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EDUCATION

- 2008- 2012 University of Missouri, Columbia, Missouri
Doctor of Philosophy in Curriculum and Instruction –
Specialization in Mathematics Education
- 2004-2006 Indiana University, Bloomington, Indiana
A Master of Science in Education –
Specialization in Mathematics Education
- 1999 – 2002 The College of The Bahamas, Nassau, Bahamas
A Bachelor of Education with a Secondary Certification –
Specialization in Mathematics Education
- 1997 – 2001 The College of The Bahamas, Nassau, Bahamas
An Associate of Arts Degree in Mathematics with Statistics

TEACHING EXPERIENCE

- 2012- Present University of South Florida, Tampa, Florida
I am an associate professor in the Department of Teaching and Learning. I teach undergraduate and graduate secondary mathematics education courses (Teaching Mathematics for Middle Grades, Teaching Senior High School Mathematics, Topics in Teaching Geometry), and an introductory mathematics course (Intermediate Algebra). Additionally, I teach the doctoral course on Curriculum History and Research in Mathematics Education. Moreover, I coordinate the Introduction to Mathematics and Intermediate Algebra courses and the undergraduate and Masters degree programs. In 2015, I wrote the doctoral program self-study report for mathematics education.

April – June, 2019

Making Real World Mathematics Connections in Middle and Upper High School Mathematics Curriculum at Tampa Preparatory School. Tampa, Florida. The researchers are Ruthmae Sears, Sanghoon Park, and Mile Krajcevski. I serve as the lead consultant to review their school mathematics curriculum. The total funded is \$2,000.

August 2017 -2021

Collaborative Research: Attaining Excellence in Secondary Mathematics Clinical Experiences with a Lens on Equity
This NSF-IUSE grant will be led by Dr. Marilyn Strutchens from Auburn University, Dr. Ruthmae Sears from University of South Florida, and Howard Gobstein from the Association of Public and Land-grant Universities (APLU). This project will examine the nature of clinical experiences in 24 universities in the United States with an attention placed on pre-service teachers' equitable implementation of the Mathematics Teaching Practices (MTPs) (National Council of Teachers of Mathematics [NCTM], 2014). The total funded amount is \$1,579,027. The amount allocated for USF is \$379,729.

February 2017

Robert Noyce USF Scholarship Program for Science Majors
This project was funded for \$1,199,843 from 2014 -2019. The principal investigator for the grant is Dr. Allan Feldman. I serve as a co-principal investigator for the grant, along with Dr. Gerry Miesels, Mr. Larry Plank, and Mr. Luanna Prevost. The purpose of the grant is to provide scholarships to 36 students who majors in biology, chemistry, geosciences, mathematics and physics to complete a Masters of Arts in Teaching (MAT) degree with certification in secondary science or mathematics.

January 2017

Using Manipulatives and Calculators to Facilitate Students' Engagement in Middle Grades Mathematics from the University of South Florida Anchin Center- Bank of America Funds
I am the principal investigator (PI) for this project, which was funded for \$2,000. The Co-PIs are: Dr. Kenneth Butler, Ms. Lakesia Dupree, Ms. Nadine Johnson, and Ms. Bridgette Bowles. The project provides professional development training to in-service mathematics teachers, that illustrates how physical manipulatives and technology (i.e. calculators) can be used to facilitate students' engagement with mathematics lessons, and foster active learning.

- June 2016 *Using Improvement Science to Transform STEM curriculum at Carrollwood Day School*
 I am the principal investigator (PI), and Dr. Kenneth Butler is the co-PI for the grant. The solicited grant amount was \$20,000. The project use improvement science research design to transform the STEM curriculum at Carrollwood Day School, by attending to the NCTM (2014) Principles to Action, promoting inquiry-based learning, and cultivating students' engagement with mathematics.
- November 2014 - August 2016 *NASA STEM Education Constellation - Network of Evidence-Based STEM Educator Professional Development*
 This project was funded for \$200,000. The principal investigator for the grant was Dr. Eugenia Vomvoridi-Ivanovic, and I served as the co-principal investigator. The purpose of the grant was to facilitate professional development training using NASA curriculum resources.

Involvement in Grant Related Activities as a Consultant, etc.

- August 2017- 2019** American Association for the Advancement of Science (AAAS) Noyce Summit
 I served as a STEM Education consultant in which I facilitate working group sessions. I also provided summaries of information discussed to the coordinators of the event.
- August 2018- Present** University of Michigan - Geometry, Reasoning, and Instructional Practices
 This research is dedicated to the study and improvement of the teaching of high school geometry. I am a member of various working group supporting geometry teaching and learning.
- January 2016 - Present *University of South Florida Systemic Transformation of Evidence-Based Education Reform (STEER) Grant*
 The STEER project supports faculty in the implementation of evidence-based teaching strategies by providing funding for professional development and supporting students in the STEM career transition from community colleges. I am a member of the Transition Implementation Leadership Team (TILT) in which we provide insights into curriculum reform initiatives.
- August 2012 – 2016 *Helios STEM Middle School Residency Program*
 I assisted with curriculum design and implementation planning for a new middle school certification program.

January 2009 - December 2011 *Comparing Options in Secondary Mathematics: Investigating Curriculum (COSMIC)*

I assisted with data analysis, writing research papers, and conference presentations relative to mathematics teachers' use of time, opportunity to learn in mathematics, and curriculum impact on students learning.

September 2008- May 2009 *Researching Science and Mathematics Teacher Learning in Alternative Certification Model (RESMAR2T)*

I coded data, conducted matrix queries using the NVivo software, wrote profiles of participants, and video recorded classroom visits.

PUBLICATIONS

Refereed Articles Printed, In Press, or Accepted

Males, L., **Sears, R.**, Lawler, B. (2020). *Equity and justice in the preparation of secondary mathematics teachers*. In The Association of Mathematics Teacher Educators (AMTE) Professional edited book series, W. G. Martin, B. R. Lawler, A. E. Lischka, & W.M . Smith (Eds). *Mathematics Teacher Education Partnership The Power of a Networked Improvement Community to Transform Secondary Mathematics Teacher Preparation* . Charlotte, NC: Information Age Publications.

Strutchens, M. E., **Sears, R.** & Zelkowski (2020). *Improving Clinical Experiences for Secondary Mathematics Teacher Candidates*. In The Association of Mathematics Teacher Educators (AMTE) Professional edited book series, W. G. Martin, B. R. Lawler, A. E. Lischka, & W.M . Smith (Eds). *Mathematics Teacher Education Partnership The Power of a Networked Improvement Community to Transform Secondary Mathematics Teacher Preparation* . Charlotte, NC: Information Age Publications.

Strutchens, M.E., Erickson, D., **Sears, R.**, & Zelkowski, J. (2020). *Clinical Experiences for Secondary Mathematics Teacher Candidates*. In The Association of Mathematics Teacher Educators (AMTE) Professional edited book series, W. G. Martin, B. R. Lawler, A. E. Lischka, & W.M . Smith (Eds). *Mathematics Teacher Education Partnership The Power of a Networked Improvement Community to Transform Secondary Mathematics Teacher Preparation* . Charlotte, NC: Information Age Publications.

Grady, M., **Sears, R.**, Stone, J., & Biagetti, S. (2020). *Using co-planning and co-teaching strategies to transform secondary mathematics clinical experiences*. In The Association of Mathematics Teacher Educators (AMTE) Professional edited book series, W. G. Martin, B. R. Lawler, A. E. Lischka, & W.M . Smith (Eds). *Mathematics Teacher Education Partnership The Power of a Networked Improvement Community to Transform Secondary Mathematics Teacher Preparation* . Charlotte, NC: Information Age Publications.

