

## **Jeremy Stricklin Zelkowski, PhD**

**Associate Professor of Secondary Mathematics Education—Program Director**

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**Current Grant Websites:** <http://aplusmath.ua.edu>; <https://seed4alcs.ua.edu/>; <https://www.cs4alabama.org>

**Other Projects Website:** <https://cerac-methods.ua.edu/>; <https://sites.ced.ncsu.edu/mathedmeasures/>;

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### **Education:**

Ph.D. Mathematics Education, Ohio University

*Appalachian Collaborative Center for Learning, Assessment & Instruction in Mathematics*

*ACCLAIM: A National Science Foundation Center for Learning and Teaching (NSF CLT)*

Zelkowski, J. (2008, Aug). *Important secondary mathematics enrollment factors that influence the completion of a bachelor's degree* (Publication No. 3683705) [Doctoral dissertation, Ohio University]. ProQuest Dissertations and Theses Global. Chair: Dr. George Johanson.

M.S. Mathematics, Interdisciplinary w/ Curriculum & Instruction, West Virginia University

B.A. Mathematics, West Virginia University

### **Selected Leadership/Licensures/Authorizations/Recognitions:**

August 2008 – present: Director of Secondary Mathematics Education (BSE, MA, EdS, EdD, PhD programs)

August 2012 – present: Director, The University of Alabama Mathematics Teacher Education Partnership

August 2012 – present: Full Graduate Faculty, The University of Alabama

November 2014 – present: T<sup>3</sup> National Instructor (Teachers Teaching with Technology)

August 2016 – present: Program national recognition, initial teacher prep programs (BSE, MA), NCTM SPA

Summer 2022 – International Congress on Mathematical Education U.S. Delegation Lead for NSF grant proposal

February 2022 – February 2023: Association of Mathematics Teacher Educators Conference Program Chair

June 2016 – December 2017: Co-Chair & Lead Writer, Alabama's State Department of Education Strategic Planning Committee on Mathematics Education. Superintendent Appointment

June 2016 – June 2017: Chair, the National Council of Teachers of Mathematics Affiliate Relations Committee

November 2014 – October 2016: President, the Alabama Council of Teachers of Mathematics

April 2011 – November 2014: T<sup>3</sup> Regional Instructor (Teachers Teaching with Technology)

August 2003 – June 2008: Institute for Mathematics Learning, Course Coordinator for multiple introductory mathematics courses, West Virginia University Mathematics Department

Fall 1999 – Spring 2003: Louisiana Masters Level Secondary Mathematics Teacher Certification

August 2007 – August 2023: NCES restricted data licensure-NELS:88, ELS:2002, NAEP:HSTS 2005

### **Research Expertise Domains:**

#### ➤ **Secondary Mathematics Teacher Development & Measurement**

- ✓ Secondary Mathematics Teacher Education Program Design, Research, & Evaluation
- ✓ Measurement & Validation
- ✓ Classroom Practice Observation
- ✓ Technological Pedagogical and Content Knowledge (TPACK)
- ✓ Professional Development for Teachers' use of Technologies for Teaching Mathematics
- ✓ The Standards for Mathematical Practice Implementation

#### ➤ **Mathematical College-Readiness Policy & Practice**

- ✓ Mathematics Intensity Level (MIL)
- ✓ College Readiness related to High School Mathematics Coursework
- ✓ AP Calculus Programs
- ✓ Mathematics Achievement
- ✓ Technology/Assessment Practices
- ✓ Mathematics Education Policy Research with NCES and NAEP datasets

## Scholarship ([Link to Publications](#))

### Publications (64 Total: 61 peer-reviewed) (\*graduate student, ^K12 teacher, as co-authors)

*Peer-Reviewed Journals (25); Peer-Reviewed Chapters (8); Peer-Reviewed Proceedings (27); Technical Docs (4)*

- Zelkowski, J., Campbell, T.G., & Moldavan, A.M. (2024). The relationships between internal program measures and a high-stakes teacher licensing measure in mathematics teacher preparation: Program design considerations. *Journal of Teacher Education*, 75(1), 58-75. <https://doi.org/10.1177/00224871231180214>
- Zelkowski, J., Makowski, M.B., Campbell, T.G., Gleason, J., Thomas, C.A., ^Mudd, A., \*Lewis, A.K., \*Gooden, C., & \*Smith, F.A. (2024). Leveraging longitudinal and annual analyses to improve program design: Considering teacher education standards and professional recommendations. In Benken, B. (Ed.). *Reflection on Past, Present and Future: Paving the Way for the Future of Mathematics Teacher Education*. (pp. 447-475). Information Age Publishing, Inc. 979-8-88730-542-4  
<https://www.infoagepub.com/products/The-AMTE-Handbook-of-Mathematics-Teacher-Education-Vol-5>
- Zelkowski, J., Odom-Bartel, R.L., & Gray, J. (2024). Examining the impact on TPACK and knowledge subcomponents in dually certifying secondary mathematics teacher candidates with a computer science add-on endorsement. *Journal of Research on Technology Education*, TBD(#), xx-xx.  
<https://doi.org/10.1080/15391523.2024.2363205>
- Sarrell, A., Zelkowski, J., & Livers, S.D. (2024). The critical roles of a mathematics specialist in establishing effective, coordinated professional development systems. *Investigations in Mathematics Learning*, TBD(#), xx-xx. <https://doi.org/10.1080/19477503.2024.2355076>
- Zelkowski, J., Odom-Bartel, R.L., & Gray, J. (accepted, 2024). Dually certifying secondary mathematics teacher candidates in mathematics and computer science: A multi-year, multi-cohort TPACK research project summary. *Proceedings of the 15<sup>th</sup> International Congress on Mathematical Education*. Sydney, Australia: ICME 15.
- Zelkowski, J., Smith, F.A., Gooden, C., Isah, Y., Gleason, J., Makowski, M., Bergeron, W.A., & Petrusis, R. (accepted, 2024). Examining the relationships between classroom observation and national teaching standards in a master teacher professional development project. *Proceedings of the 15<sup>th</sup> International Congress on Mathematical Education*. Sydney, Australia: ICME 15.
- Zelkowski, J., \*Gooden, C., & \*Smith, F.A. (accepted, 2024). *Examining the relationship between classroom observations and national boards component scores during inservice professional development*. In Kosko, K., Caniglia, J., Courtney, S., & Zolfaghari, M. (Eds.). *Proceedings of the 46<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. TBD). Kent State University.
- \*Folger, T. D., Gallagher, M. A., Walkowiak, T. A., Wilhelm, A. G., Zelkowski, J., & Bostic, J. (accepted, 2024). Examining validation practices for measures of mathematics teacher affect and behavior. In Kosko, K., Caniglia, J., Courtney, S., & Zolfaghari, M. (Eds.). *Proceedings of the 46<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. TBD). Kent State University.
- ^Smith, P.G. & Zelkowski, J. (2023). A TPACK instrument for 7-12 mathematics in-service middle and high school teachers in the United States: A validation study. *Journal of Research on Technology in Education*, 55(5), 858-876. <https://doi.org/10.1080/15391523.2022.2048145>
- \*Gooden, C., Zelkowski, J., & \*Smith, F.A. (2023). A systematic literature review on factors of stress, burnout and job satisfaction of secondary grades teachers at time of professional crisis. *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas*, 96(5), 162-171.  
<https://doi.org/10.1080/00098655.2023.2238880>

- Zelkowski, J., Odom-Bartel, R.L., & Gray, J. (2022). Integrating computer science teacher certification into a secondary mathematics teacher preparation program: The highlights. *AMTE Connections*, 32(1), published online <https://amte.net/connections/2022/05/connections-thematic-articles-integration-mathematics-teacher-education>.
- Zelkowski, J., Yow, J., Waller, P., Edwards, B.P., Anthony, H.G., \*Campbell, T.G., \*Keefe, A., & \*Wilson, C. (2022). Linking the field-based mentor teacher to university coursework: Methods course modules for completing the triad of learning for mathematics teacher candidates. In Polly, D. & Garin, E. (Eds.). *Preparing Quality Teachers: Advances in Clinical Practice* (pp. 579-608). Information Age Publishing. ISBN 978-1-64802-869-4 <https://www.infoagepub.com/products/Preparing-Quality-Teachers>
- Zelkowski, J. & Campbell, T.G. (2022). Early mathematics teacher preparation evaluation rubrics for the context of live discussion forums. In Lischka, A., Strayer, J., Lovett, J., Jones, R.S., & Dyer, E. (Eds.). *Proceedings of the 44<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1309-1318). Middle Tennessee State University. ISBN 978-1-7348057-1-0 <https://doi.org/10.51272/pmena.44.2022>
- Zelkowski, J., Odom-Bartel, R. L., & Gray, J. (2022). Two-course sequence and modules for adding Computer Science credential into secondary mathematics teacher preparation. *Paper presented at the 2022 annual meeting of the American Educational Research Association*. AERA Online Paper Repository. <https://doi.org/10.3102/1892543>
- Gallagher, M., \*Bardelli, E., \*Folger, T.D., \*Neely, A. Bostic, J.D., Walkowiak, T.A., Wilhelm, A.G., & Zelkowski, J. (2022). Measures of mathematics teachers' behavior and affect: An examination of the assessment landscape. *Paper presented at the 2022 annual meeting of the American Educational Research Association*. AERA Online Paper Repository. <https://doi.org/10.3102/1884395>
- Odom-Bartel, B., Zelkowski, J., & Gray, J. (2021). Preparing secondary education mathematics teacher candidates for AP Computer Science Principles: A two-course design model. In Mouza, C., Yadav, A., and Ottenbreit-Leftwich, A. (Eds.). *Preparing pre-service teachers to teach computer science: Models, practices, and policies* (pp. 153-172). Information Age Publishing, Inc. ISBN 978-1-64802-457-3 <https://www.infoagepub.com/products/Preparing-Pre-Service-Teachers-to-Teach-Computer-Science>
- Zelkowski, J., \*Campbell, T.G., Moldavan, A.M., & Gleason, J. (2021). Maximizing teacher candidate performances based on internal program measures: Program design considerations. In Smith, W.M. & Augustyn, L. (Eds.). *Proceedings of the 10<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 39-42). Association of Public Land-grant Universities. <https://www.aplu.org/our-work/5-archived-projects/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep10-materials/1.10thAnnualMTE-PartnershipConferenceProceedings.pdf>.
- Strutchens, M., Zelkowski, J., Edwards, B., Conway, B., Mangram, C., Sears, R., Stone, J., & Cayton, C. A. (2021). Clinical experiences research action cluster annual report. In Smith, W.M. & Augustyn, L. (Eds.). *Proceedings of the 10<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 21-27). Association of Public Land-grant Universities. <https://www.aplu.org/our-work/5-archived-projects/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep10-materials/1.10thAnnualMTE-PartnershipConferenceProceedings.pdf>.
- \*Campbell, T. G., \*King, S., & Zelkowski, J. (2021). Comparing middle grade students' oral and written arguments. *Research in Mathematics Education*, 23(1), 21-38. <https://doi.org/10.1080/14794802.2020.1722960>.
- Zelkowski, J., Gray, J., & Odom-Bartel, R. (2021). *Final NSF report: Building a Pathway for CS Principles Teachers: A Two-course Sequence for Secondary Education Mathematics Pre-service Teachers*. National Science Foundation. (*not peer-reviewed*)

- Sears, R., Zelkowski, J., Edwards, B., & \*Castro-Minnehan, C. (2020). Developing infrastructure to support teacher candidates during emergency remote clinical experiences. *AMTE Connections*, 30(2), published online <https://amte.net/connections/2020/11/connections-thematic-articles-voices-field>.
- \*Campbell, T.G. & Zelkowski, J. (2020). Technology as a support for proof and argumentation: A systematic literature review. *The International Journal for Technology in Mathematics Education*, 27(2), 113-124. <https://cloud.3dissue.com/170388/199108/233436/IJTME-Vol27-2-2020/index.html>
- Livers, S.D., Zelkowski, J., Harbour, K.E., McDaniel, S., & Gleason, J. (2020). An examination of the relationships of mathematics self-efficacy and teaching practices among elementary, secondary, and special education teachers. *Investigations in Mathematical Learning*, 12(2), 96-109. <https://doi.org/10.1080/19477503.2019.1670891>
- Zelkowski, J., Yow, J., Ellis, M.E., & Waller, P. (2020). Engaging mentor teachers with teacher candidates during methods courses in clinical settings. In Martin, W.G., Lawler, B.R., Litchka, A.E, and Smith, W.M. (Eds.). *The Mathematics Teacher Education Partnership: The Power of a Networked Improvement Community to Transform Secondary Mathematics Teacher Preparation* (pp. 211-234). Information Age Publishing, Inc. ISBN 978-1-64113-932-8 <https://www.infoagepub.com/products/The-Mathematics-Teacher-Education-Partnership>
- Strutchens, M. E., Sears, R., & Zelkowski, J. (2020). Improving clinical experiences for secondary mathematics teacher candidates. In Martin, W.G., Lawler, B.R., Litchka, A.E, and Smith, W.M. (Eds.). *The Mathematics Teacher Education Partnership: The Power of a Networked Improvement Community to Transform Secondary Mathematics Teacher Preparation* (pp. 199-210). Information Age Publishing, Inc. ISBN 978-1-64113-932-8 <https://www.infoagepub.com/products/The-Mathematics-Teacher-Education-Partnership>
- Strutchens, M.E., Erickson, D., Sears, R., & Zelkowski, J. (2020). Clinical experiences for secondary mathematics teacher candidates. In Martin, W.G., Lawler, B.R., Litchka, A.E, and Smith, W.M. (Eds.). *The Mathematics Teacher Education Partnership: The Power of a Networked Improvement Community to Transform Secondary Mathematics Teacher Preparation* (pp. 179-198). Information Age Publishing, Inc. ISBN 978-1-64113-932-8 <https://www.infoagepub.com/products/The-Mathematics-Teacher-Education-Partnership>
- Zelkowski, J. & Campbell, T.G. (2020). Praxis II and edTPA effect sizes of teacher preparation program design: A path analysis study. *Paper presented at the 2020 annual meeting of the American Educational Research Association*. AERA Online Paper Repository. <https://doi.org/10.3102/1571148>
- Zelkowski, J. & Campbell, T.G. (2020). Direct & indirect effect sizes on secondary mathematics teacher candidates content knowledge & pedagogical content knowledge as measured by national examinations: A structural equation modeling multi-cohort longitudinal study. *Proceedings of the 14<sup>th</sup> International Congress on Mathematical Education*. Shanghai, China: ICME 14. [http://jzelkowski.people.ua.edu/uploads/1/0/6/0/106005181/icme\\_2020\\_paper\\_zelkowski-campbell\\_final.pdf](http://jzelkowski.people.ua.edu/uploads/1/0/6/0/106005181/icme_2020_paper_zelkowski-campbell_final.pdf)
- Strutchens, M., Sears, R., Zelkowski, J., Edwards, B., Conway, B., & Mangram, C. (2020). Clinical experiences research action cluster annual report. In Smith, W.M. & Augustyn, L. (Eds.). *Proceedings of the 9<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 22-27). Association of Public Land-grant Universities. <https://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep9.html>
- Gray, J., Odom-Bartel, R.L., Zelkowski, J., Hamner, K., & Rogers-Farris, S. (2020). A pre-service pathway for preparing future AP CS Principles teachers. In Heckman, S., Monge, A., & Cutter, P. (Eds.). *Proceedings of the 51<sup>st</sup> ACTM Technical Symposium on Computer Science Education* (pp. 1127-1132). Association for Computing Machinery, New York, NY. <https://doi.org/10.1145/3328778.3366945>
- Odom-Bartel, R.L., Fletcher, C., Owen, J., Gray, J., & Zelkowski, J. (2020). Preparing pre-service teacher candidates for the praxis exam: An innovative model of blended support. In Heckman, S., Monge, A., &

- Cutter, P. (Eds.). *Proceedings of the 51<sup>st</sup> ACTM Technical Symposium on Computer Science Education* (p. 1298). Association for Computing Machinery, New York, NY. <https://doi.org/10.1145/3328778.3372654>
- Strutchens, M., Sears, R., Zelkowski, J., Edwards, B., Conway, B., & Mangram, C. (2019). Research action cluster annual reports: Clinical experiences. In Smith, W.M., Callahan, K.M., Strayer, J.F., Jones, R.S. & Augustyn, L.C. (Eds.). *Proceedings of the 8<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 27-33). Association of Public Land-grant Universities. <https://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep8.html>
- \*^Whitmire, B.G. & Zelkowski, J. (2018). Impact of Explore-Instruct Pedagogy on Student Learning: Solidifying teacher belief changes to productive! *Alabama Journal of Mathematics*, 42, 1-7. <http://www.ajmonline.org/wp-content/uploads/2018/12/AJM-2018-110-Zelkowski.pdf>
- Zelkowski, J., \*Campbell, T.G., & Gleason, J. (2018). Programmatic effects of capstone math content and math methods courses on teacher licensure exams. In Smith, W.M., Lawler, B.R., Strayer, J.F. & Augustyn, L. (Eds.). *Proceedings of the 7<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 91-96). Association of Public Land-grant Universities. <https://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep7.html>
- Zelkowski, J. (2018). Transforming The University of Alabama’s Secondary Mathematics Teacher Preparation Program. In Smith, W.M., Lawler, B.R., Strayer, J. & Augustyn, L. (Eds.). *Proceedings of the 7<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 29-31). Association of Public Land-grant Universities. <https://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep7.html>
- Strutchens, M., Sears, R., & Zelkowski, J. (2018). Research action cluster reports: Clinical experiences. In Smith, W.M., Lawler, B.R., Strayer, J.F. & Augustyn, L. (Eds.). *Proceedings of the 7<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 53-56). Association of Public Land-grant Universities. <https://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep7.html>
- Zelkowski, J. & Gleason, J. (2018). Programmatic effects on high stakes measures in secondary math teacher preparation. In Venenciano, L. and Redmond-Sanogo, A. (Eds.). *Proceedings of the 45<sup>th</sup> Annual Meeting of the Research Council on Mathematics Learning* (pp. 169-176). Baton Rouge, LA. <https://www.rcml-math.org/assets/Proceedings/rcml%20proceedings%202018.pdf>
- Sunal, C.S., Sunal, D.W., & Zelkowski, J. (2018). *Final NoyceWeb report: UA-Noyce*. The National Science Foundation. (*not peer-reviewed*)
- Gleason, J., Livers, S.D., & Zelkowski, J. (2017). Mathematics Classroom Observation Protocol for Practices (MCOP<sup>2</sup>): Validity and reliability. *Investigations in Mathematical Learning*, 9(3), 111-129. <https://doi.org/10.1080/19477503.2017.1308697>
- Zelkowski, J., Massey, M., Culpepper, A. & Watson, J. (2017). *Alabama Strategic Mathematics Planning Committee: Recommendations for Improving Alabama’s Mathematics Education*. The Alabama State Department of Education. <https://www.alsde.edu/ofc/osl/Documents/Math%20Str%20Rpt%20Final.pdf>
- Strutchens, M., Sears, R., Zelkowski, J., & Ellis, M.W. (2017). Research action cluster reports: Clinical experiences. In Smith, W.M., Lawler, B.R., Bowers, J. & Augustyn, L. (Eds.). *Proceedings of the 6<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 45-48). Washington, DC: Association of Public Land-grant Universities. <https://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep6.html>
- Zelkowski, J. & Gleason, J. (2016). Using the MCOP<sup>2</sup> as a grade bearing assessment of clinical field observations. In Lawler, B.R., Ronau, R.N. & Mohr-Schroeder, M.J. (Eds.), *Proceedings of the 5<sup>th</sup> Annual Mathematics Teacher Education – Partnership Conference* (pp. 129-138). Washington, DC: Association of

Public Land-grant Universities. <https://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferences-meetings/mtep5.html>

Zelkowski, J., Gleason, J., & Livers, S.D. (2016). Measuring mathematics classroom interactions: An observation protocol reinforcing the development of conceptual understanding. *Proceedings of the 13<sup>th</sup> International Congress on Mathematical Education*. Hamburg, Germany: ICME 13.  
[https://jzelkowski.people.ua.edu/uploads/1/0/6/0/106005181/2016-07\\_zelkowski-gleason-livers\\_-\\_icme\\_13\\_proceedings.pdf](https://jzelkowski.people.ua.edu/uploads/1/0/6/0/106005181/2016-07_zelkowski-gleason-livers_-_icme_13_proceedings.pdf)

Gleason, J., Livers, S.D., & Zelkowski, J. (2015). *Mathematics classroom observation protocol for practices MCOP<sup>2</sup>: Descriptive manual*. Tuscaloosa, AL: The University of Alabama.  
<http://jgleason.people.ua.edu/mcop2.html> (not peer-reviewed)

Bismarck, S., Zelkowski, J., & Gleason, J. (2014). Predicting future gas prices using the standards for mathematical practice. *Mathematics Teacher*, 107(9), 694-700.  
<https://doi.org/10.5951/mathteacher.107.9.0694>

Zelkowski, J., Gleason, J., Cox, D., & Bismarck, S. (2013). Developing and validating a reliable TPACK instrument for secondary mathematics preservice teachers. *Journal of Research on Technology in Education*, 46(2), 173-206. <https://doi.org/10.1080/15391523.2013.10782618>

\*^Kustos, P. & Zelkowski, J. (2013). Grade-continuum trajectories of four known probabilistic misconceptions: What are students' perceptions of self-efficacy in completing probability tasks? *Journal of Mathematical Behavior*, 33(3), 508-526. <https://doi.org/10.1016/j.jmathb.2013.06.003>

Zelkowski, J. & \*Goodykoontz, E. (2013). Student accountability and instructor variability in a college calculus course. *Mathematics and Computer Education*, 47(3), 204-223.  
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Zelkowski, J. (2013). Making sense of extraneous solutions. *Mathematics Teacher*, 106(6), 452-458.  
<https://doi.org/10.5951/mathteacher.106.6.0452>

Zelkowski, J. (2012). How does rural do at preparing mathematically college-ready students? *The Rural Mathematics Educator*, 10(3), 38-47. <http://bit.ly/Okx6aM>

Zelkowski, J. & \*Goodykoontz, E. (2012). Student accountability and instructor variability: A research study in a terminal, required, applications focused calculus course. In *Proceedings of the 12<sup>th</sup> International Congress on Mathematical Education*. Seoul, South Korea: ICME 12.  
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Zelkowski, J. (2011). Evaluating an AP calculus program's struggles: Lessons learned and changes for improvement. *Alabama Journal of Mathematics*, 36(1), 1-11. <http://www.ajmonline.org/wp-content/uploads/2019/03/zelkowski.pdf>

Zelkowski, J. (2011). Defining the intensity of high school mathematics: Distinguishing the difference between college-ready and college-eligible students. *American Secondary Education*, 39(2), 27-49.  
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Zelkowski, J. (2011). The TI-Nspire CAS: A happy-medium mobile device for grades 9-16 mathematics classrooms. *TechTrends: Linking Research and Practice to Improve Learning*, 55(3), 40-46.  
<https://doi.org/10.1007/s11528-011-0496-6>

Zelkowski, J. (2011). Developing secondary mathematics preservice teachers' technological pedagogical content knowledge: Influencing positive change. In Maddux C.D., Gibson, D., Dodge, B., Owen, C., Mishra, P., & Koehler, M. (Eds.), *Research Highlights in Technology and Teacher Education 2011*, (pp.31-38). Chesapeake, VA: Society for Information Technology and Teacher Education.  
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- Zelkowski, J. (2011). Developing secondary mathematics preservice teachers' technological pedagogical and content knowledge: Influencing positive growth. In M. Koehler & P. Mishra (Eds.), *Proceedings of SITE 2011-Society for Information Technology & Teacher Education International Conference* (pp. 4443-4450). Nashville, TN: Association for the Advancement of Computing in Education (AACE).  
<https://www.learntechlib.org/primary/j/SITE/v/2011/n/1/>
- Zelkowski, J. (2011). Teaching mathematics with technology: A longitudinal study of secondary preservice teacher Technological Pedagogical Content Knowledge (TPACK) development. *Paper presented at the 2011 annual meeting of the American Educational Research Association*. Retrieved April 30, 2011, from the AERA Online Paper Repository. <https://www.aera.net/Publications/Online-Paper-Repository/AERA-Online-Paper-Repository>
- Zelkowski, J. (2010). Secondary mathematics: Four-credits, block-schedules, continuous enrollment? What maximizes college-readiness? *The Mathematics Educator*, 20(1), 8-21.  
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- Zelkowski, J. (2009). Tackling low-level cognitive task teaching in secondary mathematics: One approach to mold pre-service teachers' pre-conceived beliefs into best practice. *Journal of Inquiry and Action in Education*, 3(1), 70-94.  
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- Zelkowski, J. (2009). Secondary mathematics: Four-credits vs. continuous enrollment for college readiness. In *Archives of the 38<sup>th</sup> proceedings of the annual meeting of the Mid-South Educational Research Association* (p. 115), Baton Rouge, LA: MSERA. <http://www.msera.org/old-site/2009/proceed09.htm>
- Zelkowski, J. (2008). Mini-Monongalia Mathematics Lesson. In T.M. Hopkins & V.M. Long (Eds.), *Mathematics in rural Appalachia: Place-based mathematics lessons* (pp.37-42). Koinonia Associates LLC.
- Zelkowski, J. & Mayes, R. (2008). Applied algebra: Modeling technique of least squares. *Mathematics Teacher*, 102(1), 46-51. <https://doi.org/10.5951/mt.102.1.0046>
- Zelkowski, J. S. (2008). *Important secondary mathematics enrollment factors that influence the completion of a bachelor's degree* (Publication No. 3683705) [Doctoral dissertation, Ohio University]. ProQuest Dissertations and Theses Global.
- Caldwell, J., Zelkowski, J., & Butler, M. (2006). Using personal response systems in the classroom. In *Proceedings of the West Virginia University Technology Symposium 2006*. Morgantown, WV.

### **Research Manuscripts (Pipeline) Under Review/In Progress** \*graduate student, ^teacher

- Zelkowski, J. (under review). *To Praxis test or not? Mathematics content knowledge tests for teacher licensure and programmatic considerations on moving the preparation field forward*. *Investigations in Mathematics Learning*. Submitted for review March 30, 2024.
- Zelkowski, J., Odom-Bartel, R.L., & Gray, J. (revise & resubmitted). *Examining the Impact on TPACK and Knowledge Subcomponents in Dually Certifying Secondary Mathematics Teacher Candidates with a Computer Science add-on Endorsement*. *Journal of Research on Technology Education*. Submitted for review December 29, 2023, resubmitted March 13, 2024.
- Zelkowski, J. & Campbell, T.G. (under review). *Generating Validity Evidence for Rubrics in Teacher Education: The Process and Importance for Measuring Candidate Affect*. *Practical Assessment, Research, and Evaluation*. Submitted for review December 31, 2023.
- \*Smith, F.A., Zelkowski, J. & \*Gooden, C. (under review). *A Systematic Literature Review of Culturally Responsive Teaching and Culturally Relevant Pedagogy in Mathematics Education*. *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas*. Under review.

Smith, F.A., Gooden, C., Isah, Y., Bergeron, W.A., Zelkowski, J., Gleason, J., & Makowski, M.B. (working manuscript, 30% complete). *Shaping Teacher Leadership: Exploring School Settings, Climate, and Perceptions*.

Gooden, C., Smith, F.A., Isah, Y., Zelkowski, J., Makowski, M.B., Gleason, J., & Bergeron, W.A. (working manuscript, 25% complete). *Examining teacher self-efficacy across multiple measures in relation to master teacher instructional practices*.

Zelkowski, J., <sup>\*</sup>Dai, D.C., <sup>\*</sup>Kenny, N.C., & <sup>\*</sup>Campbell, T.G. (working manuscript). *Understanding inverse functions through data analysis, modeling, & applications*. The Mathematics Teacher, (NCTM).

Zelkowski, J. & <sup>\*</sup>Campbell, T.G. (working manuscript). *An eight-year longitudinal assessment of programmatic design for the analysis of TPACK self-efficacy in secondary mathematics preservice teachers*. Target Journal: CITE-Math, (AMTE).

Zelkowski, J. (working manuscript). *Turning around an AP calculus program: A four-year project all schools can learn to improve performance*. Target Journal: The Mathematics Educator, (UGA).

### **Conference Proceeding Papers Under Review/In Progress/Accepted <sup>\*</sup>graduate student, <sup>^</sup>teacher**

Folger, T., Gallagher, M., Walkowiak, T., Wilhelm, A., Zelkowski, J., & Bostic, J. (under review). *Examining validation practices for measures of mathematics teacher affect and behavior*. Paper submitted to the 46<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Cleveland, OH.

Haynie, K., Blankenship, T., Gray, J., & Zelkowski, J. (accepted). *Observation tool for developing students' computational thinking in rural southern high schools*. Paper submitted to the 55<sup>th</sup> ACM Technical Symposium on Computer Science Education. Portland, OR.

Zelkowski, J., Haynie, K., & Gray, J. (revising for 2024). The development of an algebra instrument for the assessment of function understanding: Validity evidence. Paper to be resubmitted to the annual meeting of the American Educational Research Association.

### **Citations of Publications**

**H-index: Google Scholar h-11 (4 citations to h-12); i10 index =11 (2 citations to i10=12)**

Google Scholar Total Citations: 572 (462 since promotion to Associate Professor)

#### **Top Cited and National Impact Research Publications**

Mathematics Classroom Observation Protocol for Practices (MCOP<sup>2</sup>): Validity and reliability.

*Investigations in Mathematical Learning*, 2017

Overall MCOP<sup>2</sup> Citations: 140 total, 20/year

IML Journal Research paper: 81 total, 12/year

MCOP<sup>2</sup> Descriptors Manual: 39 total, 5/year

MTEP Proceedings: 20 total, 3/year (2016, 2017, 2018, 2019, 2020, 2021, 2022)

Developing and validating a reliable TPACK instrument for secondary mathematics preservice teachers.

*Journal of Research on Technology in Education*, 2013

Google Scholar: 143 total, 12/year

Secondary mathematics: Four-credits, block-schedules, continuous enrollment? What maximizes college-readiness? *The Mathematics Educator*, 2010

Google Scholar: 86 total, 7/year

Defining the intensity of high school mathematics: Distinguishing the difference between college-ready and college-eligible students. *American Secondary Education*, 2011

Google Scholar: 63 total, 5/year



**Grant Funding History:**Associate Professor (August 2014 – present)

Submitted: 10   Funded: 6   Amount Funded: \$7,143,072   Under Review: 0   Active: 3

Notes: 8-Federal, 2-Federal USDOE pass-through thru Alabama Dept of Education)

Assistant Professor (August 2008 – July 2014)

Submitted: 18   Funded: 10   Amount Funded: \$2,574,435

Notes: 6-Federal, 1-Federal USDOE pass-through from state ALSDE), 11-Other

**Externally Funded Grant Proposals (16 awards, 3 actives, 0 under review):****Total PI/Co-PI Funding: \$9,543,924***(PI listed first, followed by Co-PIs in rank share alphabetically)*

Gray, J. (45-50%), **Zelkowski, J.** (45-50%), & Odom-Bartel, R. (10%) (2021-24). Expanding a Statewide Pathway for CS Teacher Certification: A Curriculum Model for Secondary Education Teacher Candidates. *National Science Foundation—CS4ALL grant*. 3(years). **\$978,930 funded**. (Zelkowski/Gray assumed Odom-Bartel load after she departed UA after year 1) [https://nsf.gov/awardsearch/showAward?AWD\\_ID=2122882](https://nsf.gov/awardsearch/showAward?AWD_ID=2122882)

Gray, J. (57%), **Zelkowski, J.** (33%), & Odom-Bartel, R. (10%) (2019-24). Assessing the Statewide Impact of K-12 Computer Science Pathways: Increasing Teacher Preparation and Expanding Student Computational Literacy. *Alabama State Department of Education*. 5(years). **UA sub-award \$1,686,148 funded** from the following federal grant with the Alabama State Dept of Education:

Morrison, D., Gray, J., Haynie, K.C., Zelkowski, J., Qazi, M., Yarbrough, C., & Odom-Bartel, R. (2019-2024). Assessing the Statewide Impact of K-12 Computer Science Pathways: Increasing Teacher Preparation and Expanding Student Computational Literacy. *U.S. Department of Education Innovation and Research Program – Early Phase Grant*. 5(years). **\$3,970,350**. <https://www.ed.gov/news/press-releases/secretary-devos-announces-new-grant-awards-encourage-grantees-rethink-education>

**Zelkowski, J.** (40%), Gleason, J. (20%), Bergeron, W.A. (20%) & Makowski, M.B. (20%) (2019-26). Alabama's Practitioner Leaders in Underserved Schools for Mathematics (A-PLUS in Math). *National Science Foundation, Noyce Track-3 Master Teacher Fellowship Grant*. 6(years). **\$2,839,526 funded**  
<http://aplusinmath.ua.edu>  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1849948&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1849948&HistoricalAwards=false)

Gray, J. (34%), **Zelkowski, J.** (33%), & Odom-Bartel, R. (33%) (2017-21). Building a Pathway for CS Principles Teachers: A Two-course Sequence for Secondary Education Mathematics Pre-service Teachers. *National Science Foundation STEM+C RPP CSforALL Grant*. 3(years). **\$299,903 funded**.  
<http://sema4cs.ua.edu>  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1738849&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1738849&HistoricalAwards=false)

**Zelkowski, J.** (50%) & Boyle, J. (50%) (2017). Secondary Mathematics Teacher Education Program. *Alabama Commission on Higher Education*. 2(years). **\$15,000 funded**.

Gleason, J. (30%), **Zelkowski, J.** (^21%-14%), McDaniel, S.C. (14%), Livers, S.D. (7%), Harbour, K. (7%), Besnoy, K.D. (0-7%), Boman, T. (7%), & Barth, J. (7%) (2015-18). Differentiating Mathematics Instruction within Communities of Learners. *Math Science Partnership—Alabama State Department of Education via USDOE Federal MSP Pass-through Funding*, 3(years). **\$1,149,982 funded**. (^Zelkowski assumed Besnoy duties after year 1)

Sunal, D. (20%), Harrell, J.W. (20%), Shaughnessy, K. (20%), **Zelkowski, J.** (20%), & Vincent, S. (20%) (2013-18). UA—Noyce Scholars Program. *National Science Foundation Robert F. Noyce Teacher Scholarship Grant*. 5(years). **\$1,450,000 funded**.  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1340069&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1340069&HistoricalAwards=false)

- Boman, T. (25%), **Zelkowski, J.** (25%), Gleason, J. (25%), & Street, S. (25%) (2012-15). Improving Mathematical Practices for Alabama Classroom Teachers. *Math Science Partnership—Alabama State Department of Education via USDOE Federal MSP Pass-through Funding*, 3(years). **\$1,101,190 funded.**
- Zelkowski, J. (2012). International Congress on Mathematical Education Travel Grant. *National Science Foundation & National Council of Teachers of Mathematics*, 2012(summer). **\$1,250 funded.**
- Zelkowski, J. (2011). A National Assessment of Mathematical College-Readiness Related to Scheduling Format in Secondary Schools. *University of Alabama Research Grants Committee*, 2011(summer). **\$5,000 funded.**
- Zelkowski, J. (2011). Quantitative Analysis Software Grant. *University of Alabama College of Education Grant Program*, 2011(summer). **\$1,100 funded.**
- Zelkowski, J. (2010). Rubrics in Upper Division Major Courses. *University of Alabama Active & Collaborative Learning Grant Program*, 2010(fall). **\$1,000 funded.**
- Zelkowski, J. (2010). TI-Nspire Navigator in CSE401. *Curriculum and Instruction Departmental Grant for Research Support*, 2010(spring). **\$2,000 funded.**
- Zelkowski, J. (2010). Mathematics Teacher Education Equipment Grant. *Texas Instruments*, 2010(spring). **\$9,000 funded.**
- Zelkowski, J. (2009). Interdisciplinary Lesson Unit in Social Studies and Mathematics. *University of Alabama College of Education Grant Program*, 2009(summer). **\$2,000 funded.**
- Zelkowski, J. (2009-10). Interdisciplinary Lesson Unit in Social Studies and Mathematics. *University of Alabama Research Grants Committee*, 2(years). **\$1,895 funded.**

### **Leadership Roles & Participation on other Federal/State Funded Projects:**

- Human Resources Research Organization (HumRRO). (2023-2028). Evaluation of the Alabama Numeracy Act. *Alabama Industrial Training (AIDT), Alabama Department of Commerce*. 5(years). **TBD**  
**[Senior Consultancy, Alabama Representative]**
- Hollebrands, K., Mojica, G., Ellis, R. & Chandler, K. (2023-2028). Collaborative Research: Preparing Future Middle and High School Mathematics Teachers to Lead Productive Geometry Discussions using Web-Based Dynamic Geometry Technology Tools. *National Science Foundation Improving Undergraduate STEM Education*. 5(years). **\$1,995,859**  
**[Advisory Board Member]**  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=2235338&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2235338&HistoricalAwards=false)  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=2235393&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2235393&HistoricalAwards=false)
- Smith, W., Lai, Y., Lischka, A., Martin, W.G., & Strutchens, M. (2022-26). Collaborative Research: Using Networked Improvement Communities to Scale Up Program Transformation for Secondary Mathematics Teacher Preparation. *National Science Foundation Improving Undergraduate STEM Education*. 4(years). **\$3,000,000.**  
**[Partnership Team Leader, University of Alabama Partnership Team]**  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=2141737&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2141737&HistoricalAwards=false)  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=2141730&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2141730&HistoricalAwards=false)
- Smith, W., Strutchens, M., Martin, W.G., & Lee, J. (2021-23). Transforming Secondary Mathematics Teacher Preparation: A Conference to Focus on Recruitment and Equity. *National Science Foundation Improving Undergraduate STEM Education*. 2(years). **\$49,967.**  
**[Partnership Team Leader, University of Alabama Partnership Team]**  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=2141146&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2141146&HistoricalAwards=false)
- Krupa, E. & Bostic, J. (2019-24). Collaborative Research: Validity Evidence for Measurement in Mathematics Education (VM<sup>2</sup>ED). *National Science Foundation Discovery Research K-12*. 5(years). **\$1,944,717.**  
**[Senior Consultant, Teacher Education Instruments Leadership Team]**

Website: <https://sites.ced.ncsu.edu/mathedmeasures/>  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1920619&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1920619&HistoricalAwards=false)  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1920621&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1920621&HistoricalAwards=false)

Martin, W.G., Mohr-Schroeder, & Smith, W. (2018-21). Collaborative Research: Using Networked Improvement Communities to Design and Implement Program Transformation Tools for Secondary Mathematics Teacher Preparation. *National Science Foundation Improving Undergraduate STEM Education*. 3(years). **\$300,000.**

**[Partnership Team Leader, University of Alabama Partnership Team]**

[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1834539&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1834539&HistoricalAwards=false)  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1834551&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1834551&HistoricalAwards=false)

Gobstein, H., Strutchens, M, & Sears, R. (2017-23). Collaborative Research: Attaining Excellence in Secondary Mathematics Clinical Experiences with a Lens on Equity. *National Science Foundation Improving Undergraduate STEM Education*. 6(years). **\$1,579,027.**

**[Senior Consultant, Methods Clinical Experience Research Action Cluster Leader/Co-Leader]**

Website: <https://cerac-methods.ua.edu/>

[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1726853&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1726853&HistoricalAwards=false)  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1726998&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1726998&HistoricalAwards=false)  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1726362&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1726362&HistoricalAwards=false)

Lee, H., McCulloch, A., & Hollebrands, K. (2011-16). Preparing to Teach Mathematics with Technology: Expanding, Transforming, & Building Community [PTMT-ETC]. *National Science Foundation S-STEM*. 5(years). **\$687,735.**

**[Participant, University of Alabama curriculum implementation site]**

[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1123001&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1123001&HistoricalAwards=false)

Gobstein, H. & Martin, W.G. (2011-13). A Partnership for the Improvement of Secondary Mathematics Teacher Preparation in the Common Core Era (MTEP). *National Science Foundation Discovery Research K-12*. 2(years). **\$199,932.**

**[Partnership Team Leader, University of Alabama Partnership Team]**

[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1147987&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1147987&HistoricalAwards=false)

## Grant Proposals Under Review (0):

None

## Unfunded Grant Submissions (14):

Zelkowski, J., Wanko, J., & Barnes, J. (2023). Fifteenth International Congress on Mathematical Education (ICME-15) Research and Travel Grant. *National Science Foundation, DRK12*. 30(months). **\$443,732 not funded.**

Newman, S., Gray, J., Zelkowski, J., Stowers, K., Carver, J., & Parrish, A. (2020). Rural Women in Technology (RWiT). *Equality Can't Wait Challenge by Pivotal Ventures*. 5(years). **\$1,235,673 not funded.**

Gray, J., Cooper, B., Morrison, D., White, C., Haynie, K.C., Zelkowski, J., Qazi, M., & Yarbrough, C. (2018). Assessing the Statewide Impact of K-12 Computer Science Pathways: Increasing Teacher Preparation & Expanding Student Computational Literacy. *U.S. Department of Education Innovation and Research Program – Early Phase Grant*. 5(years). **\$4,091,967 not funded.**

Gray, J. & Zelkowski, J. (2018). CSforAll-RPP: Towards Bootstrap for All: Adapting Bootstrap Curricula to District Priorities. *National Science Foundation STEM+C* 3(years). **\$228,195 not funded.** [Brown University lead with subawards to The University of Alabama, Auburn University, The University of Alabama—Birmingham, San Diego Unified School District, and the Oklahoma State Department of Education].

- Gray, J., Zelkowski, J., Wyss, M., & Marguitu, D. (2017). Bootstrapping Effective Students and Teachers in Algebra. *National Science Foundation STEM+C Grant*. 3(years). **\$1,132,727 not funded.**
- Gray, J., Zelkowski, J., & Odom-Bartel, R. (2016). Building a Pathway for CS Principles Teachers: A Two-course Sequence for Secondary Education Mathematics Pre-service Teachers. *Google Grant* 2(years). **\$293,790 not funded.**
- Zelkowski, J. (2013). Injecting the Mathematical Practices into Alabama Classroom Teaching—High IMPACT, Transformative Teacher Professional Development. *National Science Foundation CAREER Grant*, 5(years). **\$816,360 not funded.**
- Zelkowski, J. (2013). A National Assessment of 8<sup>th</sup> Grade Mathematics Achievement Related to Technology Policy and Implementation. *University of Alabama Research Grants Committee*, 2013(summer). **\$6,000 not funded.**
- Sunal, D., Harrell, J.W., Shaughnessy, K., & Zelkowski, J. (2012). UA—Noyce Scholars Program. *National Science Foundation Robert F. Noyce Teacher Scholarship Grant*. 5(years). **\$1,450,000 not funded.**
- Zelkowski, J. (2011). A National Assessment of Mathematical College-Readiness Related to Scheduling Format in Secondary Schools. *Spencer Foundation Small Grants Program*, 2(years). **\$39,975 not funded.**
- Zelkowski, J. (2011). STEM Data Collection and Mathematical Modeling with Vernier Probeware and the TI-Nspire. *Vernier 30<sup>th</sup> Anniversary Technology Grant Program*, 2011(fall). **\$10,000 not funded.**
- Sunal, D., Harrell, J.W., Shaughnessy, K., & Zelkowski, J. (2011). UA—Noyce Scholars Program. *National Science Foundation Robert F. Noyce Teacher Scholarship Grant*. 5(years). **\$1,450,000 not funded.**
- Zelkowski, J. & Holaway, C. (2010). A National Assessment of Mathematical College-Readiness Related to Scheduling Format in Secondary Schools. *AERA Research Grants Program for Large National Data Sets*, 2(years). **\$35,000 not funded.**
- Zelkowski, J. (2009). A National Assessment of Mathematics Achievement & College-Readiness. *AERA Research Grants Program for Large National Data Sets*, 2(years). **\$35,000 not funded.**

## Professional Presentations & Invited Keynotes (140 total)

**Total Presentations by Year:** 2024—5<sup>^</sup>; 2023—5; 2022—11; 2021—7<sup>\*</sup>; 2020—12<sup>\*</sup>; 2019—14; 2018—14; 2017—9; 2016—7; 2015—4; 2014—5; 2013—6; 2012—8; 2011—16; 2010—3; 2009—6; 2008—2; 2007—3; 2006—2; <sup>\*</sup>Some cancelled due to Covid Pandemic, some presentations moved from 2020 to 2021 or 2022; <sup>^</sup>Includes presentations made and/or accepted to date.

## Refereed Abstracts for Research Presentations: (60 total)

### [International/National \(51\)](#)

- Zelkowski, J. & Kenny, N.C. (accepted, 2024, Sep). *Finding math teaching practices and student math practices in national board teachers' classrooms*. Paper to be presented at the Research Conference of the National Council of Teachers of Mathematics, Chicago, IL
- Zelkowski, J., Odom-Bartel, R.L., & Gray, J. (accepted, 2024, Jul). *Dually certifying secondary mathematics teacher candidates in mathematics and computer science: A multi-year, multi-cohort TPACK research project summary*. Paper to be presented at the 15<sup>th</sup> International Congress on Mathematical Education. Sydney, Australia.
- Zelkowski, J., Smith, F.A., Gooden, C., Isah, Y., Gleason, J., Makowski, M., Bergeron, W.A., & Petrusis, R. (accepted, 2024, Jul). *Examining the relationships between classroom observation and national teaching standards in a master teacher professional development project*. Paper to be presented at the 15<sup>th</sup> International Congress on Mathematical Education. Sydney, Australia.

- Gallagher, M. A., Walkowiak, T., Folger, T., Bostic, J., & Zelkowski, J. (2024, Feb). *So many measures! Choosing the right measure for your teacher education program evaluation*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators Annual Conference. Orlando, FL.
- Zelkowski, J., Dai, D., Makowski, M.B., Gleason, J., & Bergeron, W.A. (2023, Oct). *Relationships between NBCT Component Scores & MCOP<sup>2</sup> Teaching Observation Ratings*. Paper presented at the Research Conference of the National Council of Teachers of Mathematics, Washington, DC.
- Ware, A., Williams, M., Hamric, A., Dai, D. & Zelkowski, J. (2023, Jun). *Alabama's practitioner leaders for underserved schools in mathematics (APLUS in Math)*. Research poster presentation at the National Science Foundation Noyce Summit. Washington, DC.
- Zelkowski, J. (2023, Jun). *MCOP<sup>2</sup> lesson planning rubric module and the methods sub-RAC modules programmatic implementation ideas*. Presentation at the Forging Partnerships to Transform Secondary Mathematics Clinical Experiences national conference. MTEP, Mathematics Teacher Education Partnership.
- Zelkowski, J. & Burgos, N. (2023, Feb). *Early instructional outcomes of professional development in a Noyce Master Teacher Fellowship project*. Paper presented at the Association of Mathematics Teacher Educators Annual Conference. New Orleans, LA.
- Zelkowski, J. & Campbell, T.G. (2022, Nov). *Early mathematics teacher preparation evaluation rubrics for the context of live discussion forums*. Paper presented at the 44<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Nashville, TN.
- Kenny, N., Aviña, B., Anderson, K., & Zelkowski, J. (2022, Jul). *Alabama's practitioner leaders for underserved schools in mathematics (APLUS in Math)*. Poster presentation at the National Science Foundation Noyce Summit. Washington, DC.
- Gallagher, M. A., Bardelli, E., Folger, T., Neely, A., Bostic, J., Walkowiak, T., Wilhelm, A., & Zelkowski, J. (2022, Apr). *Measures of mathematics teachers' behavior and affect: An examination of the assessment landscape*. Paper presented at the annual meeting of the American Educational Research Association. San Diego, CA.
- Zelkowski, J., Odom-Bartel, R., & Gray, J. (2022, Apr). *Two-course sequence and modules for adding Computer Science credential into secondary mathematics teacher preparation*. Paper to be presented at the annual meeting of the American Educational Research Association. San Diego, CA.
- Zelkowski, J. (2022, Feb). *Integrating computer science credentialing into secondary mathematics education programs*. Paper presented at AMTE, Association of Mathematics Teacher Educators, Las Vegas, NV.
- Thomas, C.A., Zelkowski, J., Gooden, C., Smith, F.A., & Mudd, A. (2022, Feb). *Collaborations between university mentor teachers supervising teacher candidates in a Noyce master teaching fellowship*. Paper presented at AMTE, Association of Mathematics Teacher Educators, Las Vegas, NV.
- Zelkowski, J. & Campbell, T.G. (2021, Jul). *Direct and indirect effect sizes on secondary mathematics teacher candidates' content knowledge and pedagogical content knowledge as measured by national examinations: A structural equation modeling multi-cohort longitudinal study*. Paper presented (remotely) at the 14<sup>th</sup> International Congress on Mathematical Education. Shanghai, China: ICME. \*Delayed 1-year from 2020 to 2021 due to COVID Pandemic.
- Waller, P. & Zelkowski, J. (2021, Feb). *Connecting Lesson Planning to Practice: Engaging Mentor Teachers in Productive Interactions with Teacher Candidates*. Paper presented for presentation at AMTE, Association of Mathematics Teacher Educators, Orlando, FL. Moved to online conference for 2021 due to COVID Pandemic.
- Zelkowski, J. (2021, Feb). *Transforming Math Teacher Preparation Program Design for successful Teacher Candidate Licensure Examinations*. Paper accepted for presentation at AMTE, Association of Mathematics Teacher Educators, Orlando, FL. Moved to online conference for 2021 due to COVID Pandemic.

- Zelkowski, J., Gleason, J., Makowski, M.B., Bergeron, W.A., Campbell, T.G., & Keefe, A. (2020, Aug). *Alabama's Practitioner Leaders for Underserved Schools in Mathematics*. Poster presentation at the National Science Foundation and American Association for the Advancement of Science Robert F Noyce Summit, Washington, DC. Moved to online Conference due to COVID.
- Zelkowski, J. (2020, Jun). *Using measures for leveraging program change and transformation*. Paper presented at the MTEP, Mathematics Teacher Education Partnership Annual Conference. Scottsdale, AZ. Moved to online Conference due to COVID Pandemic.
- Zelkowski, J. & Campbell, T.G. (2020, Apr). *Praxis II & edTPA effect sizes of teacher preparation program design: A path analysis study*. Paper accepted to be presented at the AERA, American Educational Research Association, San Francisco, CA. \*Cancelled due to COVID Pandemic
- Zelkowski, J. (2020, Feb). *Secondary math program design effects on edTPA/Praxis2 exams - A multi-year longitudinal study*. Paper presented at the AMTE, Association of Mathematics Teacher Educators, Phoenix, AZ.
- Strutchens, M., Sears, R., Zelkowski, J., Conway, B. & Mangram, C. (2020, Feb). *Collaborating to improve clinical experiences for secondary teacher candidates*. AMTE, Association of Mathematics Teacher Educators, Phoenix, AZ.
- Zelkowski, J., Gleason, J., Makowski, M.B., Bergeron, W.A., & Campbell, T.G. (2020, Jan). *Alabama's Practitioner Leaders for Underserved Schools in Mathematics: A Noyce Master Teacher Fellowship*. Poster presentation at the Joint Mathematics Meeting of the Mathematical Association of America and the American Mathematical Society. Denver, CO.
- Zelkowski, J., Odom-Bartel, R., & Gray, J. (2020, Jan). *Building a Pathway for CS Principles Teachers: A Two-course Sequence for Secondary Education Mathematics Pre-service Teachers*. Poster presentation at the Joint Mathematics Meeting of the Mathematical Association of America and the American Mathematical Society. Denver, CO.
- Strutchens, M., Sears, R., Gobstein, H., Martin, W.G., Zelkowski, J., Sutton, J., Conway, B., & Mangram, C. (2020, Jan). *Improving Clinical Experiences for Teacher Candidates and Mentor Teachers*. Poster presentation at the Joint Mathematics Meeting of the Mathematical Association of America and the American Mathematical Society. Denver, CO.
- Zelkowski, J., Gleason, J., Makowski, M.B., Westbrook, P.T., & Campbell, T.G. (2019, Jul). *Alabama's Practitioner Leaders for Underserved Schools in Mathematics*. Poster presentation at the National Science Foundation and American Association for the Advancement of Science Robert F Noyce Summit, Washington, DC.
- Zelkowski, J. (2019, Apr). *Addressing the computer science & math debate with a Catalyzing Change lens*. Paper presented at The National Council of Teachers of Mathematics 2019 Research Conference, San Diego, CA.
- Zelkowski, J., Dickens, T., & Davis, H. (2019, Feb). *Addressing the computer science and mathematics debate in high school: A project & policy report*. Paper presented at the AMTE, Association of Mathematics Teacher Educators, Orlando, FL.
- Sunal, C.S., Sunal, D.W., Harrell, J.W., Shaughnessy, K.H., Vincent, S., & Zelkowski, J. (2018, Jul). *Recruiting STEM majors into science teacher certification programs*. Poster presentation at the National Science Foundation and American Association for the Advancement of Science Robert F Noyce Summit, Washington, DC.
- Zelkowski, J., Waller, P., Edwards, B., Yow, J., Ellis, M., & Boyle, J.D. (2018, Jun). *Cooperating teachers and teacher candidates' dual engagement modules during methods courses*. Paper presented at the MTEP, Mathematics Teacher Education Partnership Annual Conference, Denver, CO.

- Zelkowski, J., Campbell, T.G., & Gleason, J. (2018, Jun). *Programmatic effects of capstone math content and math methods courses on teacher licensure exams*. Paper presented at the MTEP, Mathematics Teacher Education Partnership Annual Conference, Denver, CO.
- Zelkowski, J. & Gleason, J. (2018, Feb). *Programmatic Effects on High Stakes Measures in Secondary Math Teacher Preparation*. Paper presented at the RCML, Research Council on Mathematics Learning, Baton Rouge, LA.
- Zelkowski, J. & Campbell, T. G. (2018, Feb). *Secondary Mathematics Programmatic Coursework Effects on Praxis II and edTPA*. Paper presented at the AMTE, Association of Mathematics Teacher Educators, Houston, TX.
- Zelkowski, J. (2017, Apr). *Making use of large-scale federal data sets: Secondary data analysis for policy and practice*. Paper presented at the Georgia Southern University annual research conference for College of Education, Statesboro, GA. **Invited keynote presentation w/honorarium.**
- Zelkowski, J. (2017, Feb). *Longitudinal Study of TPACK Component Development Related to Program Design: A study of Secondary Mathematics Preservice Teachers' Self-Efficacy*. Poster Presentation at the AMTE, Association of Mathematics Teacher Educators, Orlando, FL.
- Zelkowski, J., Gleason, J.A., & Livers, S.D. (2016, Jul). *Measuring mathematics classroom interactions: Observation protocol reinforcing development of conceptual understanding*. Paper presented at the 13<sup>th</sup> International Congress on Mathematical Education. Hamburg, Germany: ICME.
- Zelkowski, J. (2016, Jun). *Using the MCOP<sup>2</sup> as a Grade-Bearing Assessment of Clinical Field Observations*. Paper presented at the MTEP, Mathematics Teacher Education Partnership Annual Conference, Atlanta, GA.
- Zelkowski, J. (2015, Jun). *The MCOP<sup>2</sup> protocol for observations and scoring in a preservice teacher preparation program*. MTEP, Mathematics Teacher Education Partnership Annual Conference, Fullerton, CA. **Invited presentation.**
- Gleason, J., Weston, T.L., Livers, S.D., & Zelkowski, J. (2014, Apr). *A New Classroom Observation Instrument for Assessing K-16 Mathematics Classrooms*. Paper presented at The National Council of Teachers of Mathematics 2014 Research Conference, New Orleans, LA.
- Truelove, H. & Zelkowski, J. (2014, Feb). *Cognitive and Metacognitive Processes of Preservice Mathematics Teachers Solving Tasks Based in the Secondary Curriculum*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- Zelkowski, J., Gleason, J. & Khalilian, J. A. (2013, Sept). *Project IMPACT: Improving the Mathematical Practices for Alabama Classroom Teachers*. Paper presented at the national Mathematics Science Partnership conference. Washington, DC.
- Zelkowski, J., Gleason, J. Dempsey, D., & Garrett, L. (2013, Jan). *Building a Statewide Collaborative to Improve Existing Teacher Certification Programs*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Zelkowski, J. & Goodykoontz, E. (2012, Jul). *Student accountability and instructor variability: A research study in a terminal, required, applications focused calculus course*. Paper presented at the 12<sup>th</sup> International Congress on Mathematical Education. Seoul, South Korea: ICME.
- Shores, M., Smith, T., Zelkowski, J., & Dantzler, J. (2011, Nov). *Exploring inservice teachers' perception of student attributions in mathematics*. Paper presented at the annual convention of the School Science and Mathematics Association, Colorado Springs, CO.
- Zelkowski, J. (2011, Apr). *Teaching Mathematics with Technology: A Longitudinal Study of Secondary Preservice Teacher Technological Pedagogical Content Knowledge (TPACK) Development*. Paper

presentation at the 2011 annual meeting of the American Educational Research Association. New Orleans, LA.

Zelkowski, J. (2011, Mar). *Developing secondary mathematics preservice teachers' technological pedagogical content knowledge: Influencing positive change*. Paper presented at the Society for Information Technology and Teacher Education 22<sup>nd</sup> International Conference. Nashville, TN.

Zelkowski, J. (2011, Mar). *Teaching mathematics with technology: A longitudinal study of secondary preservice teacher Technological Pedagogical Content Knowledge (TPACK) development*. Paper presented at the Society for Information Technology and Teacher Education 22<sup>nd</sup> International Conference. Nashville, TN.

Zelkowski, J. (2011, Jan). *A longitudinal study of a secondary mathematics pre-service program's TPACK developmental effectiveness: Lessons learned*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators. Irvine, CA.

Zelkowski, J. (2010, Mar). *Nspire-ing conceptual understanding of extraneous solutions in solving radical equations*. Paper presented at the annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Atlanta, GA.

Zelkowski, J. (2009, Jun). *Secondary mathematics factors that influence the successful completion of a bachelor's degree: A policy perspective*. Abstract accepted for presentation at the national annual forum of the Association for Institutional Research, Atlanta, GA.

Zelkowski, J., Fugitt, J., Britt, D., Smith, R., Waggoner, D., Wagener, L., Owens, S., Jones, S., Landry, G., Savich, P., & Tate, B. (2008, Jan). *Lesson Study from Multiple Perspectives*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators. Irvine, CA.

### Regional (9)

Zelkowski, J. (2023, Nov). *Exploring links between observed classroom practices and national boards*. Alabama Council of Teachers of Mathematics, Oxford, AL.

Zelkowski, J. (2018, Sept). *Catalyzing Change in Geometric Thinking for students across K-12 Mathematics*. Arkansas Council of Teachers of Mathematics, Little Rock, AR. **Invited Opening Keynote Speaker**.

Zelkowski, J. (2016, Jun). *Addressing the mathematics teacher shortage in rural Alabama and other hard to staff regions*. AASB, Alabama Association of School Boards Annual Conference, Orange Beach, AL. **Invited presentation**.

Shores, M., Smith, T., Zelkowski, J., & Dantzler, J. (2011, Feb). *A comparison of inservice and preservice teachers' perception of student attributions in mathematics*. Paper presented at the annual meeting of the Eastern Educational Research Association, Sarasota, FL.

Zelkowski, J. (2009, Nov). *Secondary mathematics: Four-credits vs. continuous enrollment for college readiness*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Baton Rouge, LA.

Zelkowski, J. (2009, May). *Secondary mathematics enrollment factors that influence the completion of a bachelor's degree: A dissertation overview*. Paper presented at the ACCLAIM Research Symposium Retrospective to Congratulate, Celebrate, and Conclude—C<sup>3</sup>. Cherry Lodge, OH. **Invited honorarium presentation**.

Zelkowski, J. (2008, November). *Secondary mathematics enrollment factors that influence the completion of a bachelor's degree: A teacher education perspective*. Paper presented at the annual meeting of the Appalachian Association of Mathematics Teacher Educators, Williamsburg, KY. **Invited presentation**.

Zelkowski, J. & Caldwell, J. (2007, Feb). *RF PRS Pedagogy & Demonstration*. Paper presented at the annual WVU Technology Symposium, Morgantown, WV.



Caldwell J., Zelkowski J., & Butler M. (2006, Apr). *Using personal response systems in the classroom*. Paper presented at the annual WVU Technology Symposium, Morgantown, WV.

## Refereed Abstracts for Practitioner/Service Presentations and Workshops: (80 total)

### International/National (41)

- Zelkowski, J. & Alhammouri, A. (2024, Feb). *Mathematical Modeling with Real-World Data*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Arlington, TX.
- Zelkowski, J. (2024, Feb). *Programmatic Transformations: The University of Alabama's 10-year+ MTEP Pathway*. Ignite session presented at The Mathematics Teacher Education Partnership Annual Conference, Orlando, FL. One of six **Invited Ignite Sessions** for the Keynote opening session.
- Zelkowski, J. (2022, Jul). *Utilizing TI-Nspire™ CX Navigator™ System Strategies to Effectively Assess and Reduce Paper Grading Time*. Online summer conference of T<sup>3</sup> International, Teachers Teaching with Technology, United States.
- Zelkowski, J. & Atkin, K.A. (2022, Mar). *Implementing Tasks That Promote Reasoning and Problem-Solving in Mathematics Classrooms*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Dallas, TX.
- Lee, J.S., Zelkowski, J., & Jackson, C. (2022, Feb). *From surviving to thriving: A journey in academia*. Association of Mathematics Teacher Educators, Las Vegas, NV.
- Zelkowski, J. (2021, Nov). *Implementing tasks that promote reasoning and problem solving*. Alabama Council of Teachers of Mathematics annual Fall Forum, Virtual.
- Dai, D.C., Kenny, N.C., & Zelkowski, J. (2021, Sept). *Understanding inverse functions through data, modeling, and transformations with technology*. NCTM, National Council of Teachers of Mathematics Annual Meeting and Exhibition, Atlanta, GA. Cancelled due to COVID-19.
- Lee, J.S., Zelkowski, J., & Jackson, C. (2021, Feb). *A collective journey on mental health: Entering, surviving & thriving in the academy*. Association of Mathematics Teacher Educators, Orlando, FL. Moved to online conference for 2021 due to COVID Pandemic.
- Burrill, G., Zelkowski, J., & Ilaria, D. (2021, Feb). Adapting tasks to “measure up”. *Power Session Workshop* at the Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Chicago, IL. **Invited power session workshop**. \*Moved to online workshop due to COVID-19 Pandemic.
- Zelkowski, J. & Ilaria, D. (2020, Apr). *Implementing tasks that promote reasoning and problem solving*. NCTM National Council of Teachers of Mathematics Centennial Conference, Chicago, IL. \*Cancelled and rescheduled for 2021 due to COVID-19 Pandemic.
- Burrill, G., Zelkowski, J., & Ilaria, D. (2020, Mar). Do your tasks “measure up”? *Power Session Workshop* at the Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Dallas, TX. **Invited power session workshop**. \*Cancelled due to COVID-19 Pandemic, re-invited and rescheduled for 2021.
- Ilaria, D. & Zelkowski, J. (2020, Mar). *Implementing tasks that promote reasoning and problem solving*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Dallas, TX. \*Cancelled due to COVID-19 Pandemic.
- Burrill, G. & Zelkowski, J. (2019, Oct). *Catalyzing Change in High School Mathematics*. T<sup>3</sup> webinar series. T<sup>3</sup> International: Teachers Teaching with Technology, Dallas, TX.
- Zelkowski, J. (2019, Oct). *Implementing tasks that promote reasoning and problem solving in mathematics*. Workshop on behalf of T<sup>3</sup> International: Teachers Teaching with Technology. Worcester, MA.
- Zelkowski, J. & Ilaria, D. (2019, May). *Strategies for implementing tasks in the math classroom – Part 2*. T<sup>3</sup> webinar series. T<sup>3</sup> International: Teachers Teaching with Technology, Dallas, TX.

- Burrill, G., Martin, W.G., Zelkowski, J., & Staley, J. (2019, Apr). *ICME (International Congress on Mathematical Education): International perspectives and opportunities*. The National Council of Teachers of Mathematics 2019 Research Conference, San Diego, CA.
- Ilaria, D. & Zelkowski, J. (2019, Apr). *Strategies for implementing tasks in the math classroom – Part 1*. On-demand T<sup>3</sup> webinar series. T<sup>3</sup> International: Teachers Teaching with Technology, Dallas, TX.
- Ilaria, D. & Zelkowski, J. (2019, Mar). *Implementing tasks that promote reasoning and problem solving*. Workshop for T3 regional/national instructors. Annual professional development instructor day of the T3 International: Teachers Teaching with Technology, Baltimore, MD.
- Zelkowski, J. (2019, Mar). *Understanding inverse functions through data modeling and transformations*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Baltimore, MD.
- Zelkowski, J. (2018, Apr). *Delegate Assembly Emcee*. NCTM, National Council of Teachers of Mathematics Annual Meeting and Exhibition, Washington, DC.
- Burrill, G., Remillard, J., Karunakaran, S., Strutchens, M., Zelkowski, J., & Nank, S. (2018, Apr). *Research across boundaries: Why attend an ICME?* NCTM research conference, Washington, DC.
- Zelkowski, J. (2018, Mar). *Using the TI-Nspire™ CX technology to engage students in Common Core State Standards for Mathematical Practice*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, San Antonio, TX.
- Ellis, M., Waller, P., & Zelkowski, J. (2017, Dec). *MCOP<sup>2</sup> – National instrument & common measure of the Mathematics Teacher Education Partnership*. Invited to lead the workshop at the Association of Public and Land-grant Universities, Washington, DC. **Invited honorarium workshop.**
- Lee, J.S., Sumerlin, J., & Zelkowski, J. (2017, Apr). *Connecting and becoming stronger advocates through affiliates*. NCTM, National Council of Teachers of Mathematics Annual Meeting and Exhibition, San Antonio, TX.
- Zelkowski, J. (2017, Apr). *Delegate Assembly Emcee*. NCTM, National Council of Teachers of Mathematics Annual Meeting and Exhibition, San Antonio, TX.
- Zelkowski, J. (2017, Apr). *Organizing & compiling a usable assessment database in the classroom - Paperless daily assessment*. NCTM, National Council of Teachers of Mathematics Annual Meeting and Exhibition, San Antonio, TX.
- Zelkowski, J. (2017, Mar). *Using the TI-Nspire to Facilitate the Standards for Mathematical Practice*, Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Chicago, IL.
- Zelkowski, J. (2016, Apr). *NCTM affiliates services committee leadership development and networking in the coves*. NCTM, National Council of Teachers of Mathematics Annual Meeting and Exhibition, San Francisco, CA.
- Zelkowski, J. (2016, Feb). *What do I do the First Day I use TI-Nspire™ Technology with my Students?* Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Orlando, FL.
- Zelkowski, J. (2015, Mar). *What do I do the First Day I use TI-Nspire™ Technology with my Students?* Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Fort Worth, TX.
- Zelkowski, J. (2014, Mar). *Data Analysis with TI-Nspire™ Technology: CCSS Math Modeling*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Las Vegas, NV.
- Zelkowski, J., Wager, A., Shih, J., & Langrall, C. (2014, Feb). *What I wish I had known/done when I was in your position*. STaR Fellows Mentoring and Regroup Conference at the Association of Mathematics Teacher Educators annual meeting. **Invited presentation.**

- Zelkowski, J. (2013, Mar). *Using the Assessment Portfolio Strategically with the TI-Nspire™ Navigator™ System to Lessen Teacher Grading Time*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Philadelphia, PA.
- Zelkowski, J. (2013, Mar). *Data Analysis with TI-Nspire™ Technology: Common Core Modeling in the Math Classroom*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Philadelphia, PA.
- Dick, T., Burrill, G., & Zelkowski, J. (2012, Jul). *Mathematical Practices and Teacher Moves: A TI-Nspire Lesson*. Presented at the 12<sup>th</sup> International Congress on Mathematical Education. Seoul, South Korea: ICME
- Zelkowski, J. & Bismarck, S. (2012, Apr). *Making Sense and Modeling Mathematics: Common Core with TI-Nspire™ Technology*. **Highlighted Common Core presentation** at the Annual Meeting and Exposition of the National Council of Teachers of Mathematics, Philadelphia, PA.
- Bismarck, S. & Zelkowski, J. (2012, Apr). *Identifying Appropriate Use of Technology in an Algebra Classroom*. Annual Meeting and Exposition of the National Council of Teachers of Mathematics, Philadelphia, PA.
- Zelkowski, J. (2012, Mar). *Fostering Flexible Thinking: Making Sense of Solutions through Multiple Representations*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, Chicago, IL.
- Bismarck, S. & Zelkowski, J. (2011, Feb). *Connecting algebra and geometry concepts with TI-Nspire CAS technology*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, San Antonio, TX.
- Zelkowski, J. (2011, Feb). *Using the TI-Nspire Navigator system to make sense of extraneous solutions*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, San Antonio, TX.
- Zelkowski, J. (2011, Feb). *Learning to use the TI-Nspire™ Navigator™ system: Integrating interactive whiteboards*. Annual meeting of T<sup>3</sup> International: Teachers Teaching with Technology, San Antonio, TX.
- Regional (39)**
- Zelkowski, J. (2022, Nov). *Leveraging the TI-Nspire for instruction and student ACT confidence*. Annual meeting of the Alabama Council of Teachers of Mathematics, Oxford, AL.
- Zelkowski, J., Jones, C., & Searels, Z. (2022, Nov). *Considering leadership: Come learn about ACTM volunteering*. Annual meeting of the Alabama Council of Teachers of Mathematics, Oxford, AL.
- Zelkowski, J. (2021, Nov). *Implementing tasks that promote reasoning and problem solving*. NCTM, National Council of Teachers of Mathematics Annual Meeting and Exhibition, Virtual.
- Zelkowski, J. (2019, Nov). *What do administrators need to know about new mathematics teachers' needs?* Annual meeting of the Alabama Council of Teachers of Mathematics. Birmingham, AL.
- Zelkowski, J. (2019, Nov). *Become a math teacher leader through National Science Foundation funding*. Annual meeting of the Alabama Council of Teachers of Mathematics. Birmingham, AL.
- Zelkowski, J., Dai, D.C., Kenny, N.C., & Campbell, T.G. (2019, Oct). *Understanding inverse functions through data modeling and transformations*. National Council of Teachers of Mathematics regional conference, Nashville, TN.
- Zelkowski, J. (2019, Jul). *When the wheels are turning, the students are learning*. Alabama MEGA State Department of Education Annual Education Conference, Mobile, AL.
- Dai, D.C., Campbell, T.G., & Zelkowski, J. (2018, Nov). *Understanding inverse functions through data modeling and transformations*. Annual meeting of the Alabama Council of Teachers of Mathematics. Birmingham, AL.
- Zelkowski, J. (2018, Nov). *What do administrators need to know about new mathematics teachers' needs?* Annual meeting of the Alabama Council of Teachers of Mathematics. Birmingham, AL.

- Zelkowski, J. (2018, Nov). *Become a math teacher leader through National Science Foundation funding*. Annual meeting of the Alabama Council of Teachers of Mathematics. Birmingham, AL.
- Zelkowski, J. (2018, Aug). GROW: GRaduate Orientation & Welcome faculty panel on graduate expectations. The University of Alabama Graduate School, Tuscaloosa, AL. **Invited panelist**.
- Zelkowski, J., Flantroy, K., & Dai, D.C. (2018, Jun). *The University of Alabama Noyce Project: 2013-18*. Southeast Regional NSF Robert F. Noyce Conference. Mobile, AL.
- Zelkowski, J. (2017, Nov). *Administrators & millennials: Mindsets about the teaching profession*. Annual meeting of the Alabama Council of Teachers of Mathematics. Birmingham, AL.
- Zelkowski, J. (2017, Nov). *Research about new math teachers' needs/wants for administrators*. Annual meeting of the Alabama Council of Teachers of Mathematics. Birmingham, AL.
- Zelkowski, J. (2016, Nov). *Teaching the Statistics Standards with TI-Nspire in High School*. Annual meeting of the Alabama Council of Teachers of Mathematics, Birmingham, AL.
- Zelkowski, J. (2016, Jun). *Exploring STEM Topics in High School with TI-Nspire™ Technology*. Instructor/Host of 2-day Preservice Teacher Workshop. Tuscaloosa, AL.
- Zelkowski, J. (2015, Jul). *Exploring Common Core Topics in High School Mathematics with TI-Nspire™ Technology*. Instructor/Host of 3-day professional development workshop. Daphne, AL.
- Zelkowski, J. (2015, Jun). *Exploring STEM Topics in High School with TI-Nspire™ Technology*. Instructor/Host of 1.5-day Preservice Teacher Workshop. Tuscaloosa, AL.
- Zelkowski, J. (2014, Jul). *Exploring Common Core Topics in High School Mathematics with TI-Nspire™ Technology*. Instructor/Host of 3-day professional development workshop. Vestavia Hills, AL.
- Zelkowski, J. (2013, Nov). *A Beginner's Session on Learning the TI-Nspire™ 7-12*. Annual meeting of the Alabama Council of Teachers of Mathematics, Montgomery, AL.
- Zelkowski, J. (2013, Jun). *TI-Nspire™: Getting Started with High School Mathematics*. Instructor/Host of 3-day professional development workshop. Athens, AL.
- Zelkowski, J. (2012, Oct). *An Intermediate Session on Learning the TI-Nspire™ 7-12*. Annual meeting of the Alabama Council of Teachers of Mathematics, Montgomery, AL.
- Zelkowski, J. (2012, Oct). *A Beginner's Session on Learning the TI-Nspire™ 7-12*. Annual meeting of the Alabama Council of Teachers of Mathematics, Montgomery, AL.
- Zelkowski, J. (2012, Jun). *TI-Nspire™: Getting Started with High School Mathematics*. Instructor/Host of 3-day professional development workshop. Birmingham, AL.
- Zelkowski, J. (2011, Oct). *Using Technology to Enhance Understanding in Equation Solving*. Annual meeting of the Alabama Council of Teachers of Mathematics, Montgomery, AL.
- Zelkowski, J. (2011, Oct). *TI-Nspire™ Technology: A new, exciting way to engage students*. Annual meeting of the Alabama Council of Teachers of Mathematics, Montgomery, AL.
- Zelkowski, J. (2011, Oct). *How Can CAS be Effectively Used in Teaching Mathematics?* Annual meeting of the Alabama Council of Teachers of Mathematics, Montgomery, AL.
- Zelkowski, J. (2011, Jun). *TI-Nspire™ Navigator™ system (with and without CAS): A hands-on workshop for mathematics teachers in grades 8-12*. SECME (formerly Southeastern Consortium for Minorities in Engineering) Annual Summer Institute, Tuscaloosa, AL.
- Zelkowski, J. (2011, Jun). *Learning to use the TI-Nspire™ effectively, plus go wireless with Navigator™*. Annual Alabama Educational Technology Conference, Birmingham, AL.

- Zelkowski, J. (2011, Mar). *Learning to use the TI-Nspire™ Navigator™*. Regional T<sup>3</sup> STEM Conference: Teachers Teaching with Technology, Suwanee, GA.
- Zelkowski, J. (2011, Mar). *Making sense of extraneous solutions with Nspire CAS*. Regional T<sup>3</sup> STEM Conference: Teachers Teaching with Technology, Suwanee, GA.
- Zelkowski, J. (2010, Oct). *Using Navigator in a TI-Nspire™ classroom*. Annual meeting of the Alabama Council of Teacher of Mathematics, Montgomery, AL.
- Zelkowski, J. (2010, Jun). *Using the TI-Nspire™ CAS in the high school classroom*. Annual Alabama Educational Technology Conference, Birmingham, AL.
- Zelkowski, J. (2009, Oct). *Integrating a handheld CAS into the Algebra Classroom*. Annual meeting of the Alabama Council of Teachers of Mathematics, Montgomery, AL.
- Zelkowski, J., Lovorn, M., Little, S., Thomas, A., & Ray, E. (2009, Oct). *Integrated lessons for Math & Social Studies: Promoting Civic Fiscal Responsibility in the Classroom*. Annual meeting of the Alabama Council of Teachers of Mathematics, Montgomery, AL.
- Zelkowski, J., Perry, C., & Mohr-Schroeder, M. (2009, May). *What new assistant professors need to know*. ACCLAIM Research Symposium Retrospective to Congratulate, Celebrate, and Conclude—C<sup>3</sup>, Cherry Valley, OH. **Invited honorarium presentation**.
- Zelkowski, J. (2007, Apr). *PRS Personal Response System Pedagogy*. Paper presented at the Graduate Teaching Assistants' Annual WVU Seminar. Morgantown, WV.
- Zelkowski, J. (2007, Apr). *Cautions in Regard to the Four Math Credit Graduation Requirement*. Annual meeting of the West Virginia Council of Teachers of Mathematics, Flatwoods, WV.
- Zelkowski, J. (2006, Mar). *Student Preparedness for College Mathematics*. Annual meeting of the West Virginia Council of Teachers of Mathematics, Flatwoods, WV.

## Teaching

### Teaching Experience:

Fall 2014 –

Associate Professor of Secondary Mathematics (SEMA) Education

SEMA Programs Director

Nationally Re-Recognized in 2023 by NCTM SPA for the 2012 Standards

previously Nationally Recognized in 2014 by NCTM SPA for the 2012 Standards

University of Alabama – Tuscaloosa, AL

- Teach graduate/undergraduate courses:
  - CSE 390—Instruction and Accommodation in Secondary Schools (UG)
  - CSE 401—Technologies for Teaching Secondary Mathematics (UG)
  - CSE 406—Curriculum in Secondary Mathematics (UG)
  - CSE 483/583—Secondary Mathematics Teaching Methods (UG/MA)
  - CSE 489/592—Secondary Mathematics, Clinical Field Experiences (UG/MA)
  - CSE 497/597—Student Teaching Internship Supervision (UG/MA)
  - CIE 560—Principles in Math Education: Equity & Access Issues (MA, EdS, EdD, PhD)
  - CSE 566—Principles in Math Education: Teaching, Learning, & Curriculum (MA)
  - CSE 575—Principles in Math Education: Tools, Technology, & Assessment (MA)
  - CSE 666—Research on Teaching, Learning, & Curriculum in Math Education (EdS, EdD, PhD)
  - CSE 675—Research on Tools, Technology, & Assessment (EdS, EdD, PhD)
  - CSE 693—Workshop: Mathematics Education (EdD, PhD)
  - CIE 693—Workshop: Coaching/Mentoring Cycles (EdS)

- CEE/CSE 695—Practicum: Capstone Project for Mathematics Specialist (EdS)
- CIE 680—Seminar in Mathematics Education Research (EdS, EdD, PhD)
- CIE 640—Seminar in Teacher Education Programs (EdD, PhD)
- Independent Studies (multiple)
- Honors by Contract (undergraduate honors students)

**→Doctoral Dissertations Completed as Chair or Co-chair\* (9):**

- Jackson, J. J. (2023). Teaching mathematical generalization: A dissertation study to understand gaps in the literature, generating validity evidence for assessment, and the employment of a computer science instructional model. (Publication ID# 2863670450) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Smith, P. G. (2022). *Examining TPACK levels and teacher implementation of TPACK skills in the middle and secondary mathematics teachers in the United States: A three-article dissertation*. (Publication ID# 2771356578) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Campbell, T. G. (2021). *Examining how middle grades students develop mathematical learning opportunities and collectively engage in small groups: A three-article dissertation*. (Publication ID# 2546351936) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Glaze, P. E. (2020). *Effects of a task-based methods/practicum sequence on secondary mathematical knowledge for teaching* (Publication ID# 2426237862) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Sarrell, A. M. (2019). *A case study of one school's reform efforts to improve math instruction through coordinated professional development* (Publication ID# 2377447598) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Richey, G. E. (2018). *The effects of different mathematics course progressions on student mathematics achievement throughout the high school transition: A mixed methods study* (Publication ID# 2054000058) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Crosby, L. J. (2014). *Community college students' perspectives regarding their remedial mathematics placement* (Publication ID# 1658559889) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Smith, K. F. (2014). *A beneficiary of the communication process relative to the teacher-pupil paradigm of the preadolescent student* (Publication ID# 1658786291) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- \*Truelove, H. (2013). *Examining evidence of metacognition by preservice secondary mathematics teachers while solving tasks situated in the secondary curriculum* (Publication ID# 1505373279) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.

**→Doctoral Dissertations Completed as Committee Member (10):**

- Smith, F.A. (2024). Curricular and pedagogical decisions in mathematics education for deaf and hard of hearing students: Considering culture. (Publication ID# \_\_\_\_\_) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Gooden, C. (2024). The relationship between secondary mathematics teachers' professional identity and their persistence to teach in hard-to-staff schools. (Publication ID# \_\_\_\_\_) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Jackson, C. T. (2021). *Middle school mathematics teachers using culturally relevant pedagogy to improve learning for historically marginalized students*. (Publication ID# 2628813255) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.

- Watley, L. E. (2017). *Structural validity and reliability of two observation protocols in college mathematics* (Publication ID# 1917682652) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Collins, T. M. N. (2017). *Lesson study as professional development within secondary physics teacher professional learning communities* (Publication ID# 1917681675) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Wiginton, B. L. (2013). *Flipped instruction: An investigation into the effect of learning environment on student self-efficacy, learning style, and academic achievement in an algebra I classroom* (Publication ID# 1505373684) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Murphy, A. F. (2012). *Sustaining inquiry-based teaching methods in the middle school science classroom* (Publication ID# 1285519974) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Chatman, A. (2011). *Institutional factors that affect the mathematical achievement of African American females* (Publication ID# 903793143) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Kustos, P. N. (2010). *Trends concerning four misconceptions in students' intuitively-based probabilistic reasoning sourced in the heuristic of representativeness* (Publication ID# 851889184) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.
- Ryang, D. (2010). *The development of the mathematics teaching self-efficacy scales for Korean elementary and secondary preservice teachers* (Publication ID# 851889221) [Doctoral dissertation, The University of Alabama]. ProQuest Dissertations and Theses Global.

#### Fall 2008 – Summer 2014

Assistant Professor of Secondary Mathematics Education  
SEMA Programs Director  
University of Alabama – Tuscaloosa, AL

- Teach Secondary Mathematics Education graduate/undergraduate courses (see above)
- Teach Mathematics Education graduate courses (see above)
- Teach Doctoral courses (see above)

#### Fall 2003 – Spring 2008

Senior Lecturer of Mathematics  
West Virginia University – Morgantown, WV

- Teach Institute for Mathematics Learning (IML) coordinated courses:
  - Applied calculus with applications (Math 150)
  - College algebra & applications (Math 124)
  - College Trigonometry (Math 128)
  - Calculus 1 (Math 155)
  - Other courses taught
    - Calculus 2 (Math 156)
- Lead instructor/Co-Course coordinator
  - Math 150 (Fall 2003 – Fall 2007)
  - Math 124 (Fall 2003 – Fall 2005)
  - Math 128 (Spring 2006, Spring 2008)

#### Fall 1999 – Spring 2003

High School Mathematics Teacher  
Louisiana School for Math, Science, and the Arts – Natchitoches, LA

- Teach mathematics courses
  - Algebra, geometry, trigonometry, pre-calculus, AP Calculus AB & BC
- Developed new course—Introduction to Engineering Principles & Methods
- Conducted special projects connecting mathematics to real world applications
- Served on committees, advised students, attended professional development
- Attended NCTM Annual Meeting and Exposition

### Summer 2001 & 2002

Mathematics Teacher—Duke Talent Identification Program (Duke TIP)

Northwest State University – Natchitoches, LA

- Geometry site lead teacher for teaching students utilizing a hands-on, discovery, inquiry, and self-paced approach—Individualized approaches for each student provided on an as needed basis via scaffolding and differentiated instruction methods.

### Spring 1998 – Summer 1999

Graduate Teaching Assistant—Mathematics

West Virginia University – Morgantown, WV

- Taught Mathematics Courses
  - College Algebra (Math 124)
  - Business Calculus (Math 150)
  - Calculus 1 (Math 155)
- Mathematics Learning Center (MLC) Tutor

## *Professional Service*

### **Leadership Roles:**

- Mathematics Teacher Education—Partnership (MTE-P)  
An APLU Science and Mathematics Teacher Imperative (SMTI)  
Original MTE-P member (2012 – present)
  - Director of the University of Alabama Partnership Team → 2012 – present
  - Leadership Team of Clinical Experiences Research Action Cluster → 2017-23
  - Co-Director of Methods Sub-RAC of Clinical Experiences → 2019-23
  - Director of Methods Sub-RAC of Clinical Experiences → 2017-19
  - Member Methods Sub-RAC of Clinical Experiences → 2016-17
  - Member Group—Improving Mathematics Content Preparation → 2014-16
- National Instructor – Teachers Teaching with Technology [T<sup>3</sup>] (2014 – present)
  - Provide professional development regionally and across the nation
  - Co-Lead national webinars
  - Co-Leader of developing new professional development workshop materials
- Association of Mathematics Teacher Educators [AMTE] (2015 – present)
  - Organization Executive Director – Initially Appointed → 2023 (declined)
  - Program Past-Chair Mentor – Annual conference → 2023-24
  - Program Chair – Annual Conference → 2022-23 (Outstanding Service Honors)
  - Program Assistant-Chair – Annual Conference → 2021-22
  - Program Committee – Annual Conference → 2018-21
  - STaR Program Committee – Early Career Mentor Program → 2015-18
- National Council of Teachers of Mathematics [NCTM] (2015 – 2021)
  - Program Committee – NCTM Phoenix Regional Conference → 2020-2021
  - Nomination for Candidate to the NCTM Board of Directors → 2020



- Program Committee – NCTM Nashville Regional Conference → 2018-19
- Membership & Affiliate Relations Committee → 2018-19
- Co-Chair – Membership & Affiliate Relations Committee → 2017-18
- Chair – Affiliate Relations Committee → 2016-17
- Emcee – Annual National Conference Caucus & Delegate Assembly → 2017, 2018
- Affiliate Services Committee Member → 2015-16
- Southeastern Conference Mathematics Education Community [SEC<sup>+</sup> MEC] (2021-present)
  - 2022-23 Lead and provide guidance on NSF Noyce grant submissions
  - UA representative lead
- Alabama Council of Teachers of Mathematics [ACTM] (2010 – present)
  - Webmaster, Executive Board, District 3 Chair → 2018-24
  - Immediate Past-President & Mentorship → 2016-18
  - President & Annual Conference Chair → 2014-16
  - Vice President & Annual Program Chair → 2012-14
  - Government Relations Officer → 2010-2012
- Alabama State Dept of Education [ALSDE]
  - External Peer-Reviewer 2020 Mathematics Course of Study → 2018-20
  - Co-Chair Strategic Planning Committee on Mathematics Education → 2016-17
  - Lead Writer of Committee Recommendations Document → 2016-17
  - Praxis I Standards Setting Panel for Alabama → 2012-13
  - Praxis II Mathematics Standards Setting Panel for Alabama → 2011-12
- Secondary Mathematics Teacher Education Program [SEMA] @ The U of A (2008 – present)
  - National Accreditation & Recognition by NCTM SPA → 2014 – present
  - NCTM SPA Data Manager & Report Compiler → 2012 – Present
  - Program Director → 2008 – present
- Association of Mathematics Teacher Educators of Alabama [AMTEA]
  - Treasurer (2010 – present)
  - Lead writer on Clinical Experiences & Mentor Teacher Position Statement (2020)
- Regional Instructor – Teachers Teaching with Technology [T<sup>3</sup>] (2011 – 2014)
  - Provide professional development locally and across the nation
  - Developed new professional development workshop materials

### **Distinguished National Service:**

- National Science Foundation, Washington, DC
  - Panels: 2018, 2019, 2020, 2021, 2022, 2023, 2024
- Senior Consultancies on NSF-funded National impact grants
  - PTMT, Preparing Teaching using Mathematics Teachers
  - V-M<sup>2</sup>Ed, Validity Evidence for Measurement in Math Education
  - MTE-P Clinical Experiences Research Action Cluster
  - MTE-P 2.0
- Educational Testing Service Praxis II National Advisory Committee, Washington, DC
  - Mathematics Test Standard Setting Committee
  - Mathematics Tests 5161 and 5169, 5164, 5165 Content Realignment
  - Mathematics Test 5165 Advising Committee

### **Journal Referee:**

- Referee for the *Journal of Research in Mathematics Education (JRME)*
  - National Council of Teachers of Mathematics, August 2008 to present
- Referee for *School Science and Mathematics (SSM)*
  - School Science & Mathematics Association, August 2009 to present

- Referee for *Contemporary Educational Review (CER)*
  - American Educational Research Association, June 2011 to present
- Referee for *Contemporary Issues in Technology and Teacher Education (CITE)*
  - Association of Mathematics Teacher Educators, April 2011 to present
- Referee for *The Mathematics Teacher Educator (MTE)*
  - AMTE & NCTM co-published, May 2012 to present
- Referee for *Journal of Mathematics Teacher Education (JMTE)*
  - Springer, August 2017 to present
- Referee for *Investigations in Mathematics Learning (IML)*
  - Research Council for Mathematics Learning, April 2018 to present
- Referee for *Mathematics Teacher: Learning & Teaching PK-12 (MTLT)*
  - National Council of Teachers of Mathematics, August 2019 to present
- Referee for *Mathematics Teacher (MT)*
  - National Council of Teachers of Mathematics, August 2004 to August 2019
- Referee for *Mathematics Teaching in the Middle School (MTMS)*
  - National Council of Teachers of Mathematics, May 2012 to August 2019
- Referee for *Journal of Interactive Online Learning (JIOL)*
  - UA, September 2009 to 2015

### Book Reviews:

- Paid Honorarium for the Review of **Teaching Secondary & Middle School Mathematics**, by Daniel Brahier, Pearson
- Paid Honorarium for the Review of **Calculus: Applications and Technology**, by Edmond C. Tomastik, Brooks/Cole Wadsworth Group

### Professional Presentation (Refereed) Conferences: (strikethrough denotes cancelled/postponed for COVID19)

February 2024 – T<sup>3</sup>, International Conference (by invitation only), Arlington, TX  
 February 2024 – AMTE, Association of Mathematics Teacher Educators, Orlando, FL  
 November 2023 – ACTM, Alabama Council of Teachers of Mathematics, Oxford, AL  
 October 2023 – NCTM, Research Conference, Washington, DC  
 July 2023 – NSF, Noyce Summit Summer Conference, Washington, DC  
 June 2023 – NSF, Southeast Regional Noyce Conference, Mobile, AL  
 February 2023 – AMTE, Association of Mathematics Teacher Educators, New Orleans, LA  
 November 2022 – PME-NA, Psychology of Mathematics Education North America, Nashville, TN  
 November 2022 – ACTM, Alabama Council of Teachers of Mathematics, Oxford, AL  
 October 2022 – 3<sup>rd</sup> National Conference on Doctoral Programs in Math Ed, Las Vegas, NV  
 July 2022 – NSF, Noyce Summit Summer Conference, Washington, DC  
 April 2022 – AERA, American Educational Research Association, San Diego, CA  
 March 2022 – T<sup>3</sup>, International Conference (by invitation only), Dallas, TX  
 February 2022 – AMTE, Association of Mathematics Teacher Educators, Las Vegas, NV  
 February 2022 – MTEP, Mathematics Teacher Education Partnership Conference, Las Vegas, NV  
 November 2021 – NCTM, National Council of Teachers of Mathematics, Virtual.  
 November 2021 – ACTM, Alabama Council of Teachers of Mathematics, Virtual  
 July 2021 – NSF, Noyce Summit Summer Conference, Washington, DC  
~~October 2021 – 3<sup>rd</sup> National Conference on Doctoral Programs in Math Ed, Las Vegas, NV~~  
~~September 2021 – NCTM, National Council of Teachers of Mathematics, Atlanta, GA~~  
~~September 2020 – 3<sup>rd</sup> National Conference on Doctoral Programs in Math Ed, Las Vegas, NV~~  
~~July 2020 – NSF, Noyce Summit Summer Conference, Washington, DC~~  
 June 2020 – MTEP, Mathematics Teacher Education Partnership Conference, Virtual  
 April 2020 – AERA, American Educational Research Association, San Francisco, CA

~~April 2020 – NCTM, National Council of Teachers of Mathematics, Chicago, IL~~  
February 2020 – V-M<sup>2</sup>Ed, Validity Evidence for Measurement in Math Education, Las Vegas, NV  
February 2020 – AMTE, Association of Mathematics Teacher Educators, Phoenix, AZ  
November 2019 – ACTM, Alabama Council of Teachers of Mathematics, Birmingham, AL  
October 2019 – NCTM, Regional, National Council of Teachers of Mathematics, Nashville, TN  
July 2019 – NSF, Noyce Summit Summer Conference, Washington, DC  
April 2019 – NCTM, National Council of Teachers of Mathematics, San Diego, CA  
April 2019 – NCTM, Research Conference, San Diego, CA  
March 2019 – T<sup>3</sup>, International Conference, Baltimore, MD  
February 2019 – AMTE, Association of Mathematics Teacher Educators, Orlando, FL  
November 2018 – ACTM, Alabama Council of Teachers of Mathematics, Birmingham, AL  
September 2018 – Arkansas Council of Teachers of Mathematics, Little Rock, AR  
June 2018 – MTEP, Mathematics Teacher Education Partnership Conference, Denver, CO  
June 2018 – Southeast Regional Noyce Conference, Mobile, AL  
April 2018 – NCTM, National Council of Teachers of Mathematics, Washington, DC  
April 2018 – NCTM, Research Conference, Washington, DC  
March 2018 – T<sup>3</sup>, International Conference, San Antonio, TX  
February 2018 – RCML, Research Council on Mathematics Learning, Baton Rouge, LA  
February 2018 – AMTE, Association of Mathematics Teacher Educators, Houston, TX  
December 2017 – MTEP & APLU, Training Workshop, Washington, DC  
November 2017 – ACTM, Alabama Council of Teachers of Mathematics, Birmingham, AL  
June 2017 – NSF, Southeast Regional Noyce Conference, Mobile, AL  
April 2017 – NCTM, National Council of Teachers of Mathematics, San Antonio, TX  
April 2017 – V-M<sup>2</sup>Ed, Validity Evidence for Measurement in Math Education, San Antonio, TX  
March 2017 – T<sup>3</sup>, International Conference, Chicago, IL  
February 2017 – AMTE, Association of Mathematics Teacher Educators, Orlando, FL  
November 2016 – ACTM, Alabama Council of Teachers of Mathematics, Birmingham, AL  
October 2016 – MCTM, Mississippi Council of Teachers of Mathematics, Ellisville, MS  
July 2016 – ICME, International Congress on Mathematical Education, Hamburg, Germany  
June 2016 – MTEP, Mathematics Teacher Education Partnership Conference, Atlanta, GA  
May 2016 – NCTM, Leadership Conference, Washington, DC  
April 2016 – NCTM, National Council of Teachers of Mathematics, San Francisco, CA  
February 2016 – T<sup>3</sup>, International Conference, Orlando, FL  
February 2016 – NCTM, National Advocacy Conference, Washington, DC  
Oct 2015 – ACTM, Alabama Council of Teachers of Mathematics, Birmingham, AL  
June 2015 – MTEP, Mathematics Teacher Education Partnership Conference, Fullerton, CA  
March 2015 – T<sup>3</sup>, International Conference, Fort Worth, TX  
Oct 2014 – ACTM, Alabama Council of Teachers of Mathematics, Birmingham, AL  
April 2014 – NCTM, Research Conference, New Orleans, LA  
March 2014 – T<sup>3</sup>, International Conference, Las Vegas, NV  
February 2014 – AMTE, Association of Mathematics Teacher Educators, Irvine, CA  
November 2013 – ACTM, Alabama Council of Teachers of Mathematics, Montgomery, AL  
September 2013 – MSP, Math Science Partnerships National Conference, Washington, DC  
March 2013 – T<sup>3</sup>, International Conference, Philadelphia, PA  
January 2013 – AMTE, Association of Mathematics Teacher Educators, Orlando, FL  
November 2012 – ACTM, Alabama Council of Teachers of Mathematics, Montgomery, AL  
July 2012 – ICME, International Congress on Mathematical Education, Seoul, South Korea  
April 2012 – NCTM, National Council of Teachers of Mathematics, Philadelphia, PA  
March 2012 – T<sup>3</sup>, International Conference, Chicago, IL  
October 2011 – ACTM, Alabama Council of Teachers of Mathematics, Montgomery, AL  
April 2011 – AERA, American Educational Research Association, New Orleans.

March 2011 – T<sup>3</sup> Regional STEM Conference, Suwanee, GA  
March 2011 – SITE, Society for Information Technology and Teacher Education, Nashville, TN  
February 2011 – T<sup>3</sup>, International Conference, San Antonio, TX  
January 2011 – AMTE, Association of Mathematics Teacher Educators, Irvine, CA  
October 2010 – ACTM, Alabama Council of Teachers of Mathematics, Montgomery, AL  
June 2010 – AETC, Alabama Educational Technology Conference, Birmingham, AL  
March 2010 – T<sup>3</sup>, International Conference, Atlanta, GA  
November 2009 – MSERA, Mid-south affiliate of AERA, Baton Rouge, LA  
October 2009 – ACTM, Alabama Council of Teachers of Mathematics, Montgomery, AL  
May 2009 – ACCLAIM C<sup>3</sup> (Celebrate, Congratulate, & Conclude), Cherry Valley, OH  
November 2008 – AAMTE, Appalachian Association of Math Teacher Educators, Williamsburg, KY  
January 2008 – AMTE, Association of Mathematics Teacher Educators, Tulsa, OK

### **Professional Development Outreach Workshops Hosted/Lead/Co-Lead:**

March 2022 – Two-day (6-hour) workshop on TI-Npsire graphing technology for Birmingham City Schools  
October 2019 – Instructed 1-day (6-hour) professional development workshop for teachers of secondary mathematics, Boston/Worcester, MA  
March 2019 – T<sup>3</sup> Instructor professional development day (co-lead), Baltimore, MD  
December 2017 – MCOP<sup>2</sup> national training workshop for mathematics teacher educators. MTEP & APLU, Washington, DC  
July 2016 – Two-day (12-hour) workshop on TI-84 graphing technology for Birmingham City Schools  
June 2016 – As Alabama’s national instructor for T<sup>3</sup>, hosted 2-day (12-hour) professional development workshop for perspective STEM teachers  
July 2015 – As Alabama’s national instructor for T<sup>3</sup>, hosted 3-day (18-hour) professional development workshop for mathematics teachers from all over the state of Alabama. Daphne, AL  
March 2015 - T<sup>3</sup> Instructor professional development day, Las Vegas, NV  
July 2014 – As Alabama’s regional instructor for T<sup>3</sup>, hosted 3-day (18-hour) professional development workshop for mathematics teachers from all over the state of Alabama. Birmingham, AL  
June 2013 – As Alabama’s regional instructor for T<sup>3</sup>, hosted 3-day (18-hour) professional development workshop for mathematics teachers from all over the state of Alabama. Athens, AL  
June 2012 – As Alabama’s regional instructor for T<sup>3</sup>, hosted 3-day (18-hour) professional development workshop for mathematics teachers from all over the state of Alabama. Birmingham, AL  
August 2009 – Hosted 2-day (12-hour) professional development workshop for pre-service and in-service secondary mathematics teachers featuring the TI-Nspire, The University of Alabama, Tuscaloosa, AL

### **Conferences/Meetings Attended for Professional Development (non-presenting):**

October 2023 – SEC Conference Summit of Secondary Mathematics Teacher Educators, Gainesville, FL  
February 2023 – T<sup>3</sup> Instructor professional development conference, Fort Worth, TX  
October 2022 – SEC Conference Summit of Secondary Mathematics Teacher Educators, Lexington, KY  
November 2021 – ACTM, Alabama Council of Teachers of Mathematics, Virtual  
February 2021 – ACTM, Alabama Council of Teachers of Mathematics, Virtual  
March 2021 – T<sup>3</sup> Instructor professional development day, Virtual  
May 2020 – National Advisory Committee, ETS Praxis II Mathematics, Princeton, NJ (online)  
March 2019 – T<sup>3</sup> Instructor professional development day, Baltimore, MD  
September 2018 – A+ College Ready (Alabama) Fall Conference, Birmingham, AL  
June 2018 – MARC Southern Region Representative, NCTM Membership & Affiliates Relations Committee, Reston, VA  
March 2018 – T<sup>3</sup> Instructor professional development day, San Antonio, TX

June 2017 – MARC Vice-Chair and Southern Region Representative, NCTM Membership & Affiliates Relations Committee, Reston, VA  
March 2017 – T<sup>3</sup> Instructor professional development day, Chicago, IL  
February 2017 – TASM, Austin, TX  
June 2016 – ARC Chair and Southern Region #2 Representative, NCTM Affiliates Relations Committee, Reston, VA  
April 2016 – NCTM, San Francisco, CA  
February 2016 - T<sup>3</sup> Instructor professional development day, Orlando, FL  
February 2016 – NCTM Advocacy Conference. Washington, DC  
November 2015 – ARC Southern Region #2 Representative, NCTM Affiliates Relations Committee, Vancouver, BC (Canada)  
June 2015 – ARC Southern Region #2 Representative, NCTM Affiliates Relations Committee, Reston, VA  
June 2014 – NSF, grant writing conference. Denver, CO  
April 2014 – NCTM, National Council of Teachers of Mathematics, New Orleans, LA  
June 2013 – TUMTE, Technology Using Mathematics Teacher Educators, 3-day PD NSF funded workshop at North Carolina State University, Raleigh, NC  
March 2013 – T<sup>3</sup> Instructor professional development day, Philadelphia, PA  
May 2012 – TUMTE Technology Using Mathematics Teacher Educators, 3-day PD NSF funded workshop at North Carolina State University, Raleigh, NC  
March 2012 – MTE-P Mathematics Teacher Education Partnership, Atlanta, GA  
February 2012 – T<sup>3</sup> Instructor professional development day, Chicago, IL  
June 2011 – Integrating STEM with TI-Nspire, Atlanta, GA  
July 2010 – STaR, Park City, UT. NSF-funded professional development for new professors of mathematics education. Full fellowship at Park City Math Institute.  
April 2010 – AERA American Educational Research Association, Denver, CO  
April 2010 – NCTM, National Council of Teachers of Mathematics, San Diego, CA  
July 2009 – NAEP HSTS database training seminar sponsored NCES, Washington, DC  
May 2009 – TI-MTE, Texas Instruments Mathematics Teacher Educator Workshop, Dallas, TX  
March 2009 – Vernier Technology Workshop, Birmingham, AL  
February 2009 – AMTE Association of Mathematics Teacher Educators, Orlando, FL  
February 2009 – AMTE technology TI pre-session workshop, Orlando, FL  
February 2009 – Carnegie Learning, Are your students algebra ready? Online Webinar  
September 2008 – National Meeting *Future of High School Mathematics*, Washington, DC  
September 2008 – TEAM-MATH, Tuskegee, AL  
January 2006 – AMTE Association of Mathematics Teacher Educators, Tampa, FL  
April 2006 – NCTM National Council of Teachers of Mathematics, St. Louis, MO  
April 2005 – NCTM National Council of Teachers of Mathematics, Anaheim, CA  
April 2002 – NCTM National Council of Teachers of Mathematics, Las Vegas, NV

### **Professional Organization Memberships & Affiliates:**

- MTE-P, Mathematics Teacher Education Partnership
  - APLU Mathematics Teacher Education Imperative
    - Director University of Alabama Partnership
- AMTE, Association of Mathematics Teacher Educators
  - AMTEA, Association of Mathematics Teacher Educators of Alabama
    - Treasurer
  - AAMTE, Appalachian Association of Mathematics Teacher Educators (*previously*)
- NCTM, National Council for Teachers of Mathematics
  - ACTM, Alabama Council for Teachers of Mathematics
    - NCTM Government Relations Officer 2011-2012
    - Vice President, President-Elect 2012-2014

- President 2014-2016
- Immediate Past-President 2016-2018
- Webmaster 2018-present
- WVCTM, West Virginia Council for Teachers of Mathematics (*previously*)
- RCML, Research Council on Mathematics Learning
- AERA, American Education Research Association
  - MSERA, Mid-south Education Research Association (*previously*)
- ACCLAIM, Appalachian Collaborative Center for Learning, Assessment, & Instruction in Mathematics (an NSF-funded Center for Learning and Teaching CLT)

## Field Related Service:

### International/National

- Association of Mathematics Teacher Educators (AMTE)
  - Annual Conference Program Chair Leadership Team (2021-2024)
  - Annual Conference Program Committee (2018-2021)
- National Council of Teachers of Mathematics (NCTM) Affiliates Relations Committee (ARC); Merged in 2017 with Membership Committee, now MARC
  - Southern 2 Representative:
    - Oklahoma, Texas, Arkansas, Louisiana, Tennessee, Mississippi, Alabama
  - ARC Committee Member (2015-16)
  - ARC Committee Chair (2016-17)
  - MARC Committee Vice-chair (2017-18)
  - MARC Committee Member (2018-19)
- AMTE STaR (Service, Teaching, and Research in Mathematics Education)
  - Advisory Board Member (2015-2018)
- Mathematics Teacher Education Partnership (MTE-P): An APLU Science and Mathematics Teacher Imperative (SMTI) founding member.
  - Director of the West Alabama Partnership Team (2014-present)
  - West Alabama Partnership Team participation in Working Group III—Improving Mathematics Content Preparation of Secondary Mathematics Teacher Candidates (2014-2017)
  - West Alabama Partnership Team participation in Research Action Cluster—Methods Clinical Experiences RAC Leader (2017-2019), Co-Leader (2020-2022)
- Educational Testing Services
  - 2022, Praxis II National Content Alignment Committee, Washington, DC
    - Mathematics Tests 5165 & 5164
  - 2020-21, Praxis II National Advisory Committee, Washington, DC
    - Mathematics Tests 5161 and 5169 Content Realignment
  - 2012, Praxis II Standards Setting Panel
    - Mathematics Test 5161
- Participant at *The Future of High School Mathematics: New Priorities and Promising Innovations* national meeting of current and future secondary mathematics leaders—Washington, DC. Sept.25-27, 2008
- Participant in two topic study groups, ICME-12, Seoul, South Korea.
- Participant in two topic study groups, ICME-13, Hamburg, Germany.
- Participant in one topic study group, ICME-14, Shanghai, China (virtual participant)
- Reviewer for nine journals: IML, MTE, MTMS, MT, JRME, SSM, CITE, CER, JIOL
- External Reviewer for Promotion / Tenure
  - Drake University 2016
  - Boise State University 2017

- Penn State University 2018
- University of Arkansas 2019
- West Virginia University 2020
- University of Indianapolis 2021
- University of New Hampshire 2021
- University of Washington 2021

### Regional

- Instructed 2-day PD workshop on TI-Nspire CXII, Birmingham, AL (Mar 2022)
- Instructed 1-day PD workshop on Implementing Tasks that Promote Reasoning & Problem Solving in Mathematics, Worcester, MA (Oct 2019)
- Hosted 2-day PD workshop on ACT & TI technology, Birmingham, AL (July 2019)
- