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EDUCATION

2008- 2012

University of Missouri, Columbia, Missouri
Doctor of Philosophy in Curriculum and Instruction –
Specialization in Mathematics Education
Indiana University, Bloomington, Indiana

- 2018- Present Undergraduate B.S. and B.A. in Grades 6-12 Program Coordinator and Mathematics Education M.A.T and M.Ed Program Coordinator
Secondary Mathematics
College of Education, University of South Florida
- 2013- Present Coordinator for Developmental Mathematics Courses
College of Education and College of Arts and Science, University of South Florida
- 2012- Present Assistant Professor
Secondary Mathematics
College of Education, University of South Florida
- 2010 - 2012 Graduate Teaching Assistant
Mathematics Department
University of Missouri, Columbia, Missouri
- 2008 -2012 Graduate Research Assistant
Mathematics Education Department
University of Missouri, Columbia, Missouri
- 2002-2004 & 2006-2008 Senior High School Mathematics Teachers
C.R. Walker Senior High School
Ministry of Education and Technical and Vocational Training,
Nassau, Bahamas

PROGRAM OF RESEARCH

- x Examining the official and operational mathematics curriculum and curriculum materials and contributing factors
 - o Developing reasoning and problem-solving skills in mathematics
 - o Attending to justice, equity, diversity, and inclusion in secondary mathematics
 - o Technology integration in secondary mathematics classroom
 - o Using co-planning and co-teaching to promote student success

HONORS (FELLOWSHIPS, AWARDS, and SCHOLARSHIPS)

Fellowships

- November 2021 Association of American Advancement of Science (AAAS) Fellow
2021 AAAS Fellow <https://www.aaas.org/fellows>

- 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.
- 2004-2006 Organization of American States Fellowship Award, which paid for tuition, travel and living expenses while I attended Indiana University
- Awards
- August 5, 2022 Kappa Delta Pi - International Honor Society
2022 Chapter Leader Award Recipient for Regional Chapter Counselor
- May 4, 2022 University of South Florida – College of Education
Excellence in Undergraduate Education Award
- April 14, 2022 University of South Florida -Office of Multicultural Affairs
I Heart Diversity Award Recipient
- April 12, 2022 University of South Florida - Office of Diversity, Equity and

Matthews, L., Jessup, N. & Sears, R (2021). "Looking for 'Us': Power Reimagined in Mathematics Learning for Black Communities in the Pandemic." Educational Studies in Mathematics <https://link.springer.com/content/pdf/10.1007/s10649-021-10106-4.pdf>

Yilmaz, Y., Gulbagci, H, Sears, R., & Nielsen, S. (2021). Are We All in This Together?: Mathematics Teachers' Perspective on Equity in Remote Instruction During Pandemic. Educational Studies in Mathematics 25 <https://link.springer.com/article/10.1007/s10649-021-10060-1>

Sears, R.,

- 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. *JDM*, 46(5), 767-780.
- Grouws, D., Tarr, J. E., Chávez, Ó., 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.

Refereed Manuscripts Under Review

- Sears, R., Castro-Minnehan, C., Oloff-Lewis, J., Jurkovic, P., Biagetti, S., Grady, M., Cayton, C. (Under Review) Alignment of Secondary Mathematics Teacher Candidates' Perceptions of Co-teaching During Clinical Experiences with Dimensions of Equity
- Castro-Minnehan, C., Sears, R.,

- An, T., Boyce, S., Cohen, S., Escudro, H., He, P., Krupa, E., Milewski, A., Miller, N., Pyzdrowski, L. J., Sears, R., Szydlak, S., & Vestal (Accepted – 2022). (Toward) Essential student learning objectives for teaching geometry to pre-service secondary teachers. AMTE Professional Book Series, Volume 5 entitled Reflection on Past, Present and Future: Paving the Way for the Future of Mathematics Teacher Education * Names listed in alphabetical order. All authors contributed equally.
- Sears, R., Brosnan, P., Castro-Minnehan, Connor-Clarke, P., & Stone, (2022). Collaborating Teachers and Preservice Teachers Attention: Elements of the Apprenticeship Model for Learning During Clinical Experiences Drew Polly (Ed.) Preparing Effective Teachers: Advances in Clinical Practice. IAP
- Jessup, N., Sears, R., Matthews, L. (2020) Reengineering hope of an inclusive mathematics education In K. Varner, S. Bickmore, D. Hys, PG Schrader, D. Carlson, and D. Anagnostopoulos (Eds). The corona chronicles: Necessary narratives in uncertain times. New York: Diopress.
- 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 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 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.
- 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-

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.