Krajcevski, M., & **Sears, R.** (2019) . *Common visual representations as a source for misconceptions of preservice teachers in a geometry connection course*. *International Journal for Mathematics Teaching and Learning*, 20(1). Available online <https://www.cimt.org.uk/ijmtl/index.php/IJMTL/article/view/189>

- Strutchens, M. E., **Sears, R.**, Whitfield, J., Biagetti, S., Brosnan, P., Oloff-Lewis, J., ... & Conway IV, B. M. (2019). Implementation of Paired Placement and Co-Planning/CoTeaching Field Experience Models Across Multiple Contexts. In *Handbook of Research on Field-Based Teacher Education*(pp. 32-63). IGI Global. DOI: 10.4018/978-1-5225-6249-8.ch002
- Sears, R.**, Kersaint, G., Burgos, F., & Wooten, R. (2018). *Collaborative effort to develop middle school preservice teachers' mathematical knowledge*. PRIMUS. DOI: [10.1080/10511970.2018.1532936](https://doi.org/10.1080/10511970.2018.1532936)
- Sears, R.**, Hopf, F., Torres-Ayala, A., Williams, C. S., Skrzypek, L. (2018). *Using plan-do-study-act (PDSA) cycles and interdisciplinary conversations to transform college algebra*. (PRIMUS). DOI: [10.1080/10511970.2018.1532938](https://doi.org/10.1080/10511970.2018.1532938)
- Sears, R.** (2018). The implications of a pacing guide on the development of students' ability to prove in geometry. *Mathematics Education*. The former name of the journal is the *International Electronic Journal of Mathematics Education (IEJME)*, 13, (2), 1-13 .
- Sears, R.** (2018) Proof schemes of preservice mathematics teachers. *Investigations in Mathematics Learning*. p. 1-17. DOI: [10.1080/19477503.2018.1467106](https://doi.org/10.1080/19477503.2018.1467106)
- Sears, R.**, Butler, K., & Krajcevski, M. (2018). The integration of technology in model eliciting activities to support mathematical reasoning. *Dimensions*, 37(2), p. 16-27.
- VanIngen, S., Peterson, B., Borko, H., **Sears, R.**, & Goffney, I. (2018, Spring). A retrospective look at where we've been and where we might go: The Research Committee reflects upon the Judith Jacob Lectures and the Early Career Award Articles. *Connections – An official AMTE publication for the mathematics teacher education community*. Retrieved from <https://amte.net/connections/2018/03/retrospective-look-where-we%E2%80%99ve-been-and-where-we-might-go>
- Sears, R.**, Brosnan, P., Oloff-Lewis, J., Gainsburg, J., Stone, J., Spencer, C., Riggs, L., Biagetti, S., Cayton, C., Grady, M., Junor-Clarke, P., & Andreason, J. (2017). Using improvement science to transform clinical experiences with co-teaching strategies. *Annual perspectives of mathematics education (APME) 2017: Reflective and collaborative processes to improve mathematics teaching*. (pp. 265-273). NCTM: Reston, VA.
- Butler, K., & **Sears, R.** (2016, Fall). Using toys as manipulatives: Promoting mathematics while motivating children. *Dimensions*, 36(2), 6-13.
- Sears, R.**, & Lane, T. (2016, Winter). Integrating diversity training into doctoral programs in mathematics education. *Transformations*, 1, 37-45.
- Sears, R.**, Tran, T., Lee S. W., & Thomas, A. (2016, Winter). Function concept: Learning from history. *Transformations*, 1, 14-23.
- Sears, R.** (2016). An inherent tension: Students engaging with proof. *MathAMATYC Educator*, 8(1), 36-42.
- Sears, R.**, Karadeniz, I., Butler, K., & Pettey, D. (2015). Are standards for mathematical practice overlooked in geometry textbooks' chapter tests? *Annual perspectives in mathematics education (APME) 2015: Assessment to enhance learning and teaching* (pp. 75-97). NCTM: Reston, VA.
- Hopf, F. **Sears, R.**, Torres, A., & Maher, M. (February, 2015). SMART lab: Opening doors to success in college algebra. *MathAMATYC Educator*, 6(2), 9- 14.
- Sears, R.**, & Chávez, Ó. (2014). Opportunities to engage with proof: The nature of proof tasks in two geometry textbooks and its influence on enacted lessons. *ZDM*, 46(5), 767-780.
- Grouws, D., Tarr, J. E., Chávez, O., **Sears, R.**, Soria, V., & Taylan, R. D. (2013). Curriculum

and implementation effects on high-school students' mathematics learning from curricula representing content organization of two types. *Journal for Research in Mathematics Education*, 44(2), 416-463.

Articles under review

Sears, R. Zelkowski, J., Edwards, B., Waller, P., Conway, B., Oloff-Lewis, J., Junor Clarke, P., Stone, J., & Sabella, L. (Under Review) Facilitating Clinical Experiences Online During a Pandemic: Unpacking Programmatic Efforts, Policies, and Factors that Should be Considered”.

Castro-Minnehan , C., Sabella, L., & **Sears, R.** (Under Review). Remote Collaboration

Zelkowski, J., **Sears, R.**, Junor Clarke, P. (Under Review). New Mathematics Teacher Induction as a Result of COVID-19 Interruptions of Student Teaching.

Sabella, L., **Sears, R.**, & Castro-Minnehan (Under Review). Interrupted Student-Teaching Experiences: 6 Tips to Get to the Finish Line .

Conway, B., Waller, P. & **Sears, R.** (Under Review). Developing Mathematical Conceptual Understanding in the Virtual Space.

Technical Reports

Lubiento, J., & **Sears, R.** (2017). MyLab Math with MyLabsPlus educator study examines Workspace assignment impact in intermediate algebra at University of South Florida. *Pearson Educator Study*. Retrieved from <http://www.pearsoned.com/results/mylab-math-mylabs-plus-educator-study-examines-workspace-assignment-impact-intermediate-algebra-university-south-florida/>

Hopf, F., **Sears, R.**, Torres, A., Maher, M., & McWater, M. (2014). University of South Florida MylabsPlus – emporium model. *Pearson White Paper Report*. Retrieved from http://www.pearsonmylabandmastering.com/northamerica/results/files/U_of_S_F_L.pdf

Sears, R., Hopf, F., Maher, M & Torres, A. (2014). College students' perspectives of the “help me solve this” tool on their learning of mathematics. *Pearson Efficacy Report*. Retrieved from http://www.pearsonmylabandmastering.com/northamerica/results/files/U_of_South_FL_Dec_18.pdf?v1421173237

Web Blogs

- Pinder, C., **Sears, R.**, & Butler, K. (2017). *Workspace: An online assessment that allows intermediate algebra students to show their work*. Retrieved from <http://www.pearsoned.com/workspace-intermediate-algebra-students/>
- Torres, A., **Sears, R.**, Hopf, F., Williams, C. (2017). *The benefits of interdisciplinary conversations in transforming mathematics courses*. Retrieved from <http://www.pearsoned.com/education-blog/conversations-mathematics-student-performance/>
- Sears, R.**, Hopf, F., Torres, A., & Krajevski, M. (2016). *Utilizing MyMathTest to ensure preservice secondary teachers are prepared for state certification exams*. Retrieved from <http://www.pearsoned.com/education-blog/teachers-prepared-certification-exams/>
- Sears, R.**, Hopf, F., Torres, A., & Krajevski, M. (2015). *Math talk that builds understanding: Explain, justify and validate*. Retrieved from <http://www.pearsoned.com/education-blog/math-talk-that-builds-understanding-explain-justify-and-validate/>
- Sears, R.**, Torres, A., Hopf, F., & Krajevski, M. (2015). *Checklist for scaling up a student learning initiative in mathematics*. Retrieved from <http://www.pearsoned.com/education-blog/checklist-for-scaling-up-a-student-learning-initiative-in-mathematics>

Dissertation

- Sears, R. (2012).** *An examination of how teachers use curriculum materials for the teaching of proof in high school geometry*. (Doctoral Dissertation). University of Missouri, Columbia Missouri.

Refereed Proceedings

International

- Sears, R.**, Castro-Minnehan, C., Riggs, L., Junor Clarke, P., Stone, J., Cayton, C., Oloff-Lewis, J., Grady, M., Brosnan, P., & Strutchens, M. (2020, July 11-20). Preservice teachers and collaborating teachers' perspectives of using co-planning and co-teaching during clinical experiences in secondary mathematics. [Paper]. 14th international Congress on Mathematical Education (ICME-14). Beijing, China.
- Sears, R.**, Strutchens, M., Lawler, B., Dupree, L., Pinder, C., Castro-Minnehan, C. (2020, July 11-20). Secondary mathematics preservice teachers perspective of means to facilitate equitable learning opportunities. [Paper]. 14th international Congress on Mathematical Education (ICME-14). Beijing, China.
- Kersaint, G., & **Sears, R.** (2016, July 24-31). Partnership to design a middle school mathematics teacher preparation program with extensive clinical experiences. [Poster]. *13th International Congress on Mathematical Education* (ICME-13). Hamburg, Germany.
- Sears, R.**, Brosnan, P., Grady, M., Cayton, C., Oloff-Lewis, J., Biagetti, S., Stone, J., Andreasen, J., Maynor, J., Hollebrands, K., Spencer, C., Riggs, L., & Gainsburg, J. (July 24-31, 2016). *A collaborative effort to examine co-planning and co-teaching during clinical experiences*. [Research report]. *13th International Congress on Mathematical Education* (ICME-13). Hamburg, Germany.

