# Jennifer G. Whitfield

Texas A&M University College of Science Dean's Office Department of Mathematics TAMU MS 3257 College Station, TX 77843 Fax: (979)-862-4190 jwhitfld@tamu.edu

#### **EDUCATION**

**Doctor of Philosophy**, Distinguished Honor Graduate in Curriculum and Instruction with emphasis in Mathematics Education, Texas A&M University, College Station, TX, December 2017. Major advisors: Dr. Mary Margaret Capraro and Dr. Hersh Waxman. Dissertation Topic: The Longitudinal Effects of the TAMU Noyce Scholars Program on STEM Teachers' Classroom Instruction and Perceptions of Teaching

**Master of Science,** Mathematics, Texas A&M University, College Station, TX. August 2000. Advisor: Dr. Sue Geller

**Bachelor of Arts**, Mathematics with Emphasis in Computer Science and a minor in Education, The Colorado College, Colorado Springs, CO. May 1993

#### **PROFESSIONAL POSITIONS**

## **Texas A&M University Department of Mathematics**

Assistant Head for Academic Professional Track (APT) Faculty Affairs, Jan 2017 – Present Instructional Assistant Professor, Sept 2013 – Present

Associate Director Center for Technology Mediated Instruction, May 2018 - Present Personalized Precalculus Program Co-Director, April 2010 – August 2017 Senior Lecturer, Aug 2001 – Aug 2013

Director Online Homework Systems, Jan 2009 – May 2012

# Texas A&M University College of Science, Center for Math and Science Education

aggieTEACH Program Director, March 2011 - Present

STEM Teacher Preparation Academy Director, May 2011 - Aug 2013

## Texas A&M University College Station Department of Teaching, Learning, and Culture

Graduate Student Instructor of Record, August 2016 – May 2017

A&M Consolidated High School – Mathematics Teacher, Aug 1999 – May 2001

# Bryan High School

Mathematics Teacher, Aug 1995 – May 1999

Head Girls Volleyball Coach, Aug 1996 – May 1999

Assistant Girls Track Coach, Aug 1995 – May 1999

Assistant Girls Basketball Coach, Aug 1995 - May 1996

Jane Long Middle School – Mathematics Teacher, Volleyball and Track Coach, Aug 1993 – June 1995

## **ADJUNCT POSITIONS**

Blinn College (Bryan Campus) – Mathematics Instructor, Aug 2000 – May 2003.

**Texas A&M University** – Graduate Teaching Assistant, Department of Mathematics, Summer 1998, Summer 1999, Summer 2000.

## **FUNDED GRANT AWARDS**

#### **Federal**

- Lara-Alecio, R. (PI), Irby, B. (Co-PI), & Whitfield, J. (Co-Investigator), U.S. Department of Education, Building Instructional Capacity, Leadership, and Student Performance for Academic Content Areas in Economically Challenged Rural Schools: ACERS, \$10,000,000; January 2019 December 2023 (Pending).
- Whitfield, J. (PI), Schroeder, C. (Co-PI), Scott, T. (Co-PI), Waxman, H. (Co-PI), National Science Foundation, Training and Retaining Secondary STEM Teachers for Success in Texas Classrooms, \$1,200,000; September 2019 August 2023 (Pending).
- Lara-Alecio, R. (PI), Irby, B. (Co-PI), ..., & Whitfield, J. (Co-Investigator), U.S. Department of Education, Building Out Opportunities in STEM for Teachers: Impacting Instructional Capacity for Diverse Learners in High-Needs Schools, \$24,102,495, October 2018 September 2021 (Pending).
- Johnson, M. (PI), Hibbs, M (Co-PI), Kuttolamadom, M. (Co-PI), Morgan, J. (Co-PI), Porter, J. (Co-PI), & Whitifeld, J. (Co-PI), National Science Foundation, Connected STEM Promoting STEM Education through Connected Devices and Building Automation, \$834,654; September 2016 August 2019.
- Scott, T. (PI), Waxman, H. (Co-PI), & Whitfield, J. (Co-PI), National Science Foundation, Texas A&M University Noyce Monitoring and Evaluation, \$299,987; September 2014 August 2019.
- Allen, G.D. (PI), Froyd, J. (CO-PI), Maxwell, D. (CO-PI), Nite, S (CO-PI)., Pilant, M. (CO-PI), Austin, A. (CO-Investigator), Aurispa, B. (CO-Investigator), **Whitfield, J**. (CO-Investigator), & Zarestky, J. (CO-Investigator), National Science Foundation, Retention Through Remediation: Enhancing Calculus I Success, \$1,150,00; August 2009- October 2016.
- Pilant, M. (PI), Bollinger, K., Epstien, J., & Whitfield, J., Brooks Cole Publishing, *Applied Calculus on the Web*, \$130,000; September 2002 August 2003.