Sears, R., Karadeniz, I., Butler, K., & Pettey, C. (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.

Technical Reports

Sears, R., Gallardo, G., Reese, G. D., Dutton, T., Reigel, J., McHale, J. P., Akiwumi, F., Edmond, J., Bradham-Cousar, M., Blackshea & Thompson-Dorsey, D. (2021). Examination of Historical and Modern-Day Impact of Structural Racism on the Lives of Black People in the City of St. Petersburg, Florida. [Commissioned and Funded Study by the City of St. Petersburg, Florida] SF St. Petersburg campus Faculty Publications 4117. https://digitalcommons.usf.edu/fac_publications/4117/

Lubiento, J., & Sears, R.

- Boyce, S., Ion, M., Mcleod, K., Pyzdrowski, S., Sears, R., & St. Goar, J. (2021, May 7). Best-Laid Co-Plans for a Lesson on Creating a Mathematical Definition. Blog for American Mathematical Society. <https://blogs.ams.org/matheducation/2021/05/06/best-laid-co-plans-for-a-lesson-on-creating-mathematical-definition/>
- Sears, R., & Pinder, C. (2021, April 15). 5 Strategies to Use Assessment Purposefully. Kappa Delta Pi Blog. Retrieved from <https://blog.kdp.org/2021/04/15/5-strategies-to-use-assessment-purposefully/>
- Sears, R., Matthews, L., & Jessup, N. (2021, February). Reimagining STEM Education Pipeline for Teachers of Color. Blog for American Association for the Advancement of Science (AAAS) Advancing Research and Innovation in the STEM Education (ARISE) of Preservice Teachers in High-Needs School Districts. <https://aaas-arise.org/2021/02/16/reimagining-the-stem-education-pipeline-for-teachers-of-color/>
- Sabella, L., Sears, R., & Castro-Minnehan (January 2021). Interrupted Student-Teaching Experiences: 6 Tips to Get to the Finish Line. Kappa Delta Pi Blog. Retrieved from <https://blog.kdp.org/tag/online-teaching/>
- Pinder, C., Sears, R., & Butler, K. (2017). Workspace: An online assessment that allows intermediate algebra students to show their work.

- 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., Ahn, 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.
- Cayton, C., Grady, M., Preston, R., 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 session at the International Group for the Psychology of Mathematics Education (IPME) 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 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 (ASCH) 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 co-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, 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.

- liams, 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, D. (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 Work Group Meeting on Identifying a Research Agenda for Preservice STEM Teacher Education, Washington, D.C.
- Strutchens, M., liams, 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 attitude, 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

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.

GRANT WORK

Funded

Title: Challenging Anti-Black Racism in Civil and Environmental Engineering Curriculum

Date: June 2022- July 2026

Proposed Budget: \$1,500,000

Source of Funding: National Science Foundation (#714)

Senior Leadership Team: Maya Trotz (Principal Investigator), Christian Wells (co-Principal Investigator), Katherine A. Alfred (co-Principal Investigator), Ruthmae Sears (co-Principal Investigator), and Amy Stuart (co-Principal Investigator).

Role: Co-Principal Investigator

Brief Project Description: Facilitate a systemic approach addressing anti-black racism in civil and environmental engineering curriculum

Title: Examination of historical and modern-day impact of structural racism on the lives of Black people in the City of St. Petersburg, Florida

Date: February 2021- December 2021

Funded Budget: \$50,000

Source of Funding: City of St. Petersburg

Senior Leadership Team: Ruthmae Sears (Principal Investigator), Johannes Reichgelt (co-Principal Investigator), James McHale (co-Principal Investigator), Gwendolyn Reece (co-Principal Investigator), Gypsy Gallardo (co-Principal Investigator), Tim Dutton (co-Principal Investigator), Fenda Akiwumi (co-Principal Investigator), Dana Thompson - Dorsey (co-Principal Investigator).