- Sears, R., & Chavez, O.** (2015, February, 4-8). Students of two-curriculum types performance on a proof for congruent triangles. *Proceedings of the Ninth Congress of European Research in Mathematics Education (CERME 9)*. Prague, Czech Republic.
- Karadeniz, I., **Sears, R.**, & Colak, A. (2013, February 4-10). The effect of Google Sketch Up on elementary pre-service teachers attitude towards using technology in mathematics. [Poster]. *Proceedings of the Eight Congress of European Research in Mathematics Education (CERME 8)*. Antalya, Turkey.
- Sears, R.** (2013, February 5-10). A case study of the enactment of proof tasks in high school geometry. *Proceedings of the Eighth Congress of European Research in Mathematics Education (CERME 8)*. Antalya, Turkey.
- Sears, R.**, Mueller-Hill, E., & Karadeniz, I. (2013, November 5-8). Preservice teachers' perception of their preparation program to cultivate their ability to teach proof. *Proceedings of the First Congress on Mathematics Education for Central America and the Caribbean (I CEMACYC)*. Santo Domingo, Dominican Republic.
- Grouws, D., Tarr, J. E., Chávez, O., **Sears, R.**, Soria, V., & Taylan, R. D. (2012, April 13-17) Curriculum and implementation effects on high-school students' mathematics learning from two curricula content organizations. *Proceedings of the American Educational Research Association Annual Meeting*. Vancouver, British Columbia.
- Sears, R.** (2012, July 8-15). The impact of subject-specific curriculum materials on the teaching of proof and proof schemes in high school geometry classrooms. *Proceedings of the Twelfth International Congress on Mathematical Education (ICME-12)*. Seoul, Korea.

National

- Sears, R. & Castro-Minnehan, C.** (2019, June 23-26). *Using Co-Teaching to Develop Classroom Mathematical Discourse During Clinical Experiences*. Mathematics Teacher Educator Partnership, MTEP 2019, St. Louis, MO.
- Sears, R.**, Weiland, T., Lawler, B. R. (2019, June 23-26). *Equity and Social Justice Working Group*. Mathematics Teacher Educator Partnership, MTEP 2019, St. Louis, MO.
- Strutchens, M., **Sears, R.**, Zelkowski, J., Edwards, B., Conway, B., & Mangram, C. (2019, June 23-26). *Clinical Experiences*. Mathematics Teacher Educator Partnership, MTEP 2019, St. Louis, MO.
- Sears, R.**, Grady, M., Cayton, C., Bronson, P., Ahmad, S., Castro-Minnehan, C., (2018, June 25– 27). *Implications of a Co-Planning and Co-Teaching Professional Development Training for Preservice Teachers and Collaborating Teachers*. Mathematics Teacher Educator Partnership, MTEP 2018, Denver, CO.
- Sears, R.** (2018, June 25-27). Insights and reflections on efforts to launch transformative effort (*invited panelist). Mathematics Teacher Educator Partnership, MTEP 2018, Denver, CO.
- Sears, R.**, Potter, R., & Meisels, G. (2018, June 6-8). Teamwork makes the dream work: Systemic transformation of education through evidence-based reforms . Presentation at the SMTI/ NSEC meeting. Columbus Ohio.
- Krajcevski, M., & **Sears, R.** (2018, June 13-15). Common Visual Representations as a Source for Misconceptions in Geometry Connection Course. Presentation at the Geometry for Secondary Teacher Conference .University of Michigan, Ann Arbor Michigan.
- *Ruthmae Sears also received a \$250 scholarship award.

- Cayton, C., Grady, M., Preston, R. V., **Sears, R.**, Oloff-Lewis, J., & Brosnan, P. (2017, October 5-8). Improving preservice secondary mathematics clinical experiences through co-planning and co-teaching. Working group sessions at the International Group for the Psychology of Mathematics Education (PME) – North American Chapter. Indianapolis, IN.
- Ellis, M., Strutchens, M. & **Sears, R.** (2017, June 26-27). Focusing on Equity with the MCOP2 indicators. *Proceedings in the APLU - Mathematics Teacher Education Partnership*. New Orleans, LA.
- Brosnan, P., & **Sears, R.** (2017, June 27-28). Co-planning and co-teaching from preservice teachers to in-service teachers. *Proceedings of the APLU- Mathematics Teacher Education Partnership Meeting*. New Orleans, LA.
- Junor-Clarke, P., & **Sears, R.** (2017, June 27-28). Transforming internship thinking: Using improvement science to enhance co-teaching for student teaching. *Proceedings of the APLU- Mathematics Teacher Education Partnership Meeting*. New Orleans, LA.
- Sears, R., Potter, R., Meisels, G., & Raley, V. (2017, June 25). “STEER”ing the Systematic Approach to Improve Learning: A Hillsborough Community College- University of South Florida Partnership. *Proceeding of the Accelerating Systemic Change in STEM Higher Education (ASCN) / Science and Mathematics Teacher Imperative (SMTI) Annual Meeting*. New Orleans, LA.
- Sears, R.**, Lewis, J., Raley, V., Meisels, G., & Potter, R. (2017, June 23). On the road to culture change: Making evidence based teaching the norm in STEM at a research 1 university. [Poster]. *Proceedings of the APLU - Science and Mathematics Teacher Imperative (SMTI) Annual Meeting*. New Orleans, LA.
- Sears, R.**, Brosnan, P., Oloff-Lewis, J., Gainsburg, Stone, J., Biagetti, S., Cayton, C., Grady, M., Spencer, C., Riggs, L., & Junor-Clarke, P. (2017, January 3-7). Co-teaching mathematics: A shift in paradigm to promote student success. *Proceedings of the 15th Annual Hawaii International Conference on Education*. Honolulu, HI.
- Sears, R.**, Butler, K., Hopf, F., & Skrzypek, L. (2017, January 3-7). Transforming secondary mathematics curriculum to promote interdisciplinary STEM concepts. *Proceedings of the 15th Annual Hawaii International Conference in Education*. Honolulu, HI.
- Brosnan, P., & **Sears, R.** (2016, June 26-28). Using improvement science to increase mathematical learning through co-planning and co-teaching. *Proceedings of the APLU- Mathematics Teacher Education Partnership Meeting*. Atlanta, GA.
- Chavez, O., & **Sears, R.** (2016, October 20-22). Formal and informal proofs in secondary geometry. *Proceedings of the School Science and Mathematics Association (SSMA) Annual Meeting*. Phoenix, AZ.
- Iiams, I., **Sears, R.**, Ellis, M., & Strutchens, M. (2016, June 26-28). A deeper dive into plan-do-study-act cycles and measures. *Proceedings of the APLU- Mathematics Teacher Education Partnership Meeting*. Atlanta, GA.
- Sears, R.**, Secada, W., Cohen, M., & Roderick, A. (2016, June 20-22). Preparing current and prospective teachers for STEM teaching and learning opportunities of the future: A twenty-year projection. *Proceedings of the AAAS Working Group Meeting on Identifying a Research Agenda for Preservice STEM Teacher Education*. Washington, D.C.
- Strutchens, M., Iiams, M., & **Sears, R.** (2016, June 26 -28). Clinical experiences research action cluster: MTEP conference report. *Proceedings of the APLU - Mathematics Teacher Education Partnership Meeting*. Atlanta, GA.

