachers

Supervised student teachers, assisted with the undergraduate portfolio assessment system, advised undergraduate elementary education majors, and served on Master's degree committees

Auburn University, Auburn, Alabama: June 1997 – June 2000

Courses Taught: Developmental Mathematics, Classroom Management, Elementary Mathematics Methods, Seminar for Secondary Mathematics Education Majors and Computer Programming for Secondary Mathematics Education Majors

Supervised secondary mathematics education interns and advised undergraduate secondary mathematics education majors

U. S. Dept of Defense School, Navy Base Andros Island Bahamas: August 1995 – March 1997 Courses taught: 3rd – 8th grade *Computer Literacy*, 6th – 12th grade *Mathematics*, 6th – 8th grade *Physical and Life Science*, Kindergarten – 8th grade *Music*

Coordinated Mathematics Instruction for Grades Kindergarten – 5th grade

Nicholls State University, Thibodaux, Louisiana: May 1992 – May 2007

Mathematics Instructor for ACT Prep Workshop: Prescription for Success

Scotlandville Magnet High School, Baton Rouge, Louisiana: August 1991 – May 1995

Courses taught: AP Calculus II, Algebra I, Geometry, Computer Science I (Pascal Programming), and Computer Literacy (teaching students grades 9 through 12)

OTHER TEACHING

Taught demonstration lesson, *Solving Equations of the Form:* px + q = r, for Louisville Municipal School District 6th – 7th grade mathematics teachers, Louisville, Mississippi, October 9, 2014

Taught demonstration lesson, *Adding 2-Digit Numbers with Understanding*, for Louisville Municipal School District 2nd grade mathematics teachers, Louisville, Mississippi, September 25, 2014

Assisted Dr. J. Brian Davis and his graduate assistants of the Department of Wildlife, Fisheries, and Aquaculture with lessons for Louisville School District's DREAMS Summer Program, Louisville, MS, June 2014 – June 2015

Taught demonstration lessons for Louisville School District's CAPPS Summer Jam Program, Louisville, MS, June 2013

Assisted graduate assistants of the Department of Wildlife, Fisheries, and Aquaculture with teaching lessons for Louisville School District's CAPPS Summer Jam Program, Louisville, MS, June 2013

Taught demonstration lessons for Louisville School District's CAPPS Summer Jam Program, Louisville, MS, June, 2011

Taught demonstration lessons, Visualizing Functions through Growing Patterns: Linear, Quadratic & Exponential,, at Slidell Junior High, St. Tammany Parish, Slidell, Louisiana, October 2009

Taught demonstration lesson, Let's Go Crawfishing: An Exploration of Euler Paths and Circuits, at Southside Junior High, Livingston Parish, Denham Springs, Louisiana, October 2003

Taught demonstration lesson, *Getting Middle School Students to Communicate Mathematics Through the Use of Origami*, at Lisa Park Elementary School, Terrebonne Parish, Houma, Louisiana, May 2002

PROFESSIONAL SERVICE

Department

Elementary Education Graduate Program Coordinator, Department of Curriculum, Instruction and Special Education, 2014 – Present, Appointed

Appeals Committee, 2017 – Present, Appointed

Mississippi Excellence in Teaching Program (METP) Interview Committee, 2013 – Present, Appointed Elementary/Mathematics Education Representative

Department of Curriculum, Instruction, and Special Education's Recruitment Committee, 2012 – Present, Appointed

Department of Curriculum, Instruction and Special Education's Search Committee for Elementary Education Instructor Position, 2021, Appointed Chair

Department of Curriculum, Instruction and Special Education's Tenure and Promotion Committee, 2015 – 2020, Elected

Department of Curriculum, Instruction and Special Education's Search Committee for the Elementary Education On-line Degree Program Coordinator, 2018 – 2019, Elected, Appointed Chair

Elementary Education Undergraduate Program Coordinator, Department of Curriculum, Instruction and Special Education, 2018 – 2019, Appointed

Department of Curriculum, Instruction and Special Education's Search Committee for the Elementary Education On-line Degree Program Coordinator, 2017, Appointed