Role: Principal Investigator

Brief Project Description: Examine both the historical and modern-day impact that structural racism has had on the lives of Black people in the City of St. Petersburg, Florida (<https://www.usf.edu/arts-sciences/institutes/black-life/structural-racism/index.aspx>). This work was featured in various news outlets (<https://www.usf.edu/arts-sciences/institutes/black-life/structural-racism/news-archive.aspx>), inclusive of: The Weekly Challenger, The Tampa Bay Times, WUSF Radio, ABC Action News, CW 44, The Oracle, Florida Politics and The Power Broker.

Title: NASA STEM Education Constellation - Network of Evidence-Based STEM Educator Professional Development
Date: November 2014 - August 2016
Funded Budget: \$200,000
Source of Funding: Sub-contract from Texas State University's NASA funded project
Senior Leadership Team: Eugene Mamvori-Ivanovic and Ruthmae Sears
Role: co-Principal Investigator
Brief Project Description: Facilitate professional development training using NASA curriculum resources

Title: The CodebreakHERS: A GenC

Date: 2019
Proposed Funding Budget: \$3,999,616
Senior Leadership Team: Dr. Ruthmae Sears, Dr. Michael Cross, Dr. Anna Pyayt, Dr. Kevin Yee, Dr. Robert Potter
Role: Principal Investigator
Brief Project Description: The project goal is to increase participation and success of Black and Latinx undergraduate students in STEM disciplines through a convergence support effort among academic, student affairs, and student organization units, and focused development of their digital literacy skills.

Title: A Learning Assistant Scholarship Program - Supporting Students of Color Success in STEM
Date: 2019
Proposed Funding Budget: \$599,370
Senior Leadership Team: Dr. Ruthmae Sears, Dr. Michael Cross, Dr. Anna Pyayt, Dr. Kevin Yee, Dr. Robert Potter
Role: Principal Investigator
Brief Project Description: The goal of this proposed effort is to expand the number of Students of Color (i.e. ethnic and racial minority groups) who serve as learning assistants; thereby increasing their academic roles at the collegiate level, and further supporting all students achieving success in introductory STEM courses and beyond.

Title: A Professional Development to Foster Inclusive Excellence and Address Anti-Blackness within STEM Disciplines
Date: 2020
Proposed Funding Budget: \$25,000
Senior Leadership Team: Dr. Ruthmae Sears, Dr. Robert Potter, Dr. Gerry Meisels, Dr. Sylvia Thomas, Ms. Caree Pinder, Ms. Queshonda Kudaisi, and Mr. Alberto Danny Camacho
Role: Principal Investigator
Brief Project Description: This proposal advocates for inclusive excellence and addresses anti-Blackness within STEM disciplines at the University of South Florida (USF) and Hillsborough Community College (HCC).

Involvement in Grant Related Activities as a Consultant, Working Group Member, Key Personnel, etc.

Title: The modernization of Digital Information Technology
Date: 2022-2023
Funded Budget: \$ 625,196

Source of Funding : Florida Department of Education and Cyber Florida. This subaward is issued pursuant to the grant, "CRRSA GEER II - Cybersecurity and IT Pathways Expansion Grant," 291-1231C-2C00

Senior Leadership Team: Ron Sanson (PI) and Clinton Daniel (co-PI)

Brief Project Description: 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. The link to the STEER website is <https://www.usf.edu/atleeer/about-us/index.aspx> Additionally, highlights of STEER accomplishments over the years can be viewed online at <https://www.youtube.com/watch?v=F9MeVjb3ZKM>

Title: Helios STEM Middle School Residency Program
 Source of Funding: Helios Foundation
 Date: August 2012-2016
 Role: Key personnel

Title: Comparing Options in Secondary Mathematics: Investigating Curriculum (COSMIC)
 Date: January 2009 - December 2011
 Source of Funding: National Science Foundation
 Senior Leadership Team: Dr. Douglas Gross, Dr. James Tarr, and Dr. Oscar Chavez
 Role: Graduate Research Assistant