- Butler, K., & Sears, R. (2015, February 26-28). Technology in intermediate algebra: Effects on anxiety and opportunity to learn. *Proceedings of the Research Council for Mathematics Learning (RCML)*. Las Vegas, NV.
- Krajcevski, M., & Sears, R. (2015, October, 23-24). Pre-service teachers' misconceptions about visual representations of altitude, median and angle bisector of a triangle. *Fall Western Sectional Meeting of American Mathematical Society (AMS)*. Fullerton, CA.
- Sears, R., & Kersaint, G. (2014, June 4). The transformation of middle school STEM teacher preparation program: A collaborative design. [Poster]. *APLU - Science and Mathematics Teacher Imperative (SMTI) National Conference*. Milwaukee, WI.
- Sears, R., & Chavez, O. (2013, April 27-May 1). Comparative analysis of task features and levels of cognitive demand of proofs in geometry textbooks. *Proceedings of the American Educational Research Association (AERA) Annual Meeting*. San Francisco, CA.
- Sears, R. (2011, October 20-23). An examination of preservice mathematics teachers' proof schemes. *Proceedings of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Reno, NV.
- Grouws, D., Tarr, J., Sears, R., & Ross, D. (2010, January 7-11). Mathematics teachers' use of instructional time and relationships to textbook organization and class period format. [Poster]. *Proceedings of the Hawaii International Conference for Education*. Honolulu, HI.
- McNaught, M., Tarr, J., & Sears, R. (2010, April 29-May 5). Conceptualizing and measuring "fidelity of implementation" of secondary mathematics textbooks: Results of a 3-year study of curriculum implementation. *Proceedings of the American Educational Research Association (AERA) Annual Meeting*. Denver, CO.
- Sears, R., Taylan, R. D., & Tarr, J. (2010, October 28-31). Associations between secondary mathematics teachers' beliefs, background characteristics, and dimensions of curriculum implementation [Poster]. *Proceedings of the North American Chapter of the International Group for the Psychology of Mathematics Education Annual Meeting*. Columbus, OH.
- Tarr, J., Ross, D., McNaught, M., Chavez, O., Grouws, D., Reys, R., Sears, R., & Taylan, R. D. (2010, April 29-May 5). Identification of student-and-teacher level variables in modeling variation of mathematics achievement data. *Proceedings of the American Educational Research Association (AERA) Annual Meeting*. Denver, CO.

Newspaper Articles

- Sears, R. (2012, August 15). BGCSE National Average: An Illusion. *The Nassau Guardian*. Nassau, Bahamas.
- Sears, R. (2012, August 16). BGCSE National Average: An Illusion. *The Freeport News*. Nassau, Bahamas.
- Sears, R. (2012, August 28). BGCSE National Average: An Illusion. *The Tribune*. Nassau, Bahamas.

WORKSHOPS AND PRESENTATIONS

International

- Sears, R., & Pinder, C.** (2020, May 26). *Attending to Equity in Mathematics During a Pandemic: Supporting Inclusion, Access, Fairness and Respect for All*. Invited Speaker for The Global Mathematics Project.
- Sears, R.** (2018, September 9). Importance of Literacy in Achieving my Academic Goals. Presentation via Facebook Live to students in Acklins Central High School. Acklins, Bahamas.
- Sears, R.** (2013, May 3). *Education for all: Using differentiated instruction and effective questioning strategies to facilitate learning*. Presentation via Skype at the Crooked Island High School Teachers' Professional Development Training. Crooked Island, Bahamas.

National

- Strutchens, M.E., **Sears, R.**, Zelkowski, J., Mangram, C., & Conway, B. (2020, February 7). *Collaborating to Improve Clinical Experiences for Secondary Mathematics Teacher Candidates*. Presentation at the Association of Mathematics Teacher Educators Conference. Phoenix, AZ.
- Sears, R.**, Dupree, L., & Castro-Minnehan. (2020, February 6). Secondary mathematics teacher candidates' perspectives about strategies that can support equitable learning opportunities. Presentation at the Association of Mathematics Teacher Educators Conference. Phoenix, AZ.
- Sears, R.**, Pinder, C., & Castro-Minnehan, C. (2020, April 1-4). Two heads are better than one: Using co-teaching to support equity in secondary mathematics. Presentation at the National Council of Teachers of Mathematics annual meeting (centennial). Chicago, IL.
- Sears, R.**, Potter, R., Meisels, G., & Schuler, K. (2019, November 8). *Using Professional Development to Support STEM Laboratory Teaching Assistants*. Presentation at AAC&U Transforming STEM Higher Education. Chicago, IL.
- Sears, R.**, & Potter, R. (2019, May 30-June 1). *Supporting STEM Lab Teaching Assistants Enactment of an Effective Operational Curriculum via Year-Long Professional Development Initiative*. Poster at Network of STEM Education Center. Omaha, NE.
- Sears, R.**, Potter, R., Meisels, G. (2019, May 30-June 1). *Utilizing Effective Features of Professional Development to Support STEM Lab Teaching Assistants to Exhibit Good Teaching Practices*. Network of STEM Education Center. Omaha, NE.
- Strutchens, M., **Sears, R.**, & Zelkowski, J. (2019, May 2). Clinical experience research action cluster. Presentation for the MTE-Partnership Webinar Series via <http://mtep.info/zoom>.
- Sears, R.** (2019, May 6-8) Participate in The American Association for the Advancement of Science (AAAS) working group meeting focused on STEM teacher retention in high-need schools. Washington DC.
- Sears, R.** (2019, April 7-9). *Improving Research on Mathematics Teachers and Teaching: Discussions of Measures and Methods*. Session Chair for American Educational Research Association (AERA) - SIG Research in Mathematics Education. Toronto, Canada.

- Sears, R., & Pinder, C.** (2019, April 4). *Attending to Equity in Mathematics: Policies, Practices and Belief Systems*. Presented at the National Council of Teachers of Mathematics (NCTM) Annual Meeting. San Diego, California.
- Sears, R., Oloff-Lewis, J., Riggs, L., Brosnan, P., Grady, M., & Stone, J.** (2019, February 7-9). *Attending to equity in clinical experiences via co-planning and co-teaching strategies*. Presentation at the annual meeting for the Association of Mathematics Teacher Educators. Orlando, FL.
- Strutchens, M., & Sears, R.** (2019, January 11). Attaining excellence in secondary mathematics clinical experiences with a lens on equity. Presentation at the Joint Mathematics Meetings for MAA and AMS. Baltimore, MD.
- Sears, R. & Junor -Clarke, P.** (2018, November 7-10). Attending to equity in secondary mathematics using co-planning and co-teaching strategies. Presented at *AAC&U 2018 Transforming STEM Education Conference*. Atlanta, GA.
- Sears, R. & Hopf, F.** (2018, November 7-10). Strategies to Motivate Students and Facilitate Learning in Online College Algebra. Presented at *AAC&U 2018 Transforming STEM Education Conference*. Atlanta, GA.
- Castro, C., Pinder, C., & Sears, R.** (2018, October 10-13). *Co-planning and Co-teaching Strategies in Secondary Mathematics Classrooms*. Presentation at the Florida Council of Teachers of Mathematics Annual Meeting. Daytona Beach, Florida.
- Pinder, C., & Sears, R.** (2018, October 10-13). Embracing Students' Mathematical Identities in the Teaching and Learning of Mathematics. Presentation at the *Florida Council of Teachers of Mathematics Annual Meeting*. Daytona Beach, Florida.
- Sears, R., & Kamlue, N.** (2018, October 10-13). Using Problem Based Learning to Promote Student Success in Secondary Mathematics. Presentation at the *Florida Council of Teachers of Mathematics Annual Meeting*. Daytona Beach, Florida.
- Sears, R.** (2018, June 25-27). Insights and reflections on efforts to launch transformative effort (*invited panelist). *Mathematics Teacher Educator Partnership, MTEP 2018*, Denver, CO.
- Sears, R., Potter, R., & Meisels, G.** (2018, June 6-8). Teamwork makes the dream work: Systemic transformation of education through evidence-based reforms. Presentation at the *SMTI/ NSEC meeting*. Columbus Ohio.
- Krajcevski, M., & Sears, R.** (2018, June 13-15). Common Visual Representations as a Source for Misconceptions in Geometry Connection Course. Presentation at the *Geometry for Secondary Teacher Conference*. University of Michigan, Ann Arbor Michigan.
*Ruthmae Sears also received a \$250 scholarship award.
- Potter, R. & Sears, R.** (2018, August 14-18). "STEERING" the Course to Promote Effective Teaching Practices within STEM Laboratories. Presented at the University of South Florida, Tampa Florida.
- Potter, R. & Sears, R.** (2018, October 19). STEM Lab TA Follow Up Workshop. Presented at the University of South Florida, Tampa Florida.
- Sears, R., & Meisels, G.** (2018, February 1). Top 10 things to consider when promoting student success in STEM fields. Presentation at the *Sunshine State Conference*. St. Petersburg, FL.
- Strutchens, M., & Sears, R.** (2018, January 11). Collaborative Research: Attaining Excellence in Secondary Mathematics Clinical Experiences with a Lens on Equity. Presented at the Joint Mathematics Meetings for MAA and AMS. San Diego, CA.