Elementary/Middle Level Mathematics Education Instructor Search Committee, 2017, Appointed Chair

Department of Curriculum, Instruction and Special Education's Search Committee for the Program Coordinator for the Master in Arts of Teaching, 2015, Appointed

Elementary Education Program Coordinator for the Department of Curriculum, Instruction and Special, 2010 - 2014, Appointed

Department of Curriculum, Instruction, and Special Education's Distance Education Committee, 2010 - 2012, Appointed

Department of Curriculum, Instruction, and Special Education's Technology Utilization Committee, 2007 – 2012, Appointed

Department of Curriculum, Instruction, and Special Education's Diversity Committee, 2010 – 2012, Elected

Department of Curriculum, Instruction, and Special Education's Point of Contact to MSU's Division of Academic Outreach and Continuing Education (AOCE) for the Online Undergraduate Elementary Education Degree program, 2010-2011, Appointed

Department of Curriculum, Instruction, and Special Education's Student Appeals Committee, 2008 – 2009, Elected

Department of Curriculum, Instruction, and Special Education's Recruitment Committee, 2007 – 2009, Appointed

Statistical Consultant to Drs. Devon Brenner and Renarta Tompkins for a literacy grant, 2007

College

College of Education's Representative on the Mississippi Department of Education's Educator Preparation Programs Working Group for High Quality Instructional Materials, 2021 – Present, Appointed

College of Education's Council for the Accreditation of Educator Preparation (CAEP) Committee, 2016 – Present, Appointed Elementary Education – Mathematics Representative

College of Education's Research Committee, 2015 – Present, Appointed Curriculum, Instruction and Special Education Representative

College of Education's Assessment Committee, 2014 – Present, Appointed Elementary Education Graduate Representative

College of Education's Teacher Education Council, 2009 – Present, Appointed Elementary Education – Mathematics Representative

College of Education Promotion and Tenure Committee, 2020 – 2021, Elected Curriculum, Instruction & Special Education Representative

Search Committee for the Dean of the College of Education, 2020, Elected Curriculum, Instruction & Special Education Representative

College of Education's Graduate Coordinators Advisory Council, 2016 – 2020, Appointed Chair & Elementary Education Representative

SOCSD-MSU COE Partnership School Steering Committee, 2019, Appointed

Department of Music Promotion and Tenure Committee, 2019, Appointed

College of Education's Barry F. Box Curriculum Council, 2012 – 2019, Elected Curriculum, Instruction and Special Education Representative

Search Committee for the Chair of the Department of Curriculum, Instruction, and Special Education, 2016 – 2018, Elected Elementary Education Representative

College of Education's Barry F. Box Curriculum Council, 2014 - 2018, Elected Chair

Department of Music's Tenure-Track Assistant Professor of Voice Search Committee, Appointed External Member, 2017

College of Education's Scholarship Application Evaluator, 2015 – 2016, Appointed Department of Curriculum, Instruction, and Special Education Representative

Panelist, Academic Insight, January 2016, Appointed Elementary Education Representative

Presenter, Academic Insight Elementary Education Break-out Session, Appointed Elementary Education Representative, January 2016

College of Education's Search Committee, College of Education Assistant Dean, 2015, Appointed

College of Education's NCATE Standard 2, Unit Assessment, Committee, 2012 – 2015, Appointed Chair

College of Education's Search Committee for the Director of the Early Childhood Institute, 2012 – 2014, Appointed Department of Curriculum, Instruction, and Special Education Representative

Chair-Elect of the College of Education's Barry F. Box Council, 2013 - 2014, Elected

College of Education's Professional Development School Steering Committee – Louisville School District, 2011 – 2014, Appointed Elementary Education Representative

College of Education's Undergraduate Education Advisory Council, 2011 – 2014, Elected Curriculum, Instruction, and Special Education Representative