Title: Researching Science and Mathematics Teacher Learning in Alternative Certification Model (RESMAR2T)
 Date: September 2008- May 2009
 Source of Funding: National Science Foundation
 Senior Leadership Team: Dr. Sandra Abo, Dr. John Lannin, Dr. Kathryn Chval
 Role: Graduate Research Assistant

FUNDED CONTRACTS

Title: Making Real World Mathematics Connections in Middle and Upper High School Mathematics Curriculum at Tampa Preparatory School.
 Date: April – June, 2019
 Funded Budget: \$2,000
 Source of Funding: Tampa Preparatory School
 Senior Leadership Team: Ruthmae Sears, Sanghoon Park, and Mike Krajcevski.
 Role: Principal Investigator
 Brief Project Description: Review school mathematics curriculum and make recommendations to amplify the relevance and practicality of mathematics, and the integration of technology.

Sears, R (2021, March 5) Education Researchers Roundtable Knowledgehook.
<https://app.knowledgehook.com/app/Leaders/Video/ec71286c-cb8c-eb11-9752-0050568c42b6>

Castro-Minshall, C, Sears, R., & Eou, Y. (2021, April 10). Virtual K–12 School Field Experiences: A Review of the Literature Presentation at the American Educational Research Association Division K (virtually).

Sears, R. (2021, April 10). Equity Topics in Mathematics Education Chair of Session for the American Educational Research Association for Division C (virtually).

Sears, R. (2021, April 11). Confronting Systemic Inequities and Disparities Using Case-Based Instruction in Mathematics Teacher Preparation Chair of Session for the American Educational Research Association SIG-Research in mathematics Education (virtually)

National Presentations

Sears, R. (2022, August 25). Roundtable discussion facilitator for “Access and equity for diverse learners: Closing achievement and opportunity gaps in mathematics”. National Council of Supervisors of Mathematics 2022-Conference event. Virtual.

American Educator Educator Ma7 Association. Knowledge

- Castro-Minnehan, C., & Sears, R. (2020, October, 23). Preservice teacher perspectives of their collaborating teachers' role in co-teaching during early field experiences. Presentation at the National Conference on Co-Teaching. Virtual.
- Sears, R., Potter, R., Meisels, G. (2020). "STEMing Our Way To Inclusive Excellence! NSF STEM Diversity and Inclusion Video Exhibition (Dive) Challenge 2020 - <https://www.youtube.com/watch?v=yqi-wSkGkQQ>
- Sears, R., Potter, R., Meisels, G., & Schuler, K. (2020). Using Professional Development to Support Equitable Learning Opportunities in STEM Lab Settings. <https://www.youtube.com/watch?v=udYsXLg2j0w&t=17s>
- 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, C. (2020, February 6). Secondary mathematics teacher candidates' perspectives about strategies that support equitable learning opportunities. Presentation at the Association of Mathematics Teacher Educators Conference. Phoenix, AZ.
- Sears, R., Pinder, C., & Castro-Minnehan, C. (2020, April 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 (cancelled). Chicago, IL. [Canceled due to COVID-19]
- 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 6). 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 6). Utilizing Effective Features of Professional Development to Support STEM 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 <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 Am

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

- Dupree, L. & Sears, R. (2017, April 5-8). The hidden treasures in student misconceptions. Presentation at the National Council of Teachers 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, 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. Workshop assignments in MyLabsPlus. Presentation at the Joint Mathematics Meeting 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, C., 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., Sipe, 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, 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 Space 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., Vomvori, 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 Presentation at the American Mathematical Society (AMS) and the Mathematical Association of America (MAA) Joint Mathematics Meeting. San Antonio, TX.

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.