- Sears, R., & Pinder, C.** (2017, November 9-12). *Using Workspace to Unpack Students' Math Errors and Promote Reasoning*. Presentation at the AMATYC Annual Conference. San Diego, CA.
- Sears, R., & Pinder, C.** (2017, April 17). Using MyLabsPlus Workspace to unpack students' mathematical errors and to develop reasoning skills. Webinar for Pearson Higher Education. Retrieved from <http://www.brainshark.com/pearsonschool/vu?pi=zGUzP5yazMmpAz0&nodesktopflash=1>
- Dupree, L., & Sears, R.** (2017, April 5-8). *The hidden treasures in student misconceptions*. Presentation at the National Council of Teachers of Mathematics (NCTM) Annual Meeting. San Antonio, TX.
- Hopf, F., Sears, R., Torres, A., & Williams, C.** (2017, March, 9-12). *Does mastery learning for online college algebra students enhance students' performance*. Presentation at the 29th International Conference on Technology in Collegiate Mathematics. Chicago, IL.
- Oloff, J., Sears, R., Junor Clarke, P., Brosnan, P., Riggs, L., Grady, M., Biagetti, S., Stone, J., Gainsburg, J., Spencer, C., Andreason, J., Cayton, C., & Cheng, I.** (2017, February 9-11). *Measuring co-teaching during clinical experiences*. Presentation at the Association of Mathematics Teacher Education (AMTE) Annual Meeting. Orlando, FL.
- Sears, R., & Dupree, L.** (2017, February 9-11). *Using students' misconceptions as a source for rich mathematical discourse*. Presentation at the Association of Mathematics Teacher Education (AMTE) Annual Meeting. Orlando, FL.
- Sears, R., Hopf, F., & Butler, K.** (2017, January 4-7). *Developing intermediate algebra students' mathematical communications via Workspace assignments in MyLabsPlus*. Presentation at the Joint Mathematics Meetings for American Mathematical Society (AMS) and Mathematical Association of America (MAA). Atlanta, GA.
- Sears, R., Hopf, F., Torres-Ayala, A., & Williams, C.** (2017, March 9-12). *Using plan-do-study-act cycles to transform introductory mathematics courses*. Presentation at the 28th International Conference on Technology in Collegiate Mathematics. Chicago, IL.
- Torres-Ayala, A., Williams, C., Sears, R., & Hopf, F.** (2017, March 9-12). *Let's talk: The benefits of interdisciplinary conversations in transforming math courses*. Presentation at the 29th International Conference on Technology in Collegiate Mathematics. Chicago, IL.
- Wieman, R., Bieda, K., Buchbinder, O., Cook, A., Males, L., McAneny, T., & Sears, R.** (2017, February 9-11). *Technique and purpose: Separating and integrating doing and thinking in representations of practice*. Presentation at the Association of Mathematics Teacher Education (AMTE) Annual Meeting. Orlando, FL.
- Sears, R., & Burgos, F.** (2016, June 26-28). *Developing middle school preservice teachers' knowledge of number and operations*. Presentation at the APLU- Mathematics Teacher Education Partnership Annual Meeting. Atlanta, GA.
- Sears, R., & Burgos, F.** (2016, June 8-9). *A collaborative effort to develop middle school preservice teachers mathematical content knowledge*. Presentation at the APLU- Science and Mathematics Teacher Imperative Annual Meeting. San Antonio, TX.
- Sears, R., & Burgos, F.** (2016, January). *Collaborative effort to address the Common Core State Standards for Mathematics in a middle school mathematics teacher certification program*. Presentation at the American Mathematical Society (AMS) and the Mathematical Association of America (MAA) Joint Mathematics Meeting. Seattle, WA.

- Sears, R., Grady, M., Cayton, C., Brosnan, P., Sinicrope, R., Preston, R., & Strutchens, M. (October 27-29, 2016). *Transforming clinical experiences for secondary mathematics with co-teaching strategies*. Presentation at the National Conference on Co-Teaching and Collaboration. Bloomington, MN.
- Sears, R., Hopf, F., & Torres-Ayala, A. (2016, March 10-13). *Developing preservice teachers mathematical content knowledge with MyMathTest*. Presentation at the 28th International Conference on Technology in Collegiate Mathematics. Atlanta, GA.
- Sears, R., Oloff-Lewis, J., Biagetti, S., Brosnan, P., Stone, J., Grady, M., Cayton, C., Andreason, J., Gainsburg, J., Spencer, C., Riggs, L., Junor-Clarke, P., & Cheng, I. (2016, October 27-29). *Measuring co-teaching at various stages of a plan-do-study-act cycle*. Presentation at the National Conference on Co-Teaching and Collaboration. Bloomington, MN.
- Torres-Ayala, A., Sears, R., & Hopf, F. (2016, March 10-13). *Multiple testing opportunities in college algebra: Does it promote student success?* Presentation at the 28th International Conference on Technology in Collegiate Mathematics. Atlanta, GA.
- Sears, R. (2015, June 3-4). *Ensuring preservice secondary teachers are prepared for state certification exams*. Presentation at the APLU Science and Mathematics Teacher Imperative (SMTI) National Conference. New Orleans, LA.
- Sears, R., Burgos, F., & Wooten, R. (2015, January 12). *Collaborative effort to address content and practice standards in a middle school mathematics teacher preparation program*. Presentation at the American Mathematical Society (AMS) and the Mathematical Association of America (MAA) Joint Mathematics Meeting. San Antonio, TX.
- Sears, R., Hopf, F., & Torres-Ayala, A. (2015, March 12-15). *College Algebra students' perspective of the SMART Lab learning environment*. Presentation at the 27th International Conference on Technology in Collegiate Mathematics. Las Vegas, NV.
- Chavez, O., & Sears, R. (2015, January 12). *Informal and formal proofs in geometry: Evidence from a large-scale curriculum comparison study*. Presentation at the American Mathematical Society (AMS) and the Mathematical Association of America (MAA) Joint Mathematics Meeting. San Antonio, TX.
- Hopf, F., & Sears, R. (2015, March 12-15). *Enhancing college algebra with team-based activities*. Presentation at the 27th International Conference on Technology in Collegiate Mathematics. Las Vegas, NV.
- Hopf, F., Sears, R., Torres, A. & Maher, M. (2014, March 20-23). *"Help me solve this" does it? - Implications of an online tool on student learning*. Presentation at the 26th International Conference on Technology in Collegiate Mathematics. San Antonio, TX.
- Kersaint, G., Sears, R., Vomvoridi, E., & Krajcevski, M. (2014, February 6-8). *Partnership to design a middle school mathematics teacher preparation program from the ground up*. Presentation at the 18th American Association of Mathematics Teacher Educators (AMTE) Annual Meeting. Irvine, CA.
- Kersaint, G. & Sears, R. (2014, June 7). *The Transformation of Middle School STEM Teacher Preparation Program: A Collaborative Design*. Presentation at the APLU - Mathematics Teacher Education Partnership. Milwaukee WI.
- Kersaint, G., & Sears, R. (2013, June 7-9). *A collaborative effort to develop a middle school mathematics teacher preparation program*. Presentation at the APLU- Mathematics Teacher Education Partnership Conference. St. Louis, MO.
- Sears, R. (2013, June 13-15). *Increasing high school students' opportunities to engage in proofs: Addressing shortcomings of textbooks*. Presentation at the R. L. Moore Legacy

- and Inquiry Based Learning conference. Austin, TX. Retrieved from <http://www.youtube.com/watch?v=XUAIKfY8WAw>
- Sears, R., & Kersaint, G.** (2013, October 4-6). *Cultivating relationships between mathematicians and mathematics teacher educators*. Invited Speakers for the AMS Special Sessions Meeting. Louisville, KY.
- Sears, R., & Tran, D.** (2012, April 25-28). *Move to improve: Using GSP animations in the geometry classroom*. Presentation at the National Council of Teachers of Mathematics (NCTM) National Conference and Exposition. Philadelphia, PA.
- Sears, R.** (2011, October 20-23). *An examination of preservice mathematics teachers' proof schemes*. Presentation at the North American Chapter of the International Group for the Psychology of Mathematics Education. Reno, NV.
- Grouws, D., Chavez, O., Tarr, J., Reys, R., McNaught, M., Ross, D., **Sears, R.**, & Papick, I. (2010, April 19-21). *Design recommendation for improving research on curricular effectiveness*. Presentation at the Research Pre-session for the National Council of Teachers of Mathematics (NCTM). San Diego, CA.
- Grouws, D., Tarr, J., Chavez, O., Reys, R., McNaught, M., Ross, D., **Sears, R.**, & Taylan, R. D. (2010, April 29-May 5). *Researching curricular effectiveness: Insights from a 3-year longitudinal study of the impact of secondary-school mathematics curricula*. Presentation at the American Educational Research Association (AERA) Annual Meeting. Denver, CO.
- Grouws, D., Tarr, J., **Sears, R.**, & Ross, D. (2010, January 7-11). *Mathematics teachers' use of instructional time and relationships to textbook organization and class period format*. [Poster]. Presentation at the Hawaii International Conference for Education, Honolulu, HI.
- McNaught, M., Tarr, J., **Sears, R.** (2010, April 29-May 5). *Conceptualizing and measuring "fidelity of implementation" of secondary mathematics textbooks: Results of a 3-year study of curriculum implementation*. Presentation at the Annual Conference of the American Educational Research Association (AERA) Annual Meeting. Denver, CO.