Department of Kinesiology's Tenure and Promotion Committee, 2012, Appointed

College of Education's Search Committee, Director of the Office of Clinical and Field-Based Instruction, 2011 – 2013, Appointed Curriculum, Instruction and Special Education Representative College of Education's Faculty Council, 2009 – 2012, Elected Curriculum, Instruction and Special Education Representative

College of Education's Search Committee, Department Head of Curriculum, Instruction, and Special Education, 2011 – 2012, Elected Elementary Education Representative

College of Education's Teacher Preparation Redesign Committee, 2008 – 2009, Appointed Elementary Education Representative

Campus and University

MSU Robert Holland Faculty Senate, President, 2020 – Present, Elected College of Education Representative

Graduate Council, 2016 – Present, Chair (2018 – Present), Appointed College of Education Representative

MSU SACSCOC Reaffirmation Team, 2022 - Present, Appointed

Provost's Task Force for Experiential Education, 2022, Appointed

Provost's Task Force for Faculty Development, 2021 - Present, Appointed

Athletic Council, 2020 – Present, Faculty Senate Designate

COVID-19 Task Force & Future Planning Committee, 2020 - Present, Faculty Senate Designate

Design Review Subcommittee, 2020 - Present, Faculty Senate Designate

Inclusive Excellence Leadership Council, 2020 - Present, Faculty Senate Designate

Executive Council, 2020 - Present, Faculty Senate Designate

Executive Enrollment Management Committee, 2020 - Present, Faculty Senate Designate

Faculty/Staff Housing Appeals Committee, 2020 – Present, Faculty Senate Designate

Honorary Degree Committee, 2020 - Present, Faculty Senate Designate

Information Technology Committee, 2020 - Present, Faculty Senate Designate

Master Plan Development and Advisory Committee, 2020 - Present, Faculty Senate Designate

Parking and Traffic Regulation Committee, 2020 - Present, Faculty Senate Designate

President's Committee on Planning, 2020 - Present, Faculty Senate Designate

Special Events and Game Day Operations Committee, 2020 – Present, Faculty Senate Designate

Sustainability Committee, 2020 - Present, Faculty Senate Designate

Provost's Committee for the Development of the Student Survey of Course Satisfaction, 2021 - Appointed

Dean of the Graduate School's Committee for Investigating Split Level Courses, 2021 – Appointed

Provost's Task Force for Online Education, 2019 – 2021, Appointed

Provost's Task Force for the Evaluation of Teaching Performance, 2019 - 2020, Appointed

MSU Robert Holland Faculty Senate, Secretary, 2019 – 2020, Elected College of Education Representative

Academic Review Board, 2018 - 2020, Faculty Senate Designee

Search Committee for the Provost and Executive Vice-President, 2019, Elected College of Education Representative

Search Committee for the Associate Dean of the Graduate School, 2019, Graduate Council Representative

MSU Robert Holland Faculty Senate, 2018 – 2019, Elected College of Education Representative

Graduate Enrollment Advisory Council, 2016 – 2018, Appointed College of Education Representative

Internal Review Committee for the 5-Year Program Review of the Department of Mechanical Engineering's Graduate Programs, Spring 2017, Appointed by the Office of the Provost

Internal Review Committee for the 5-Year Review of The Learning Center, Fall 2016, Appointed by the Office of the Provost

New Maroon Camp Ice Cream Social at MSU, August 2016, Invited Faculty Member

Panelist, Center for Teaching and Learning's Faculty Luncheon Series, *Mastering Teaching – Striving for Excellence*, February 2016, Invited Presenter

University Instructional Improvement Committee, 2012 – 2016, Appointed College of Education Representative

Search Committee for the Provost and Executive Vice-President, 2015 – 2016, Elected College of Education Representative

New Maroon Camp in Florence, MS and New Maroon Camp Faculty Dinner at MSU, August 2015, Appointed College of Education Representative

Search Committee for the Administrative Director and Head of Campus for MSU-Meridian, 2015, Elected College of Education Representative

University Undergraduate Admissions Committee, 2014 – 2015, Appointed Faculty Senate Representative

External Curriculum Reviewer for the College of Veterinary Medicine's Doctor of Veterinary Medicine Degree Program, 2013 – 2014