#### State

- Whitfield, J. (PI), & Scott, T. (Co-PI), The University of Texas (Sponsor), TAMU College Station Math Regional Collaborative, \$110,982; May 2017 July 2018.
- Whitfield, J. (PI), & Scott, T. (Co-PI), The University of Texas (Sponsor), TAMU College Station Math Regional Collaborative, \$99,909; May 2016 July 2017.
- Capraro, R. (PI), Capraro, M. (Co-PI), Morgan, J. (Co-PI), Scott, T. (Co-PI), Stillisano, J. (Co-PI), Waxman, H. (Co-PI), & Whitfield, J. (Project Personnel), Texas Higher Education Coordinating Board, Science, Technology, Engineering, and Mathematics (STEM) Center for Professional Learning, \$764,000; July 2013 December 2015.
- Scott, T. (PI), & **Whitfield**, **J.** (Co-PI) Greater Texas Foundation, aggieTEACH Program Expansion and Improvement Project, \$150,000; June 2012 June 2015
- Scott, T. (PI), & Whitfield, J. (Director) Texas Instruments Foundation, Challenge Grant for aggieTEACH Project, \$150,000; August 2011-August 2013.
- Whitfield, J. (PI), & Scott, T. (Co-PI), Texas Higher Education Coordinating Board, Mathematics, Science and Technology Teacher Preparation Academies (MSTTPA), \$500,000; May 2011 December 2013.
- Allen, G.D. (PI), Goldsby, D. (Co-PI), Nite, S. (Co-PI), & Whitfield, J. (Co-PI), Texas Higher Education Coordinating Board, Teacher Quality Type B Algebra 1 & Algebra 2, \$320,476; June 2009 May 2012.
- Allen, G.D., Nite, S., & Whitfield, J. (2009-2011) Contract for Texas Education Agency Mathematics Instructional Coaches Service Provider, Gladewater ISD; \$26,150.
- Allen, G.D., Nite, S., & Whitfield, J. (2008-2010) Contract for Texas Education Agency Mathematics Instructional Coaches Service Provider, El Paso ISD; \$82,000.
- Allen, G.D. (PI), Goldsby, D. (Co-PI), & Whitfield, J. (Co-PI), Texas Higher Education Coordinating Board, Teacher Quality Type B Algebra 1, \$82,000; June 2008 May 2009.
- Allen, G.D. (PI), Goldsby, D. (Co-PI), & Whitfield, J. (Co-PI), Texas Higher Education Coordinating Board, Teacher Quality Type B Algebra 2, \$86,998; June 2007 May 2008.

- Allen, G.D. (PI), Goldsby, D. (Co-PI), & Whitfield, J. (Co-PI)), Texas Higher Education Coordinating Board, Teacher Quality Type B Algebra 2, \$81,875; June 2006 May 2007.
- Allen, G.D. (PI), Goldsby, D. (Co-PI), & Whitfield, J. (Co-PI), Texas Higher Education Coordinating Board, Teacher Quality Type B Algebra 2, \$81,875; June 2005 May 2006.
- Allen, G.D. (PI), Goldsby, D. (Co-PI), Poage, P. (Co-PI), & Whitfield, J. (Co-PI), Texas Higher Education Coordinating Board, Teacher Quality Type B Pre-Calculus, \$82,000; June 2004 May 2005.
- Allen, G.D., (PI), Austin, A., Axelson, H., Bollinger, K., & Whitfield, J., Texas Higher Education Coordinating Board, Teacher Quality Type A (Precalculus), \$300,000; January 2004 June 2004.

### University/Local

- Parker, D. (PI), **Whitfield, J**. (Co-PI), Texas A&M University, College of Education and Human Development Global Education Programs, \$24,877; Spring 2019.
- Brightsmith, D. (PI), Arcak, C. (Co-PI), Coates, C. (Co-PI), Flaherty, J. (Co-PI), Gonzalez, E. (Co-PI), Mateos, M. (Co-PI), Song, H. (Co-PI), Vargas, R. (Co-PI), & Whitfield, J. (Co-PI), Texas A&M University, Global Engagement Grant \$80,000; June 2018 September 2021.
- **Whitfield, J.** (PI), Texas A&M University, Innovative Pedagogy Grant Program, \$10,000; September 2017 December 2018.
- Whitfield, J. (PI), Parker, D. (Co-PI), Texas A&M University, College of Education and Human Development Global Education Programs, \$12,000; August 2016 May 2017.
- Pilant, M. (PI), Furuta, R. (Co-PI), **Whitifeld, J**. (Co-PI), & Wu, B. (Co-PI), Texas A&M Univeristy Tier-One Program Grant (TOP), Math Virtual Learning Center (MVLC), \$300,000; September 2016 August 2019.
- Epstein, J., Geller, S. Matusevich, L., Robles, C., Schielack, J., **Whitfield, J.**, & Zarestky, J., TAMU ADVANCE Center, Department of Mathematics: Women's Community Building Initiative, \$7500; June 2012 June 2013.
- Hester, Y (PI), **Whitfield, J**. (Co-PI), & Zarestky, J. (Co-PI), TAMU Instructional Technologies, Large Sections in Business Mathematics: Interaction, Communication, and Personalization through Technology, \$75,000; May 2012 May 2013.

## **PUBLICATIONS**

#### **Books and Book Chapters**

- Strutchens, M., Sears, R., **Whitfield, J.**, Biagetti, S., Brosnan, P., Olaff-Lewis, J., Junor-Clarke, P., Erickson, D., Parrish, C., Conway, B., & Ellis, R. (2018). Implementation of Paired Placement and Co-Planning/Co-Teaching Field Experience Models Across Multiple Contexts. In T. Hodges & A. Baum (Eds.) *Handbook of Research on Field Based Teacher Education*. Hershey, PA: IGI Global.
- Capraro, M.M., **Whitfield, J.**, Etchells, M.J., & Capraro, R.M. (Eds.). (2016). *A companion to interdisciplinary STEM project based learning: For educators by educators* (2nd ed.). Rotterdam, The Netherlands: Sense.
- Hilsabeck, T., **Whitfield, J.**, & Etchells, M.J., (2016). Building a better tomorrow: Designing the home of the future. In M.M. Capraro, J. Whitfield, M.J. Etchells, & R.M. Capraro (Eds.), *A companion to interdisciplinary STEM project based learning: For educators by educators* (2nd ed., pp. 19-26). Rotterdam, The Netherlands: Sense.
- Lopez, R.N., & Whitfield, J. (2016). Design your own high tech high school. In M.M. Capraro, J. Whitfield, M.J. Etchells, & R.M. Capraro (Eds.), *A companion to interdisciplinary STEM project based learning: For educators by educators* (2nd ed., pp. 39-46). Rotterdam, The Netherlands: Sense
- Makenna, A., & **Whitfield, J.** (2016). Survival of the fittest: Flying hamster genetics. In M.M. Capraro, J. Whitfield, M.J. Etchells, & R.M. Capraro (Eds.), *A companion to interdisciplinary STEM project*