State and Regional

- Sears, R. (2020, September 30-October 2, 2020)** *Unpacking the complexities of facilitating secondary mathematics clinical experiences in an online setting: Policies, Practices, and Challenges*. Invited speaker for the Florida Distance Learning Association, and Florida Association of Mathematics Teacher Educators.
- Sears, R., & Pinder, C.** (2019, November 21). *Mirror, Mirror on the Wall*. Presentation at the Great American Teach-in at Sulphur Springs K-8 Community School. Tampa, FL.
- Sears, R.** (2019, September 14). *Instructional Pairs Training for Clinical Experiences in Secondary Mathematics - with Attention to Equity*. Professional Development at USF. Tampa Florida.
- Sears, R. & Beneteau, C.** (2019, February 15). *Interactive classroom engagement strategies*. Presentation at USF STEM Education Workshop. Tampa, FL.
- Sears, R., Castro-Minnehan, C.** (2019, January 30-February 1). *Promoting Equitable Learning Opportunities in Mathematics via Co-planning and Co-teaching Strategies*. Presentation at the joint meeting of the Florida Distance Learning Association (FDLA) and Florida Association of Mathematics Teacher Educators (FAMTE). Altamonte Springs, FL.

- Castro, C., Pinder, C., & **Sears, R.** (2018, October 10-13). *Co-planning and Co-teaching Strategies in Secondary Mathematics Classrooms*. Presentation at the Florida Council of Teachers of Mathematics Annual Meeting. Daytona Beach, Florida.
- Pinder, C., & **Sears, R.** (2018, October 10-13). Embracing Students' Mathematical Identities in the Teaching and Learning of Mathematics. Presentation at the Florida Council of Teachers of Mathematics Annual Meeting. Daytona Beach, Florida.
- Sears, R.**, & Kamlue, N. (2018, October 10-13). Using Problem Based Learning to Promote Student Success in Secondary Mathematics. Presentation at the Florida Council of Teachers of Mathematics Annual Meeting. Daytona Beach, Florida.
- Potter, R. & **Sears, R.** (2018, August 14-18). "STEERING" the Course to Promote Effective Teaching Practices within STEM Laboratories. University of South Florida, Tampa Florida.
- Sears, R.** (2017, October 20). *Conceptualization of an interdisciplinary STEM curriculum: Core tenets, affordances and complexities*. Invited Speaker at The University of Miami. Coral Gables, FL.
- Sears, R.**, Dupree, L., & Pinder, C. (2017, October 18-20) *Culturally responsive teaching: Cultivating learning for each and every student*. Presentation at the National Council of Teachers of Mathematics (NCTM) Regional Meeting. Orlando, FL.
- Sears, R.**, & Pinder, C. (2017, September 13-15). *Using MyLabsPlus Workspace to Unpack Students' Mathematical Thinking*. Presentation at the Florida Association of Mathematics Teacher Educators (FAMTE) and Florida Distance Learning Association. Altamonte Springs, FL.
- Sears, R.**, Butler, K., Pinder, C., Hopf, F., Torres, A., & Williams, C. (2017, February 24). *Using workspace assignments in MyLabsPlus to develop intermediate algebra students' mathematical communications*. Invited Presentation at the Pearson Sunshine Symposium. Orlando, FL.
- Cayton, C., Grady, M., Brosnan, P., & **Sears, R.** (2016, July 22). *Co-teaching and co-planning a paradigm shift*. Presentation at a Professional Development Training for Helios Middle School Program at the University of South Florida. Tampa, FL.
- Sears, R.** (2016, November 18). *Diversity in STEM Education*. Invited speaker at Brooks DeBartolo Collegiate High School Great American Teach-In. Tampa, FL.
- Sears, R.** (2016, November 17). *In pursuit of excellence: Make every moment count*. Invited speaker at Young Middle Magnet School Great American Teach-In. Tampa, FL.
- Sears, R.** (2016, October 13). *Diversity in STEM Education*. Presentation at the University of South Florida STEM Education Summit. Tampa, FL.
- Sears, R.** (2016, September 25-27). *Developing preservice teachers' mathematical content knowledge with MyMathTest*. Presentation at the Florida Association of Mathematics Teacher Educators (FAMTE) / Florida Distance Learning Association (FDLA) Annual Meeting. Altamonte Springs, FL.
- Sears, R.** (2016, April 15). *Discovery math: Increasing student engagement through real world mathematical investigations*. Presentation at a Professional Development Training at Brooks DeBartolo Collegiate High School. Tampa, FL.
- Sears, R.** (2016, January, 20). *Using National Aeronautics and Space Administration (NASA) tasks to promote inquiry and interdisciplinary initiatives*. Invited Speaker at the University of South Florida National Science Teachers Association. Tampa, FL.

- Sears, R., Bassila, A., & Butler, K.** (2016, July 26). *Using NASA resources to promote inquiry based learning*. Presentation at the Florida Association for Career and Teacher Education (FACTE) Annual Meeting. Buena Vista, FL.
- Sears, R., & Butler, K.** (2016, October 20-22). *Transforming secondary education with improvement science plan-do-study-act (PDSA) cycles*. Presentation at the Florida Council of Teachers of Mathematics (FCTM) Annual Meeting. Orlando, FL.
- Morales, L., & Sears, R.** (2015, Oct 15-17). *Soaring with NASA space math: Taking the mathematics beyond lower earth orbit*. Presentation at the Florida Council of Teaching Mathematics (FCTM) Annual Meeting. Orlando, FL.
- Sears, R.** (2015, September 30). *Combating the challenges of having students engage in reasoning and proof activities*. Invited Speaker at the University of Tampa Lecture Series. Tampa FL.
- Sears, R.** (2015, November 20). *Top 10 reasons why teaching mathematics rocks!*. Invited speaker at the Great American Teach-In at Brooks-DeBartolo Collegiate High School. Tampa, FL.
- Sears, R.** (2015, August 1). *Cultivating STEM education with NASA educational resources: Climate change*. Retrieved from <https://www.youtube.com/watch?v=X7tT853Ru8E>
- Sears, R.** (2015, August 1). *Cultivating STEM education with NASA educational resources: Rockets and nix moon*. Retrieved from <https://www.youtube.com/watch?v=MZW2WNv9XAk>
- Sears, R., Vomvoridi- Ivanovic, E., & Muller- Karger, F.** (2015, August, 17). *Using NASA educational resources to promote STEM education*. Presentation at the University of South Florida NASA STEM Education Professional Development Training. Tampa, FL.
- Butler, K. & Sears, R.** (2014, October 23-24). *The play phenomenon: Transforming mathematical classroom with toys*. Presentation at the Florida Council of Teachers of Mathematics (FCTM) Annual Meeting. Palm Harbor, FL.
- Hopf, F., & Sears, R.** (2014, March 6). *Flipping the classroom in upper level math with EWA*. Webinar for Cengage Publishing. Retrieved from http://www.cengage.com/tlconnect/client/discipline/archived_online_seminars.do?disciplineId=54
- Sears, R.** (2014, February 18). *Modifying mathematics tasks to increase students engaging in reasoning and proof*. Invited speaker for Brevard County Secondary Programs. Viera, FL.
- Sears, R., Karadeniz, I., Butler, K.** (2014, October 24) *Assessing the Standards for Mathematical Practice in high school geometry*. Presentation at the Florida Council of Teachers of Mathematics (FCTM). Palm Harbor, FL.
- Smith, S., Sears, R. & Karadeniz, I.** (2014, October 23). *Let's play: A showcase of online games to promote mathematical learning*. Presentation at the Florida Council of Teachers of Mathematics (FCTM). Palm Harbor, FL.
- Butler, K., & Sears, R.** (2013, October 16-18). *Identifying and remediating mathematical and computer anxiety when using MyMathlab in an algebra course*. Presentation at the Florida Council of Teachers of Mathematics (FCTM) Annual Meeting. Orlando, FL.
- Hopf, F. & Sears R.** (2013, October 24). *Flipping the classroom with EWA*. Webinar for Cengage Learning. Retrieved from <https://cengage.webex.com/cengage/ldr.php?AT=pb&SP=MC&rID=71874817&rKey=b3cd17d9940d6ec1>