- Officials and Leaders within St. Petersburg Florida Manhattan Casino Event Has St. Petersburg, Florida <https://www.youtube.com/watch?v=AbeZhm3a4dc>
- Sears, R., Gallardo, G., Reese, G. D., Dutton, T., Reigel, J., McHale, J. P., Akiwumi, F., Edmond, J., Bradham-Cousar, M., Blacksh, J., & Thompson-Dorsey, D. (2021, October 14) Community Conversation: Supporting Racial Equity in St. Petersburg Florida. Virtual. <https://www.youtube.com/watch?v=NnvIZT4cRig>
- Sears, R., Chavez, O., & Tarr, J. (2021, October 13) COSMIC Study. Invited speaker for Ohio University course. "Mathematics Curriculum in Kindergarten–Grade 14" Facilitated virtually.
- Sears, R. & Kudaisi, Q. (2021, August 21 & August 28) Inchin Center Professional development : Attending to J.E.D.I in mathematics Facilitated a workshop for teachers. Tampa, FL. (POSTPONED)
- Sears, R. (2021, June 9) Catalyzing Change in mathematics attending to justice, equity, diversity, and inclusion (J.E.D.I.) Presentation at the Florida Council of Teachers of Mathematics (FCTM).
- Sears, R. (2021, May 13) Presentation for the Quality of Life Study Presentation at City Council of St. Petersburg on Structural Racism Study. St. Petersburg, Florida. https://stpete.granicus.com/MediaPlayer.php?view_id=4&clip_id=5247&meta_id=105480

- 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 (FAMTEA) 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., Dupree, L., & Pinder, C. (2017, October 18-20)

- 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) cycle 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, 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., & Muler- 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., 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/webex?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., & Tayan, 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.

Television, Movie, and Social Media Live Presentations

- Sears, R.(2022, March 14) (1) Math Excellence - Dr. Ruthmae Sears. This presentation was hosted by Anastacia Palacios on Bahamas at Sunrise.
<https://www.facebook.com/203218586408312/videos/524579002427305>
- Sears, R.(2022, March 4). AAAS award viral celebration in The Bahamas. This presentation was hosted by Spence Finlayson on Immediate Response.
<https://www.facebook.com/znsweofficial/videos/384241176399107>
- Sears, R (2022, February 28) USF math professor shows students the beauty of numbers. This was produced by Kelly Ring for Fox 13-Tampa Bay, What's Right in Tampa Bay segment.
<https://www.fox13news.com/news/usf-math-professor-shows-students-the-beauty-of-numbers?fbclid=IwAR3ihYE2ZanxSb0gxsStpWWtVQWYpWuuzXZM1kLT2saNwit1D59GGCOWc>
- Sears, R.(2022, February 16). A discussion on structural racism in St. Petersburg. The community conversation was sponsored by Tombolo Books and the African American Heritage Association (AAHA). Broadcast live on the Tombolo Book Facebook page.
<https://fb.watch/bhdxMx4Fv/>

MATH 1100- College Algebra

University of South Florida 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

University of South Florida 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 6906 – Independent Study in Mathematics Education

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

Faculty and Staff

University of South Florida Inclusive and Equitable Pedagogy Course

<https://www.usf.edu/innovative-edu/cit/inclusive-equitable-experience.aspx>

University of South Florida Enlightenment Series <https://www.usf.edu/president/anti-racism/resources/enlightenment-series.aspx>

RESEARCH SUPERVISION (Students for whom I serve as a Major Professor, co-Major Professor, or Committee Member)

Dissertations

- | | |
|----------------|--|
| 2012 - 2015 | Dr. Ilyas Karadeniz – Committee Member (Graduated)
Dissertation Title: ‘UCSMP teachers' perspectives when using graphing calculators in advanced mathematics’ |
| 2012 - 2016 | Dr. Kenneth Butler – Committee Member (Graduated)
Dissertation Title: ‘Motivation for mathematics: The development and initial validation of an abbreviated instrument’ |
| 2016 -2019 | Dr. Keisha Albritton – Chairperson (Graduated)
Dissertation Title: Ratios and Proportional Reasoning Representations in Open Educational Resources |
| 2015 - 2018 | Dr. Pelagia Kilgore – Committee Member (Graduated)
Dissertation Title: Adult College Students' Perceptions about Learning Mathematics via Developmental Mathematical xMOOCs |
| 2015 - Present | Lakesia Dupree – Co-Chairperson
Dissertation Title: ‘Mathematics Teacher Preparation Reimagined: The Next Generation of Upper Elementary School and Middle Grades Teacher Candidates Enacting Culturally Responsive Teaching in a Mathematics Methods Course that Addresses Grades 5-9 Mathematics Content’ |
| 2018- 2021 | Queshonda Kudaisi – Chairperson (Graduated)
Dissertation Title: ‘Learning, Planning For, and Reflecting on Teaching Mathematics for Social Justice: A Case Study Investigation of a High School Mathematics Methods Course’ |
| 2018- 2021 | Cynthia Castro-Miranda – Chairperson (Graduated)
Dissertation Title: ‘An Ecology of Learning: Secondary Mathematics Teacher Candidate Learning While Co-Teaching in Early Clinical Practice’ |
| 2017- Present | Caree Pinder – Chairperson
Dissertation Title: ‘Intermediate Algebra Students’ Perspectives Towards Learning Mathematics, and Technology’ |