- based learning: For educators by educators (2nd ed., pp. 209-214). Rotterdam, The Netherlands: Sense.
- McKissick, S., & Whitfield, J. (2016). Building a better cereal box. In M.M. Capraro, J. Whitfield, M.J. Etchells, & R.M. Capraro (Eds.), *A companion to interdisciplinary STEM project based learning: For educators by educators* (2nd ed., pp. 11-18). Rotterdam, The Netherlands: Sense.
- Oseguera, L., Etchells, M.J., & Whitfield, J. (2016). Carbon footprint reduction. In M.M. Capraro, J. Whitfield, M.J. Etchells, & R.M. Capraro (Eds.), *A companion to interdisciplinary STEM project based learning: For educators by educators* (2nd ed., pp. 139-144). Rotterdam, The Netherlands: Sense.
- Whitfield, J. (2016). The water flows through it: Design and build an irrigation system. In M.M. Capraro, J. Whitfield, M.J. Etchells, & R.M. Capraro (Eds.), *A companion to interdisciplinary STEM project based learning: For educators by educators* (2nd ed., pp. 121-136). Rotterdam, The Netherlands: Sense.

#### **Articles**

- Walters, L., Green, M., Parker, D., **Whitfield, J.**, & Harmon, F. (submitted). The good, the bad, and the ugly: Reflections on an urban school experience. *Urban Education*.
- **Whitfield, J.**, Waxman, H., & Scott, T. (2016). Comparing Robert Noyce scholars and non-Robert Noyce scholars perceptions of teaching. *Journal of Research in STEM Education*, *2*, 90-105.
- Lyons, L. C., Fleming, K. J., **Whitfield, J.**, Ging, A. B., Ketsetzi, A., Etchells, M. J., & Waxman, H. C. (2015). Evaluating the implementation of core practices in teacher education programs in Texas. *Texas Forum of Teacher Education*, *5*, 33-48.
- **Whitfield, J**. (2010). *The Insider's Guide to Teaching With Problem Solving Approach to Mathematics*, 10, 34, 37, 39-40, 43-47, 53-55, 59, 63-66. Norfolk, VA: Pearson

## **Conference Preceedings**

- Cevik, E., Johnson, M.D., Yalvac, B., **Whitfield, J.**, Kuttolamadom, M., Porter, J.R., & Morgan, J.A. (2018), Assessing the effects of authentic experiential learning activities on teacher confidence with engineering concepts, ASEE Annual Conference Proceedings.
- Conway, B., Erikson, D., Parish, C., Strutchens, S., & Whitfield, J. (2017). An alternative approach to the traditional internship model. Paper presented at the Georgia Association of Mathematics Teacher Educators, Eagle Rock, GA. Retrieved from http://digitalcommons.georgiasouthern.edu/gamte/.
- Allen, G. D., Nite, S. B., Pilant, M. S., & Whitfield, J. (2013). Using a math placement exam to develop a personalized precalculus program. In P. Bogacki (Ed.). *Electronic Proceedings of the 25th International Conference on Technology in Collegiate Mathematics*. Norfolk, VA: Pearson.
- Nite, S. B., Allen, G. D., Sledge, S., & Whitfield, J. (2012). Retention through remediation: Enhancing calculus I success. In P. Bogacki (Ed.). *Electronic Proceedings of the 24th International Conference on Technology in Collegiate Mathematics*. Norfolk, VA: Pearson.
- Bollinger, K., & **Whitfield, J**., (2003). Applied calculus on the web: An interactive approach to freshman calculus. *16<sup>th</sup> Annual International Conference of Technology in Collegiate Mathematics*.

#### **Online Modules**

- **Whitfield, J.**, & Schroeder, C. (2014), *Scientific Applications of Mathematics*, TAMU STEM Collaborative for Teacher Professional Learning STEM Certificate, produced for Texas Higher Education Coordinating Board.
- Bollinger, K., Epstein, J., Kiffe, T. Pilant, M., & Whitfield, J. (2006). *Applied Calculus on the Web*, Brooks/Cole Publishing A series of web-based instructional modules for use by Applied Calculus courses.

#### **Online Videos**

- **Whitfield, J.**, (October 2005), Finite mathematics for business economics, life sciences and social sciences by Barnett/Ziegler/Byleen. *My Math Lab*. Upper Saddle River, NJ: Prentice Hall Publishing Company.
- **Whitfield, J.**, (October 2005), Finite mathematics and its applications by Goldstein/Schneider/Siegel. *My Math Lab*. Upper Saddle River, NJ: Prentice Hall Publishing Company.

#### **AWARDS**

## Texas A&M University

- Grant Recipient Award, Texas A&M Department of Teaching, Learning, and Culture, May 2015
- Texas A&M Chancellor's Academy of Teacher Educators, February 2014
- Center for Research, Evaluation, and Advancement of Teacher Education (CREATE) Award for Exemplary Faculty Practice, July 2013
- TAMU Fish Camp Namesake 2013
- College of Education and Human Development 2012 John E. Trott, Jr. Award in Student Recruiting
- Who's Who in America, 2012
- Student Led Award for Teaching Excellence (SLATE), Fall 2009
- The Physician's Center Hospital Honorary Guest Coach TAMU Women's Softball, Spring 2009
- Lecturers Helping Hand Award, January 2009
- Department of Mathematics Outstanding Service Award, 2009
- Department of Mathematics Outstanding Teaching Award, 2005

## **PRESENTATIONS**

- Banerjee, M., Waxman, H., **Whitfield, J**., & Scott, T. (2018, July). *Job satisfaction and STEM teachers: Linking the Noyce scholarship to job satisfaction*, Poster session presented at Noyce 2018 Summit, Washington D.C.
- Whitfield, J., Banerjee, M., Waxman, H., Scott, T., & Capraro, M. (2018, July). *Reflections from Noyce scholars on their route to STEM teaching*, Noyce 2018 Summit, Washington D.C.
- Whitfield, J., Banerjee, M., Waxman, H., Scott, T., & Capraro, M. (2018, June). *Reflections from Noyce scholars on their route to STEM teaching*, Mathematics Teacher Educators Partnership 2018 Annual Conference, Denver, CO.
- Wilding, L., Amick, L., & Whitfield, J. (2018, June). *Practices that support beginning mathematics teachers*, Mathematics Teacher Educators Partnership 2018 Annual Conference, Denver, CO.
- Struchens, M., **Whitifeld, J.**, Erickson, D., Conway, B., & Ellis, R. (2018, June). *Paired-placment internships: A collaborative and empowering model for clinical teaching*, Mathematics Teacher Educators Partnership 2018 Annual Conference, Denver, CO.
- **Whitfield, J.** (2018, June). *TEKS and STAAR/EOC; Discussing standards*, Presented at the Summer Boot Camp of Aggie STEM, College Station, TX.
- Walters, L., Green, M., Whitfield, J., Parker, D., & Harmon, F. (2018, April). *The good, the bad, and the ugly: Reflections on an urban school experience*, American Educational Research Association (AERA) Annual Conference, New York, NY.
- Wright, K., Stillisano, J., Rollins, K., **Whitfield, J.**, Scott, T., Banerjee, M., & Waxman, H. (2018, April). *Examining STEM integration in Texas teacher preparation programs*, American Educational Research Association (AERA) Annual Conference, New York, NY.
- **Whitfield, J.** (2017, October). *An introduction to graph theory*, TAMU Math Regional Collaborative Fall Institute, College Station, TX.
- Conway, B., Erikson, D., Parish, C., Strutchens, S., & Whitfield, J. (2017, October). *An alternative approach to the traditional internship model*. Paper presented at the Georgia Association of

- Mathematics Teacher Educators, Eagle Rock, GA. Retrieved from http://digitalcommons.georgiasouthern.edu/gamte/.
- **Whitfield, J.** (2017, July), *Geogebra workshop*, TAMU Math Regional Collaborative Summer Institute, College Station, TX.
- Capraro, M.M., Capraro, R., & Whitfield, J. (2017 May), *Project-based learning in mathematics (3-8 grades*, Texas Regional Collaborative Mathematics Leadership Institute, Austin, TX.
- Whitfield, J., Waxman, H., & Scott, T. (2017 April). Comparing Noyce scholars and non-Noyce scholars perceptions of teaching. National Council for Teachers of Mathematics Research Conference, San Antonio, TX.
- Whitfield, J., Conway, B., Erickson, D., Parrish, C., & Strutchens, M. (2017 April). *Paired-placement: A collaborative & empowering model for clinical teaching*. National Council for Teachers of Mathematics Research Conference, San Antonio, TX.
- Whitfield, J., Waxman, H., & Scott, T. (2016 October). Comparing Noyce scholars decisions to teach and perspectives on teaching to non-Noyce scholars. Consortium of State Organizations for Texas Teacher Education (CSOTTE) Fall 2016 Teacher Education Conference, San Marcos, TX.
- Wilding, L., & Whitfield, J. (2016 October) *Induction and support for secondary STEM teachers*.

  Consortium of State Organizations for Texas Teacher Education (CSOTTE) Fall 2016 Teacher Education Conference, San Marcos, TX.
- **Whitfield, J**. (2016 July). *Characteristics and perceptions unique to Noyce Scholars: Do they exist?* Presented at Robert Noyce Summit, Washington D.C.
- Alexandar, J., **Whitfield, J.**, & Parker, D. (2016 June). *Certification programs...past, present, and future*. Presented at Region 6 Summer Administrators Conference, League City, TX.
- Whitfield, J. (2016 June). Comparing Noyce Scholars' decisions to teach and perspectives on teaching to non-Noyce Scholars. Presented at Mathematics Teacher Educator Partnership 2016 annual meeting, Atlanta, GA.
- Whitfield, J. & Scott, T. (2016 June). *Increasing success in calculus with placement exams and online tutoring*. Presented at Science & Mathematics Teaching Imperative (SMTI) National Conference, San Antonio, TX.
- Lyons, L.C., **Whitfield, J.**, & Waxman, H. (2016 April). *Comparing K12 STEM teachers' college of preparation: Effects on preparedness, autonomy, and commitment to teaching*. Presented at the annual conference Roundtable Session 51 of the American Educational Research Association (AERA), Washington D.C.
- Whitfield, J., Waxman, H., & Scott, T. (2016 February). Comparing Noyce scholars' decisions to teach and perspectives on teaching to non-Noyce scholars. Presented at the annual conference of the Southwest Educational Research Association, New Orleans, LA.
- **Whitfield, J.** (2015 July). *How to incorporate standards into project based learning*. Presented at the Summer Boot Camp of Aggie STEM, College Station, TX.
- **Whitfield, J.** (2015 May). *Mathematical applications for STEM*. Presented at the meeting of POSSE Foundation Houston STEM Cohort III, Houston, TX.
- Whitfield, J. (2015 April). A longitudinal evaluation of the Robert Noyce scholarship project at Texas A&M University. Presented at the annual conference Division H Roundtable Forum of the American Educational Research Association (AERA), Chicago, IL.
- Pilant, M., & Whitfield, J. (2015 March). *The impact of placement exams on retention for engineering mathematics*. Presented at the 27<sup>th</sup> International Conference on Teaching in Collegiate Mathematics, Las Vegas, NV.
- Allen, G. D., Pilant, M., & Whitfield, J. (2015 March). *PRIMES: Placement, remediation, intervention in the math engineering sequence*. Poster session presented at the 27<sup>th</sup> International Conference on Teaching in Collegiate Mathematics (ICTCM), Las Vegas, NV.
- **Whitfield, J.** (2015 February). *Getting math ready for college*. Presented at the meeting of POSSE Foundation Houston STEM cohort III, Houston, TX.
- Carter, T., & Whitfield, J. (2015 February). Using chemical reactions as a platform for STEM