- Hopf, F., & **Sears, R.** (2013, November 19). *USF SMART lab: An example of flipping the classroom using good practices*. Presentation at the University of South Florida Academy for Teaching and Learning Excellence (ATLE) Workshop. Tampa, FL.
- Hopf, F., **Sears, R.**, Torres, A. & Maher, M. (2013, October 16-18). *SMART lab: Providing opportunities for students to achieve success in mathematics*. Presentation at the Florida Council of Teachers of Mathematics Annual Meeting. Orlando, FL.
- Karadeniz, I., & **Sears, R.** (2013, October 16-18). *Transform the teaching and learning of science, technology and mathematics (STEM) using Google Sketch Up*. Presentation at the Florida Council of Teachers of Mathematics Annual Meeting. Orlando, FL.
- Sears, R.** (2013, October 16-18). *Increasing students' opportunities to engage in reasoning and proof in high school mathematics classroom*. Presentation at the Florida Council of Teachers of Mathematics Annual Meeting. Orlando, FL.
- Sears, R.** (2012, November 16). *Combating the challenges of enacting proof tasks*. Presentation at the University of South Florida Mathematics Education Colloquium. Tampa, FL.
- Sears, R.** (2012, October 18-20). *Proofs in geometry textbooks: Task features and levels of cognitive demand*. Presentation at the Florida Council of Teachers of Mathematics (FCTM) Annual Meeting. Orlando, FL.
- Sears, R.** (2011, October 26-28). *What does it take to make a convincing proof argument?* Presentation at the National Council of Teachers of Mathematics (NCTM) Regional Conference and Exposition. St. Louis, MO.
- Tran, D., Spain, V., & **Sears, R.** (2011, December 2-3). *Mathematics manipulatives: Learning through play*. Presentation at the Missouri Council of Teachers of Mathematics (MCTM) Annual Meeting. Columbia, MO.
- Sears, R.**, Tran, D., Thomas, A., & Taylan, R. D. (2010, December 3-4). *From chalk-talk to tech-talk: Let's transform*. Presentation at the Missouri Council of Teachers of Mathematics (MCTM) Annual Meeting. Columbia, MO.
- Sears, R.**, Tarr, J., & Ross, D. (2010, February 5). *But what about teacher beliefs? Making sense of self-report data by mathematics teachers of two curriculum types*. Presentation at the University of Missouri Mathematics-Science Education Research Colloquium. Columbia, MO.
- Chavez, O., **Sears, R.**, & Cumming, L. (2009, December 4-5). *Making abstract mathematics concrete with Geogebra*. Presentation at the Missouri Council of Teachers of Mathematics (MCTM) Annual Meeting. Columbia, MO.
- Sears, R.**, Chavez, O., & Nevels, N (2009, December 4-5). *Using visual proofs for instruction an alternative assessment*. Presentation at the Missouri Council of Teachers of Mathematics (MCTM) Annual Meeting. Columbia, MO.

AWARDS

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| April 11, 2018 | USF chapter of the National Council of Negro Women – Catherine Johnson STEM Award |
| February 18, 2017 | Vex Robotics Competition – Volunteer of the Year Award for 2016-2017 |

October 22, 2016 Florida Association of Mathematics Teacher Educators (FAMTE)-
Mathematics Teacher Educator of the Year Award 2016

March 18, 2015 University of South Florida's Chapter of the National Council of
Negro Women -Black Girls Rock Honoree

SCHOLARSHIPS AND FELLOWSHIPS

June 2020 NSF-funded Aspire Alliance's Institutional Change Network
(IChange) IAspire Leadership Academy!
I was "selected as one of the highly qualified applicants chosen
from across the United States to take part in this transformative
leadership development experience"(Rochelle Sapp, June 8,2020
Email). I am a fellow of the second cohort.

December 2019 National Council of Teachers of Mathematics (NCTM) - National
Science Foundation (NSF) travel grant award for the 14th
International Congress on Mathematical Education (ICME-14) in
Beijing China (July 11-19, 2020). This award provides \$2,750
towards the cost of or registration, airfare, lodging, and meals

March 2012 12th International Congress on Mathematical Education (ICME-
12) Travel Grant Award, which waived the conference registration
fee and provided \$400.00 for travel reimbursement.

2008-2012 Center for the Study of Mathematics Curriculum (CSMC)
Fellowship Award, which provided a four-year graduate
assistantship with tuition waiver at the University of Missouri.

May 2011 Kappa Delta Pi- Hollis L Caswell Doctoral Award, which awarded
\$4,000.00 to assist with expenses relative to my dissertation
studies.

2010-2012 University of Missouri Mathematics Education Scholarship, which
awarded \$5,000 annually, for two years.

2008-2011 Lyford Cay Foundation Graduate Student Award, which awarded
\$7,500 annually for three years.

November 2010 Graduate Student Association Travel Grant Award, which awarded
\$150.00.

- December 2009 Graduate and Professional Council Travel Award, which awarded \$300.00.
- 2004-2006 Organization of American States Fellowship Award, which paid for tuition, travel and living expenses while I attended Indiana University.
- 1997-2002 The Bahamas Teachers' Educational Grant, which paid for tuition at The College of The Bahamas and provided a \$475.00 monthly stipend.

SERVICE ACTIVITIES

- March 2020- Present National Council of Teachers of Mathematics (NCTM) journal, *Mathematics Teacher: Learning and Teaching PreK-12 (MTLT)*. I am the associate editor for the high school grade band
- February 2020- Present Mathematics Teacher Education Partnership Annual Meeting Proceedings- Co-Editor
I provided an editorial analysis about the scope of submissions.
- February 2020 – Present University of South Florida – College of Education-Department of Teaching and Learning - Governance Committee
I serve a committee member in crafting the departmental governance document for the consolidated university.
- January 2020- Present University of South Florida – College of Education-Department of Teaching and Learning - Tenured and Tenure earning Faculty Annual Review Committee
I serve as an annual review committee member for the department in which I provide feedback to my colleagues on their productivity relative to research, teaching, and service.
- January 2020 – Present University of South Florida – College of Education-Department of Teaching and Learning – IRB Reviewer
I serve as the department reviewer for research proposals submitted to the university Institutional Review Board (IRB) .
- December 2019- Present Tampa Bay Black Heritage Festival
I serve as the co-chair for the Tampa Bay Black Heritage Festival (TBBHF) Leadership Luncheon, and as a volunteer for the Children's village at the TBBHF music festival.
- August 2019- Present Florida Council of Teachers of Mathematics – State Standards reviewer

I served as a reviewer for the draft state standards for mathematics for calculus, geometry, algebra, probability and statistics. The document was released in January 2020.

April 2019- Present

University of South Florida – College of Education - Faculty Policy Council

I was elected to represent the Department of Teaching and Learning. I also serve as the chair of the ad-hoc committee for the Faculty Constitution Committee to support the university consolidation efforts.

June 2019- Present

Bay View Alliance

I serve as the University of South Florida Representative for the Diversity Equity and Inclusion Working Group.

January 2018- Present

National Science Foundation

I served as a reviewer for multiple NSF grant proposals.

August 2018- Present

Association of Public Land-Grant University- Network of STEM Education Centers (NSEC)

I serve on the steering committee that determines the direction for the network, assist with planning the annual meeting, and review to proposals for research action clusters. In 2019, I became one of the three co-chairs for the conference planning committee. The other co-chairs are Cynthia Ghent (Townson University), and Ken Griffith (Texas Tech University).

June 2018- Present

Accelerated Systemic Change Network

I serve as a committee member for planning the annual conference. I am also the co-chair for the equity and inclusion working group.

May 2018- Present

USF Research BootCamp

I served as a senior scholar and mentor for doctoral students and tenure-earning faculty for the Research BootCamp.

April 2017- 2018

Florida Metropolitan STEM Continuum: From College to Career Program

This grant is funded by the Leona M. and Harry B. Helmsley Charitable trust, and the principal investigator for the grant is Michael Preston. I am a member of the network improvement community (NIC), which seeks to support underrepresented groups in science, technology engineering and mathematics (STEM).

January 2017-2020

Association of Mathematics Teacher Educators (AMTE) Research Committee

- I assist with making decisions relative to AMTE research activities.
- September 2016 - Present Mentor for undergraduate and graduate underrepresented groups for the Office of Diversity, Inclusion and Equal Opportunity, and the Black Faculty and Staff Association
I serve as a mentor for underrepresented students at the University of South Florida. In this role, I provide guidance and support to students in an effort to increase the number of minorities that graduate from the university.
- September 2016 - Present University of South Florida STEM Education Summit
I assist with the planning and facilitation of the event.
- September 2016 - Present University of South Florida Black Faculty and Staff Association (BFSA).
I serve on the scholarship review committee. In 2019, I served as the moderator for BFSA Annual Fall Breakfast in which we welcome new faculty and staff to the institution.
- September 2016 - Present ThEMaT 3/LessonSketch Modules - University of Maryland
I am an inquiry group member. In this role, I assist with research related activities and training of LessonSketch Modules.
- May 2016 - Present Florida Distance Learning Association (FDLA) Conference Planning Committee
I assist with planning the annual meetings.
- April 2016 - Present University of South Florida - College of Education Scholarship Selection Committee
I evaluate scholarship applicants on the following criteria: student academic data, commitment to education, long term goals and professional objectives, special life circumstances, and letter of recommendation.
- January, 2016 - Present Florida Department of Education – State Course Numbering System (SCNS) Discipline Coordinator for Mathematics Education (MAE) and Science and Mathematics Education (SMT)
I serve in an adversary capacity to the SCNS on all matter related to mathematics education and science and mathematics education interdisciplinary course, chair faculty discipline committee meetings in discipline assigned, and evaluate assigned levels for courses to comply with upper and lower division in response to Florida Statues.

January, 2016 - Present	The University of South Florida STEER Transformation Implementation Leadership Team (TILT). I participate in strategic planning for the university STEM education initiatives.
May 2015 - Present	Marshall at University of South Florida Commencement Ceremony I assist with the smooth flow of graduates walking across the stage to obtain their diplomas.
April 1 2015 - Present	State Science & Engineering Fair of Florida I serve as a senior high mathematics, and behavioral sciences, lead judge.
October 2012 - Present	Florida Association of Mathematics Teacher Educators I was elected in October 2014 as the secretary for the organization.
August 2014 - Present	American Educational Research Association I review articles for AERA annual meetings for the mathematics education and teaching and teacher education Special Interest Groups (SIGs).
August 2014 - Present	National Conference of Teachers of Mathematics Publications I review books and other educational resources for a K-16 mathematics audience.
April 2014 - Present	Mathematics Teacher Education Partnership (MTEP) I serve as the Tampa Bay representative, and the leader of the subgroup research action cluster devoted to mathematics co-teaching and co-planning during clinical experiences. Currently, we have refined training modules for co-teaching and co-planning and have submitted an NSF- IUSE grant proposal. Additionally, I participated in the Carnegie Network Foundation Improvement Community.
March 2014 - Present	Florida VEX Robotics State Championship I judge secondary students' robotics submissions.
February 2014 - Present	Hillsborough Regional Science Fair I judge middle and senior high school students' projects, which are submitted in the Behavior and Social Sciences category.
September 2013 - Present	Florida Teacher Certification Examination I evaluate assessment items for teacher certification in the state of Florida.

- September 2012 - June 2014 Mathematics Education Colloquium
I facilitated monthly meetings in which faculty and students discussed their research initiatives.
- September 2012 - April 2017 Mathematics Education Search Committee
I serve on the screening committee to review applicants.
- August 2012 - Present National Council of Teachers of Mathematics (NCTM) – Research Pre-session
I review conference proposals and make recommendations as to whether proposals ought to be accepted or rejected. Additionally, I presided over a session pertinent to reasoning and proof at the 2013 meeting.
- August 2012 - Present Congress of European Research in Mathematics Education (CERME 8 and CERME 9)
I review conference proposals and make recommendations as to whether proposals ought to be accepted or rejected.
- February 2011 - Present Psychology of Mathematics Education - North American Chapter (PME-NA)
I review articles for the proceedings, and make recommendations as to whether or not articles ought to be accepted or rejected.
- July 2010 - July 2012 University of Missouri Family Friendly Task Force
I worked with the sub-committee for space planning.
- February 2009 - April 2010 Center for Study of Mathematics Curriculum (CSMC)
I served as a planning committee member for CSMC Doctoral Symposium 2010 in San Diego, California.
- June 2009 - Present Mathematics Teaching in the Middle School Journal
I review articles submitted for publication, and make recommendations as to whether articles should be accepted, revised and resubmitted, or rejected.
- May 2009 - Present School Science and Mathematics Journal
I review articles submitted for publication, and make recommendations as to whether articles should be accepted, revised and resubmitted, or rejected.
- April 2009 - Present Ronald McDonald House Charities (RMHC)
At the RMHC in Mid Missouri, I researched information for grant writing, and assisted with fundraising events and database management. I received the Ronald McDonald Heroes Award

nominee for Columbia Missouri. At the RMHC in Tampa bay I am a shift volunteer at the home.

December 2008 - May 2012 UMC Synthesis Projects for High School Mathematics.
I evaluated pre-service teachers' synthesis projects in alignment with the University of Missouri capstone guidelines.

2007 - 2012 National Science Council for The Bahamas
I was appointed to the National Science Council by the Governor General (The queen's representative). The duties of my appointment are defined in the Education Act, for the Commonwealth of The Bahamas.

2007 - Present PACE Foundation
I am a board member for the PACE Foundation. The PACE foundation seeks to empower teenagers to make wise choices, and have built a school for teen mothers in The Bahamas. PACE Foundation was founded by members of the Zonta Club of Nassau.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

August 2009 - Present	American Educational Research Association (AERA)
February 2013 - Present	Association of Mathematics Teacher Educators
April 2011 - Present	Griffiths Leadership Society for Women
April 2005 - Present	Kappa Delta Pi Honor Society in Education
March 2010 - Present	Mathematics Association of America (MAA)
November 2005 - Present	National Council for Teachers of Mathematics (NCTM)
February 2010 - Present	Psychology of Mathematics Education- North America Chapter (PME-NA)

COMMITTEE MEMBER ON DOCTORAL DISSERTATIONS AND UNDERGRADUATE HONORS THESIS AT THE UNIVERSITY OF SOUTH FLORIDA

Dissertations

2012 - 2015	Dr. Ilyas Karadeniz - Committee Member
2012 - 2016	Dr. Kenneth Butler - Committee Member

2016 -2019	Dr. Keisha Albritton – Chairperson
2015 - 2018	Dr. Pelagia Kilgore - Committee Member
2015 - Present	Lakesia Dupree – Co-Chairperson
2017- Present	Caree Pinder – Chairperson
2018- Present	Queshonda Kudaisi – Chairperson
2018- Present	Prathima Gogumulla- Committee member
2018- Present	Cynthia Castro-Minnehan- Chairperson
2019 – Present	Matthew O’Brien – Chairperson
2019- Present	Dennis Ward – Committee Member and External Chairperson for the Defense.

Undergraduate Honors Theses

2014 - 2015	Cassandra Garton - Co-Chairperson
2016 - 2017	Shivani Sookchand - Co-Chairperson
2017- 2018	Abbi Rinaldi – Co-Chairperson

Course Taught

Undergraduate

MAT 1033- Intermediate Algebra
MAE 3224 – Middle School Mathematics Methods 1
MAE 4320 – Teaching Mathematics for Middle Grades
MAE 4945 – Practicum in Mathematics Education
MAE 4330 – Teaching High School Mathematics

Graduate

MAE 6356 – Teaching Pre-secondary Mathematics
MAE 6362- Senior High Mathematics Methods

MAE 6329 – Geometry and Measurement for Middle Grades Teachers

MAE 6338-Topics in Teaching Geometry

MAE 6945 – Practicum in Mathematics Education

MAE 7146 – Curriculum History and Research in Mathematics Education

MAE 7910 – Directed Research in Mathematics Education

MAE 7945 – Practicum in Mathematics Education

MAE 7980 – Dissertation