- 2018- Present Prathima Gogumulla- Co-Chairperson
Tentative Dissertation Title: Levels of Cognitive Demand and Authenticity of Real-World Problems in Grade 8 Probability and Statistics Curriculum Materials
- 2022 – Present Matthew Brien – Chairperson
- 2022 – Present Alexandra Green – Chairperson
- 2019- Present Dennis Ward – Committee Member and External Chairperson for the Defense.
Dissertation Title: The Effects of Motivationally-Enhanced Digital Game-Based Learning on Undergraduate Students' Learning Motivation, Math Achievement, and Learning Retention in College Algebra'

Undergraduate Honors Theses

- 2014 - 2015 Cassandra Garton - Co-Chairperson
Thesis Title: Intermediate Algebra Student Perspectives of the Usefulness and Challenges of Learning Mathematics in a Computerized Learning Environment
- 2016 - 2017 Shivani Sookchand - Co-Chairperson
Thesis Title: Exploration of Art Programs in Mathematics Courses to Promote Inclusiveness
- 2017- 2018 Abbi Rinaldi – Co-Chairperson
Thesis Title: Integrating Statistics into Undergraduate Journalism Curriculum
- 2021 – 2022 Erika House – Chairperson
Thesis Title: Mathematics Education Reform: Gender Differences in Application of Mathematics Courses
- 2022-2023 Alyssa Eman- Chairperson
Thesis interest: Bi-lingual strategies to support English Language Learners in Mathematics

SERVICE ACTIVITIES

- January- April, 2021 I'm Speaking Series Hosted by the Women and Leadership Initiative – The Bishop Center for Ethical Leadership. Role: Co-Creator and Facilitator. Links to sessions are: <https://www.youtube.com/watch?v=ejSC6QSwMvg> <https://www.youtube.com/watch?v=50FE4vdrNfj> https://www.youtube.com/watch?v=K_o88ILoO1E
- National Football League (NFL) -Super Bowl LV Middle for Change. Role: Facilitator on sessions focusing racial equity and health equity. The link to the Kickoff Recording: <https://vimeo.com/502649014>
- March 2020- Present National Council of Teachers of Mathematics (NCTM) journal, Mathematics Teacher: Learning and Teaching PreK-12 (MTLT). Role: Associate editor for the high school grade band
- December 2019- Present Tampa Bay Black Heritage Festival Leadership Luncheon Role: Co-Chair.
- August 2019- 2020 Florida Council of Teachers of Mathematics – State Standards Reviewer for calculus, geometry, algebra, probability, and statistics.
- June 2019- Present Bay View Alliance Role: University of South Florida Representative for the Diversity Equity and Inclusion Working Group.

- January 2017-2020 Association of Mathematics Teacher Educators (AMTE) Research Committee
Role: Committee Member
- September 2016 - Present ThEMaT 3/6/9 Sketch Modules - University of Maryland
Role: Inquiry group member
- May 2016 - Present Florida Distance Learning Association (FDLA) Conference
Role: Planning Committee Member
- January, 2016 - Present Florida Department of Education – State Course Numbering System (SCNS)
Role: Discipline Coordinator for Mathematics Education (MAE) and Science and Mathematics Education (SMT)
- August 2014 - Present American Educational Research Association
Role: Reviewer for the mathematics education and teaching and teacher education Special Interest Groups (SIGs).
- August 2014 - Present National Conference of Teachers of Mathematics Publications
Role: Reviewer
- April 1 2015 - Present State Science & Engineering Fair of Florida
Role: Senior Judge
- October 2012 - Present Florida Association of Mathematics Teacher Educators (FAMTE)
Role: Vice President for public universities (2016-Present), and secretary (October 2014-2015).
- April 2014 – June 2020 Mathematics Teacher Education Partnership (MTEP)
Role: Chair of co-planning and coaching research action cluster.
- March 2014 - 2017 Florida VEX Robotics State Championship
Role: Senior Judge
- February 2014 - Present Hillsborough Regional Science Fair
Role: Senior Judge for Behavioral and Social Sciences category.
- September 2013 - Present Florida Teacher Certification Examination
Role: Evaluator of assessment items for teacher certification in the state of Florida.
- August 2012 - Present National Council of Teachers of Mathematics (NCTM) – Research Pre-session
Role: Reviewer and Facilitator

- August 2012 – August 2016 Congress of European Research in Mathematics Education (CERME 8 and CERME 9)
Role: Reviewer
- February 2011 - Present Psychology of Mathematics Education North American Chapter (PME-NA)
Role: Reviewer
- June 2009 - Present Mathematics Teaching in the Middle School Journal
Role: Reviewer
- May 2009 - Present Social Science and Mathematics Journal
Role: Reviewer
- April 2009 - Present Ronald McDonald House Charities (RMHC)
Role: Volunteer and member of the board of directors for RMHC Tampa Bay (effective December 2020).
- 2007 - 2008 National Science Council for The Bahamas
Role: Appointed member by the Governor General (The queen's representative).
- 2007 - Present PACE Foundation Bahamas
Role: Board Member <http://www.pacebahamas.com/>
- University Service
- September 2022- July 2025 University of South Florida- Faculty Senate
Role: Senator for the College of Education
- January 2021-Present Florida Alliance for Graduate Education and Professoriate (FLAGEP).
Role: Senior Scholar and Mentor.
- September 2020-Present University of South Florida- Institute on Black Life.
Role: Faculty advisor.
- July 2020- July 2023 University of South Florida - University-Wide Sabbatical Committee
Role: Member
- June 2020- Present University of South Florida Black Steering Committee
Role: Co-chair of Professional Development committee and host of Enlightenment Series <https://www.usf.edu/president/anti-racism/resources/enlightenment-series.aspx>

- May 2018 USF Research Boot Camp
Role: Senior scholar and mentor
- September 2016 - 2018 University of South Florida STEM Education Summit
Role: Planning Committee Member and Presenter
- September 2016 - Present University of South Florida Black Faculty and Staff Association (BFSA).
Role: Scholarship review committee member, Host of Annual Breakfast, Mentor.
- January 2016 - Present The University of South Florida STEER Transformation Implementation Leadership Team (TILT).

August 2019- Present University of South Florida – College of Education -Constitution Committee
Role: Chairperson

April 2016 - Present University of South Florida - College of Education Scholarships Committee
Role: Selection Committee Member

September 2012 - June 2014 Mathematics Education Colloquium
Role: Facilitator

September 2012 - April 2017 Mathematics Education Search Committee
Role: Committee Member

July 2010 - July 2012 University of Missouri Family Friendly Task Force
Role: Sub-committee member for space planning.

February 2009 - April 2010 Center for Study of Mathematics Curriculum (CSMC)
Role: Planning committee member for CSMC Doctoral Symposium 2010 in San Diego, California.

December 2008 - May 2012 UMC Synthesis Projects for High School Mathematics.
Role: Evaluator for capstone projects.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

February 2021 – Present Sigma Xi Scientific Research Honor Society

August 2009 - Present American Educational Research Association (AERA)

February 2013 - Present Association of Mathematics Teacher Educators

April 2011 - Present Births 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)

INDEPENDENT CONSULTANT

2017-2019 Guidepoint

2020- Present

Amplify/ XQ

2021- Present

Knowledgehook