MSU Robert Holland Faculty Senate, 2009 – 2015, Elected College of Education Representative

MSU Robert Holland Faculty Senate's Charter and Bylaws Committee, 2012 – 2015, Appointed Chair

Panelist, Center for Teaching and Learning's Brown Bag, Secrets of the Successful, November 2013, Invited Presenter

MSU Robert Holland Faculty Senate's Charter and Bi-laws Committee, 2009 - 2012, Appointed

MSU Robert Holland Faculty Senate's Orientation Taskforce, 2011 – 2012, Appointed

Continuing Education Youth Advisory Board, 2010-2011, Appointed College of Education Representative

Panelist, *The First Years at MSU: A Panel Discussion for New Faculty* sponsored by the Office of the Provost and The Center for Teaching and Learning, January 2009 & February 2010, Appointed College of Education Representative

Proposal Reviewer, MSU Office of Research and Economic Development's 2009 Research Initiation Program, Appointed College of Education Representative

Professional Organizations

National Council of Teachers of Mathematics Mathematics Teaching in the Middle School, Editorial Panel Member, 2016 – Present Mathematics Teacher: Learning and Teaching PreK-12, Associate Editor, 2018 – Present

Mid-South Educational Research Association
At Large Director, 2021 – Present
Local Arrangements Chair for 50th Anniversary Meeting, 2020 – Present
Budget Advisory Committee Chair, 2020 – Present
Past-President, 2019
President - 2018
President-Elect, 2017
Future Site Selection Chair, 2019
Local Arrangements Chair, 2015 – 2016;
Mississippi Director, 2012 – 2016
Past Program Chair, 2015 – 2016
Program Chair, 2014 – 2015
At Large Director, 2009 – 2011

 $\label{eq:model} \mbox{Mid-South Educational Research Foundation Board, Vice-President/Secretary/Treasurer, 2020-Present} \\$

Mid-South Educational Research Foundation Board, Mississippi Representative, 2011 - Present

Louisiana Education Research Association, President-Elect/President/Past-President, 2003 - 2006

Southeast Louisiana Chapter of Phi Delta Kappa, 2001 – 2004, Historian

Service to Other Organizations

Southeastern Louisiana University, Hammond, Louisiana: August 2000 to January 1, 2005 Chair of NCATE Standard II: Assessment Committee, 2002 – 2004, Appointed

Chair, College of Education and Human Development's Grades 4-8 (Middle School) Teacher Certification Program, 2001 – 2004, Appointed

Developed two new middle school mathematics education courses (Foundations of Mathematics Education in the Middle School and Curriculum and Instruction: Middle School Mathematics Education)

Collaborated with faculty from the Colleges of Education and Human Development and Arts and Sciences to develop plans for the attainment of 180 field experience hours prior to student teaching

Department of Teaching and Learning's Curriculum Advisory Council, 2003 – 2004, Appointed

Chair, College of Education and Human Development's Undergraduate Portfolio Committee (developed the undergraduate portfolio assessment system, authored the undergraduate portfolio faculty and student handbooks, and coordinated the implementation/phase-in of the system), 2001 -2003, Appointed

Faculty Senate, 2001 – 2003, Elected College of Education Representative

Faculty Senate's Faculty Welfare Committee, 2002 - 2003, Appointed Chair

NCATE Standard III: Field Experiences Committee, 2000 – 2001, Appointed

Department of Teaching and Learning's Elementary Task Force, 2000 - 2003, Appointed

Dept. of Defense School, U. S. Navy Base Andros Island Bahamas August 1995 – March 1997 Conducted three workshops for school faculty: *Exploring Patterns, Creating Tessellations*, and *Taking a Look at Portfolios*

Other Service

Mathematics consultant for Louisiana's Ascension, East Baton Rouge, Lafourche, Livingston, St. Tammany, Tangipahoa and Terrebonne Parish School Systems, 2001 – Present

Mathematics consultant to the Mississippi School for Mathematics and Science, Nicholls State University, Rutgers University, and Belhaven College, 2007 – 2014

Mathematics consultant to the U.S. Department of Defense's AUTEC School. Andros Island, Bahamas, 2008 – 2012

Mathematics consultant for Myers, Gamst, & Guarino statistics textbook with respect to vectors, vector spaces, log linear analysis, and exponential functions, 2004 – 2009

Judged science fair for Prairieville Middle School, Prairieville, Louisiana, Ascension Parish, December 2002

MEMBERSHIPS

National Council of Teachers of Mathematics, 1995 – Present *Mathematics Teaching: Learning and Teaching PreK-12* of NCTM – Associate Editor Panel Liaison – Growing Problem Solvers Department, 2018 – Present *Mathematics Teaching in the Middle School* of NCTM Reviewer, 2000 – 2018 Panel Liaison – Mathematical Explorations Department, 2016 – 2018 *Teaching Children Mathematics* of NCTM, Reviewer 2000 – 2018

Mid-South Educational Research Association (MSERA), 1999 - Present

Mid-South Educational Research Foundation Board, Mississippi Representative, 2011 - Present

Australian Association of Mathematics Teachers, 2016 - Present

American Association of Colleges for Teacher Education, 2013 - Present

Association for Middle Level Education, 2013 – Present

Association of Mathematics Teacher Educators, 2010 - Present

Mississippi Association of Mathematics Teacher Educators, 2011-2015

National Association of Professional Development Schools, 2009-2013

Mississippi Council of Teachers of Mathematics, 2008 – 2012

Louisiana Education Research Association (LERA), President-Elect/President/Past President, 2003 – 2006 Proposal Reviewer, 2000 – 2010

PROFESSIONAL GROWTH AND DEVELOPMENT

The annual meeting of the National Council of Teachers of Mathematics, February 2022

SACSCOC annual meeting, December 2021

The annual meeting of the National Council of Teachers of Mathematics, April 2021

The spring virtual regional meeting of the National Council of Teachers of Mathematics, February 2021

Council for the Accreditation of Educator Preparation Conference (CAEPCon), Virtual, March 2021

The fall virtual regional meeting of the National Council of Teachers of Mathematics, November 2020

Council for the Accreditation of Educator Preparation Conference (CAEPCon), New Orleans Louisiana, March 2020

The annual southern regional meeting of the National Council of Teachers of Mathematics, October 2019

The annual northern regional meeting of the National Council of Teachers of Mathematics, September 2019

The annual meeting of the National Council of Teachers of Mathematics, April 2018

The annual meeting of the National Council of Teachers of Mathematics, April 2017

The annual Research Conference of the National Council of Teachers of Mathematics, April 2017

EdTPA Local Evaluation Workshop, May 2017

- Council for the Accreditation of Educator Preparation Conference (CAEPCon), St. Louis, Missouri, March 2017
- EdTPA Faculty Orientation Workshop, February 2017
- The Center for Teaching and Learning's *Rabideau Lecture on Teaching Excellent: Dr. Rich Raymond*, Mississippi State University, April 2016
- The Center for Teaching and Learning's Seminar, *Engaging Students through Writing*, Mississippi State University, January 2016
- Mississippi State University's Libraries Seminar, Conference Poster Design, September 2015

The annual meeting of the Association for Middle Level Education, November 2014

The annual meeting of the National Council of Teachers of Mathematics, April 2014

- The Center for Teaching and Learning's Seminar, Judging Teachers: Recent Research on Student Evaluations of Instructors, Mississippi State University, January 2014
- The Center for Teaching and Learning's Seminar, *Starfish Education: Living my Dream and Making a Difference*" Mississippi State University, November 2013
- The Center for Teaching and Learning's Seminar, *Jump Start the Maroon and Write MSU QEP*, Mississippi State University, October 2013
- The Center for Teaching and Learning's Seminar, *Terrific Tips: Great Teaching Ideas from Award Winning Faculty*, Mississippi State University, April 2013
- The Center for Teaching and Learning's Seminar, *Student Today, Professional Tomorrow: Effective Mentoring of Graduate Students*, Mississippi State University, March 2013

The annual meeting of the American Association for Colleges of Teacher Education, March 2013

The annual meeting of the National Council of Teachers of Mathematics, October 2012

- The Center for Teaching and Learning's Seminar, Students are from Jupiter, Professors are from Saturn: Understanding Millennials in College, Mississippi State University, August 2012
- The Center for Teaching and Learning's Seminar, Promotion and Tenure: Does Teaching Still Matter?, Mississippi State University, April 2012
- The Center for Teaching and Learning's Seminar, *THINGS THAT WORK!*, Mississippi State University, April 2012
- The Center for Teaching and Learning's Seminar, *Rubrics across the Curriculum; A Panel Discussion*, Mississippi State University, February 2012
- The annual meeting of the National Association of Professional Development Schools, March 2012
- The annual meeting of The Wildlife Society, November 2011
- The Center for Teaching and Learning's Seminar, *Preparing Future Faculty MSU's Program to Prepare and Train Future Faculty*, Mississippi State University, March 2011
- The Center for Teaching and Learning's Brown Bag, *The Learning University: Restoring Teaching as an Honorable Pursuit*, Mississippi State University, March 2011
- The Center for Teaching and Learning's Seminar, Improving your Classroom Voice: Tips from a Pro for Energetic and Effective Presentations, Mississippi State University, March 2011
- The Center for Teaching and Learning's Brown Bag, *Terrific Tips: Great Teaching Tips from Award Winning Faculty*, Mississippi State University, February 2011
- The Center for Teaching and Learning's Brown Bag, Get Fired? Get Sues? Get Smart: University Policies and Rules Every Faculty Member Should Know – University Policies, Mississippi State University, January 2011
- The annual meeting of the National Council of Teachers of Mathematics, April 2011
- The annual meeting of the National Association of Professional Development Schools, March 2010
- The annual meeting of the American Education Research Association, April 2009
- The annual meeting of the National Council of Teachers of Mathematics, April 2009
- The annual meeting of the National Association of Professional Development Schools, March 2009
- The Office of Regulatory Compliance 2008 Summer Workshop, Mississippi State University, July 2008

The Center for Teaching and Learning, Introduction to myCourses, Mississippi State University, April 2008

The annual meeting of the American Education Research Association, April 2008

- The Office of Research & Economic Development, Mississippi State University, 2007-2008 Research Seminar Series: *The Five W's of Compliance at Mississippi State University: Who, What, When, Where, and Why*, February 2008
- The Office of Research & Economic Development, Mississippi State University, 2007-2008 Research Seminar Series: Pre- and Post-Award Management and Proposal Submission, January 2008
- The Office of Research & Economic Development, Mississippi State University, 2007-2008 Research Seminar Series: *Funding from the National Endowment for the Humanities*, September 2007
- The Office of Research & Economic Development, Mississippi State University, 2007-2008 Research Seminar Series: *Grant Writing & Developing Proposal Budgets*, September 2007

OTHER

Southeastern Louisiana University Scholarly Grant Activities: 2000 - 2004

Developed an instrument to measure K-12 students and pre-service teachers' awareness of mathematics in the real world

Mathematics education consultant for Southeastern Louisiana University's Teacher Scholar Master's Degree Program

Education leader of the SLU team for "[MS]², Middle School Mathematics and Science," a joint project between Louisiana State University and Southeastern Louisiana University funded by the Center for Innovative Teaching and Learning and the Louisiana Board of Regents

Mathematics consultant for Southeastern Louisiana University's Project CREATE (Collaboration for Reform in the Education of Aspiring Teachers)

Mathematics Education consultant for Southeastern Louisiana University's Project HART (Hiring Alternative Resources for Teaching)

Auburn University Grant Activity: 1999 – 2000

Member of the South Florida Annenberg Challenge Program Evaluation Team - Conducted phone interviews, scored school portfolios, assisted in assessing the inter-rater reliability for the evaluation team, and conducted in-service training for teachers involved with the Annenberg grant