- *integration*. Online workshop presentation for the TAMU STEM Collaborative for Teacher Professional Learning Teacher Professional Learning Network.
- Jabbari, N., Lyons, L., Sonnenburg, S., Waxman, H., & Whitfield, J. (2015 February). *A meta-analysis of the effects of teacher education components on student outcomes*. Presented at the annual conference for the Southwest Educational Research Association, San Antonio, TX.
- Lyons, L., Sandoval, S., Waxman, H., & Whitfield, J. (2015 February). *The impact of principals' prior leadership experiences and background on teacher professional development.* Presented at the annual conference for the Southwest Educational Research Association, San Antonio, TX.
- **Whitfield, J.** (2014 December). *Using telescopes to integrate STEM content*. Presented in a workshop for the TAMU STEM Collaborative for Teacher Professional Learning Teacher Professional Learning Network, online.
- **Whitfield, J**. (2014 October). *Integrating STEM content using Newton's first law of motion*. Presented in a workshop for the TAMU STEM Collaborative for Teacher Professional Learning Teacher Professional Learning Network, online.
- Waxman, H., Rollins, K., Stillisano, J, Wright, K., **Whitifeld, J**., & Scott, T., (2014 October). *A needs assessment of teacher education in Texas: Issues in implementing STEM and college and career readiness standards*. Presented at the conference of the Consortium of State Organizations for Texas Teacher Education, Austin, TX.
- **Whitfield, J**. (2014 September). *STEM project-based learning lessons*. Presented in a workshop for the TAMU STEM Collaborative for Teacher Professional Learning Teacher Professional Learning Network, online.
- Capraro, R., Capraro, M.M., Morgan, J., Stillisano, J., **Whitfield, J.**, & Wright, K., (July 2014). *Teacher professional learning network summer institute*. Presented at the summer conference for the STEM Collaborative, College Station, TX.
- Parker, D., & Whitfield, J. (2014 June). *Mentoring and induction to increase retention of secondary mathematics and science teachers*. Presented at the third annual conference for the Mathematics Teacher Education Partnership (MTEP), Milwaukee, WI.
- Parker, D., & Whitfield, J. (2014 June). Successful clinical experiences through university and school partnerships. Presented at the third annual conference for the Mathematics Teacher Education Partnership (MTEP), Milwaukee, WI.
- Parker, D., & Whitfield, J. (2014 June). Reeling them in: Capturing the attention of potential students. Presented at the third annual conference for the Mathematics Teacher Education Partnership (MTEP), Milwaukee, WI.
- Hendry, W., Urquhart, M., **Whitfield, J**., & Zipkes, S., (2014 May). *Teacher training, preparation, & recruitment*. Presented at the symposium on STEM education for The Texas Tribune, On the Road, Dallas, TX.
- Morgan, J., & Whitfield, J. (2014 March). *Robotics/engineering applications for high school classrooms*. Presented at the conference for New Horizons in STEM Education, San Antonio, TX.
- Allen, D., Nite, S., & Whitfield., J. (2014 March). *Retention through remediation enhancing calculus I success*. Poster session presented at the annual grantees meeting for Science, Technology, Engineering, & Math Talent Expansion Program (STEP), Washington D.C.
- Allen, D., Nite, S., & Whitfield., J. (2014 March). *Improving student success in foundational courses in math*. Presented at the annual grantees meeting for Science, Technology, Engineering, & Math Talent Expansion Program (STEP), Washington D.C.
- **Whitfield, J**. (2014 February). *Getting math ready for college*. Presented at the meeting of POSSE Foundation Houston STEM Cohort II, Houston, TX.
- **Whitfield, J**. (2013 December). *Implementation of WebAssign into college calculus classes*. Presented at the University of Texas, Austin, TX.
- Perkins, A., **Whitfield, J.**, Parker, D., Schroeder, C., & Wilding, L., (2013 November). *TPACK analysis of a STEM teacher preparation academy*. Presented at the Research Conference on Teacher

- Education of the Center for Research, Evaluation, & Advancement of Teacher Education (CREATE), Austin, TX.
- **Whitfield, J**. (2013 September). *The aggieTEACH program*. Presented at a seminar of Nutritional Sciences, College Station, TX.
- **Whitfield, J**. (2013 July). *Using the iPad for data collection*. Presented at the Conference for the Advancement of Mathematics Teaching (CAMT), San Antonio, TX.
- Whitfield, J. (2013 June). Calculus placement test and personalized precalculus remediation. Presented at the meeting of the WebAssign Users Group (WAUG), Raleigh, NC.
- Whitfield, J. (2013 June). Equipping pre-service teachers with technological skills for 21st century classroom. Presented at the meeting of the Science and Mathematics Teacher Imperative (SMTI) Mathematics Teacher Education Partnership (MTEP), St. Louis, MO.
- **Whitfield, J**. (2013 June). *Equipping pre-service teachers with technological skills for 21st century classroom*. Presented at the national conference of the Science and Mathematics Teacher Imperative (SMTI), St. Louis, MO.
- Scott, T., & Whitfield, J. (2013 March). *Getting math ready for college*. Presented at the meeting of POSSE Foundation Houston STEM Cohort I, Houston, TX.
- **Whitfield, J**. (2013 March). *Use "The Force" to enhance your classroom*. Presented at the conference for Mathematics Digital Engagement, Detroit, MI.
- **Whitfield, J**. (2013 February). Best practices for administering your course: Trials and triumphs of a course coordinator. Presented as a webinar for Cengage Learning, online.
- Criscione, J., Erukhimova, T., North, S., & Whitfield, J., (2013 January). *Faculty panel*. Presented at the conference of the Texas A&M University Teacher Summit, College Station, TX.
- **Whitfield, J**. (2012 December). *Orchestrating efforts to improve university calculus courses*. Invited presentation for the University of Delaware, Newark, DE.
- Whitfield, J. (2012 October). Enhanced WebAssign hands-on training for precalculus & calculus. Presented at the Greatest Common Factor in Success Cengage Team-Up Event for Cengage Learning, Houston, TX.
- Parker, D., & Whitfield, J., (2012 June). *Using iPads in the classroom*. Presented at the Collaborative Summer Institute at Texas A&M University, College Station, TX.
- **Whitfield, J**. (2012 March). *TAMU STEM academy*. Poster session presented at the annual meeting of Math, Science, Technology Teacher Preparation Academy, El Paso, TX.
- **Whitfield, J**. (2012 March). *Keynote speaker: Implementing EWA and best practices*. Presented at the workshop of Cengage Calculus Media and Technology, San Francisco, CA.
- **Whitfield, J**. (2012 February). *Using SmartNotebook software and the SmartBoard in the mathematics classroom*. Presented at the Conference on Teaching of Mathematics 6-12 of Sam Houston State University, Huntsville, TX.
- **Whitfield, J**. (2012 February). *EWA implementation at TAMU*. Presented at the University of Alabama, Tuscaloosa, AL.
- **Whitfield, J**. (2012 February). *Keynote speaker: Implementing EWA and best practices*. Presented at the workshop of Cengage Calculus Media and Technology, Charlotte, NC.
- Whitfield, J., & Parker, D. (2012 February). *The STEM teacher preparation academy*. Presented at the Teaching with Technology Conference of Texas A&M University, College Station, TX.
- Whitfield, J., & Nite, S.(2012 January). *Ideas to excite students about math*. Presented at the meeting of the Texas A&M University Teacher Summit, College Station, TX.
- **Whitfield, J** (2011 November). *Managing large math courses using WebAssign*. Presented to the University of South Carolina faculty, Columbia, SC.
- Beatty, R., Shaw, P., Simpson, R, & Whitfield, J. (July 2011). *Best practices for implementing enhanced WebAssign*. Presented at a panel discussion at the training event for Enhanced WebAssign, Belmont, CA.
- **Whitfield, J**. (2011 June). *Using the personal study plan as a learning tool*. Presented at the conference of the WebAssign Users Group (WAUG), Raleigh, NC.

- Whitfield, J. (2011 April). *The basics of using WebAssign*. Presented to Victoria College faculty, Victoria, TX.
- Pilant, M., Sledge, S., & **Whitfield, J**. (2011, March). *Improving success in calculus with an online personalized precalculus program*. Presented at the 23<sup>rd</sup> International Conference on Technology in Collegiate Mathematics (ICTCM), Denver, CO.
- **Whitfield, J.**, (2011 March). *Using problem solving strategies for TAKS*. Presented for the Math Instructional Coaches Program, Gladewater, TX.
- **Whitfield, J**. (2010 October 2011 April). *Middle school and high school mathematics content professional development*. Monthly presentations (via Centra) for Gladewater high school and middle school teachers, online.
- **Whitfield, J**. (2010 October). *How assessment changes with handheld technology*. Presented to Katy ISD faculty, Katy, TX.
- **Whitfield, J.**, (2010 April). *Using problem solving strategies for TAKS*. Presented for the Math Instructional Coaches Program, Gladewater, TX.
- **Whitfield, J.**, (2010 March). *Effective methods for teaching fractions, measurement, and proportionality part 2*. Presented for the Math Instructional Coaches Program, Gladewater, TX.
- **Whitfield, J.**, (2009 November). *Effective methods for teaching fractions, measurement, and proportionality part 1.* Presented for the Math Instructional Coaches Program, Gladewater, TX.
- **Whitfield, J**. (2009 October). *WebAssign implementation at TAMU*. Presented for the Math Day of Austin Community College, Austin, TX.
- **Whitfield, J**. (2009 September 2010 April). *Middle school and high school mathematics content professional development*. Monthly presentations (via Centra) for Gladewater high school and middle school teachers, online.
- Allen, G.D., Nite, S., & Whitfield, J., (2009 August). Research based instruction for mathematics and math coaching. Presented for the Math Instructional Coaches Program, Gladewater, TX.
- Ivanov, I., Pizer, A., Rosenfield, S., Roth, V., Scott, M. Dedic, & Whitfield, J., (2009 August). Assessing the effectiveness of online homework. Presented for Math Fest, Portland, OR.
- Whitfield J., & Zarestky, J., (2009 June). *Using online assessment to impact achievement*. Presented at the Conference for the Advancement of Mathematics Teaching (CAMT), Houston, TX.
- **Whitfield J**. (2009 June). *WebAssign implementation at TAMU*. Web-presentation to Collin County Community College District (CCCCD), Plano, TX.
- **Whitfield J**. (2009 May). *WebAssign implementation at TAMU*. Presented to the San Antonio College faculty, San Antonio, TX.
- **Whitfield J.** (2009 May). *WebAssign implementation at TAMU*. Web-Presentation to the Palo Alto College faculty, San Antonio, TX.
- **Whitfield J**. (2009 March). *WebAssign implementation at TAMU*. Web-Presentation to the New Mexico State University faculty, Las Cruces, NM.
- **Whitfield J.** (2009 March). *WebAssign implementation at TAMU*. Presented to the El Paso Community College faculty, El Paso, TX.
- Allen, G.D., & Whitfield J. (2009 March). *Creating Camtasia movies*. Presented at the International Conference on Technology in Collegiate Mathematics (ICTCM), New Orleans, LA.
- Nite, S., & Whitfield, J. (2007 March). *Saturday math TAKS camp*. Presented at a student workshop of Hearne High School juniors and seniors who had not passed Exit Level Math TAKS at Texas A&M University, College Station, TX.
- Whitfield, J., & Nance, R., (2006 July). *Navigating through the classroom with the TI Navigator*. Presented at the Conference for the Advancement of Mathematics Teaching (CAMT), Houston, TX.
- Allen, G.D., & Whitfield J. (2006 March). *Using Centra conferencing software to teach online courses*. Presented at the technical meeting of Teacher Quality, Austin, TX.
- **Whitfield, J**. (2006 March). *Using the TI Navigator in the classroom*. Presented at a workshop for Early High School math teachers of Early High School, Early, TX.

- **Whitfield, J.** (2005 December). *Using the TI Navigator in the classroom.* Presented at a workshop for Snook High School math teachers of Snook High School, Snook, TX.
- Allen, G.D., Janes, S., Sledge, S., & Whitfield, J. (2004 May). *TOT using Teacher Quality grant type A precalculus materials*. Presented at a workshop for Teacher Quality grant recipients, high school mathematics coordinators and other math education educators, Houston, TX.
- Allen, G.D., Janes, S., Sledge, S., & Whitfield, J. (2004 May). *TOT using Teacher Quality grant type A precalculus materials*. Presented at a workshop for Teacher Quality grant recipients, high school mathematics coordinators and other math education educators, Fort Worth, TX.
- Bollinger, K. & **Whitfield**, J. (2003 October). *An interactive approach to freshman calculus*. Presented at the 16<sup>th</sup> Annual International Conference on Technology in Collegiate Mathematics (ICTCM), Chicago, IL.
- **Whitfield J.** (2002 November). *The real world of teaching public school*. Presented to pre-service teachers of Texas A&M University, College Station, TX.

## PROFESSIONAL ASSOCIATIONS

National Council of Teachers of Mathematics (NCTM) – Member Southwest Educational Research Association (SERA) – Member Association of Mathematics Teacher Educators – Texas (AMTE-Tx) - Member Mathematics Teacher Educational Partnership (MTEP) – Team Leader

## **SERVICE**

#### Texas A&M University

- Council for Teacher Education (CTE): Fall 2017 (chair), Spring & Fall 2018 (chair)
- Math Placement Exam Administrator: Fall 2015, Spring 2016, Summer 2016, Summer 2017
- Health and Kinesiology Clinical Assistant Professor for Pedagogy, Search Committee, Outside member: Fall & Spring 2017.
- Invited guest for TAMU Football Game, representing faculty efforts for STEM Education: October 2015
- Math Placement Exam migration to WebAssign: Summer 2015
- TAMU POSSE Foundation, Houston branch summer emersion experience: Summer 2015
- University Supervisor for Student Teaching Paired Placement Model: Spring 2015
- TAMU POSSE Scholarship selection for Atlanta and Houston POSSE: December 2014
- TAMU POSSE Foundation, Houston branch summer emersion experience: Summer 2014
- Center for Research Evaluation and Advancement of Teacher Education (CREATE) Exceptional Teacher Candidate Review Committee: May 2014
- Brazos Valley Cooperative Teacher Education Center, Secretary: 2013-2017
- Aggie Educator Network College of Science Representative: 2012-2016
- TAMU Mathematics Department Math Placement Exam Improvement Group: 2013-present
- TAMU POSSE Foundation, Houston branch, summer emersion experience: Summer 2013
- Association of Public Land Grant Universities (APLU), Science & Mathematics Teacher Imperative (SMTI), East Central Texas Mathematics Teacher Partnership Team Leader: Fall 2013
   present
- SEE Math Camp Instructor: 2013
- Association of Public Land Grant Universities (APLU) Courseware Project in Precalculus: 2013
- STEM Teacher Education Council Member: 2011-2013
- Future Aggie Mathematics Educators (FAME) Sponsor: 2011-2016
- Applied Calculus Electronic Resources Inventory Committee: 2011 Chair
- Appointed Member, Mathematics Department Head Search Committee: 2010

- Elected Member, Lecture Core Curriculum Committee: 2010 2012
- Math Advisory Panel for Advanced Instructional Systems (WebAssign): 2010-2017
- Departmental lunchtime fitness leader: 2009-2014
- Online Homework Committee: 2008 Chair, 2009 Chair, 2010 Chair, 2011 Chair
- Brazos Valley P-16 Council Member: 2009, 2010
- Precalculus content modification and textbook editor: 2009
- Elected Member, Senior Lecturer Promotion Committee (Subcommittee L): 2008 Chair, 2009
- Assisted in overseeing individual help sessions: 2003, 2004, 2006, 2007, 2008
- Conducted help session interviews: 2003, 2004, 2006, 2007, 2008
- Textbook committees: 2003 (Math 142), 2005 (Math 142), 2007 (Math 131 Chair)
- Mathematics major mentor: 2005
- Lecturer classroom teaching evaluator (via classroom visits): 2003, 2004
- Help session (restructure) committee 2003
- UIL academic meet grader– 2003

#### **REVIEWS**

#### **Standardized Tests**

Texas Success Initiative Item Review, Reviewed for the College Board (January 2013)

#### **Textbooks**

- Precalculus Electronic Courseware, Reviewed for Cengage Publishing (June 2012).
- Brief Calculus Practical Applications (1e) by David B. Johnson, Freeman, (July 2008).
- Comparative Review of *Applied Calculus for the Managerial, Life, and Social Sciences* by Tan, *Applied Calculus* by Larson, and *Applied Calculus* by Barnett/Zeigler/Byleen, Reviewed for Prentice Hall, (May 2005).
- Comparative Review of *Applied Calculus* by Barnett/Zeigler/Byleen and *Calculus and Its Applications* by Bittinger, Prentice Hall, (December 2004).
- Applied Calculus by Fox and West, Pearson, (December 2004).
- Finite Math by Fox and West, Pearson, (December 2004).
- Finite Math and Its Applications by Goldstein, Schneider, and Siegel, Prentice Hall, (December 2004).
- Comparative Review of *Calculus & Its Applications* (10e) by Goldstein/Lay/Schneider vs. *Calculus* (8e) by Hoffmann/Bradley and *Calculus* (8e) by Bittinger. Reviewed for Prentice Hall (April 2004).
- Calculus for the Managerial, Life, and Social Sciences (6e) by Tan, Thompson Learning, (September 2003).
- Calculus: Applications and Technology for Business, Social and Life Sciences (2e) by Tomastik, Thompson Learning, (November 2002).

## **Online Resources**

- Applied Calculus Interactive Website to accompany Waner/Costenoble textbook, Thompson Learning, (June 2007)
- My ILRN Experience, prepared for Brooks/Cole Publishing, (May 2004)

#### TECHNOLOGICAL SKILLS

#### **Software Programs**

Microsoft Access, Microsoft Word, Microsoft Powerpoint, Microsoft Excel, Camtasia, Snag-It, Centra online conferencing, Adobe Acrobat Professional, Macromedia Dreamweaver, Scientific Notebook, TI Connect, SMART Board, TI SmartView, Blackboard Learning Management System.

## **Computer Languages**

Latex, HTML, Pascal, Basic.

## Other Technologies

TI 83/84 Graphing Calculator, Calculator-Based Ranger (CBR), Calculator-Based Lab (CBL), TI Navigator system, WebAssign.

## **MISCELLANEOUS POSITIONS**

Group Fitness Instructor – Aerofit Health Clubs Group Fitness Instructor, June 1999 – Aug 2009 Club Girls Volleyball Coach – U14 and U16 Head Coach, Dec 2002 – June 2004 Texas A&M University

- National Youth Sports Camp Instructor summer 1994, summer 1995.
- Lady Aggie Volleyball Camp Head Coach summer 2003, 2004, 2005.

#### **COURSES/WORKSHOPS TAUGHT**

## **Texas A&M University - Mathematics Courses**

- MATH 102 College Algebra (Summer 2000)
- MATH 131 Mathematical Concepts: Calculus (Spring 2006)
- MATH 131 Honors Mathematical Concepts: Calculus (Spring 2006)
- MATH 141 Business Mathematics I (Summer 1999, Spring 2002, Fall 2005, Fall 2008)
- MATH 142 Business Mathematics II (Summer 2001, Fall 2002, Spring & Fall 2003)
- MATH 142 Honors Business Mathematics II (Fall 2003)
- MATH 147 Calculus I for Biological Sciences (Fall 2012)
- MATH 151 Engineering Mathematics I (Fall 2001, Spring 2002, Spring & Fall 2009, Spring 2010, Fall 2013, Fall 2015)
- MATH 152 Engineering Mathematics II (Summer 2002, Summer 2003)
- MATH 171 Analytic Geometry and Calculus (Spring 2003, Spring 2004)
- MATH 172 Calculus (Fall 2002)
- MATH 365 Structure of Mathematics I (Spring & Fall 2004, Spring 2005, Spring & Fall 2006, Spring & Fall 2007, Spring & Fall 2008)
- MATH 645 (online) Survey of Mathematics Problems I (Fall 2016)
- MATH 646 (online) Survey of Mathematics Problems II (Spring 2016, Spring 2017, Sum 2018)
- MATH 689 (online) Special Topics: Teaching Algebra and PreCalculus (Summer 2008)
- Week-in Review MATH 142 (Fall 2002, Fall 2003, Spring 2008)
- Week-in Review MATH 151 (Fall 2001, Spring 2002, Spring 2004)
- Week-in Review MATH 365 (Fall 2006)
- Math 142 Course Coordinator (Fall 2003, Spring 2007)

## Texas A&M University Education/Teaching Courses

- SCEN 201 Self-Directed Experiences with Adolescents (Fall 2011, Spring & Fall 2012, Spring & Fall 2013, Spring & Fall 2014, Spring & Fall 2015, Spring & Fall 2016, Spring & Fall 2017)
- TEFB 406 Science in the Middle and Secondary School (Fall 2016, Spring 2017)
- TEFB 407 Mathematics in the Middle and Secondary School (Fall 2016, Spring 2017)

Blinn College: MATH 0312 – Intermediate Algebra; MATH 1324 – Mathematics, Analysis I

**A&M Consolidated High School:** Algebra 1; Algebra 2; Geometry

Bryan High School: TAAS Math, Algebra 1; Algebra 2; Geometry; Trigonometry; Elementary Analysis

Jane Long Middle School: 7<sup>th</sup> Grade Mathematics; 8<sup>th</sup> Grade Mathematics

# **GRADUATE COMMITEES – STUDENTS GRADUATED**

## M.S. - Non-Thesis Option Chair

Chris Bolognese (Aug 2018) Debra Brewer (Dec 2017) Jessica Crook (Aug 2018) Maci Kaiser (Aug 2018) Aaron Mock (May 2017) Leslie Thomas (Aug 2018)

### M.S. - Non-Thesis Option Member

Nikki Chandler (Aug 2017) Jennifer Rieger (May 2018) Carolos Shine (Aug 2018)

Barbara J. Smith (May 2017)

## **GRADUATE COMMITEES – CURRENT GRADUATE STUDENTS**

## M.S. - Non-Thesis Option Chair

Kristi Burks John Cowen Michelle Favreau Karian Geoghegan Bridgette L. Hewitt Lia Hoying Haley Pichler David R. Riley Teri St. Pierre

Jessica Tripode Lawrence E. Yee

## M.S. - Non-Thesis Option Member

Lauren Bingham Badri Johnson

## Ph.D

Manjari Banerjee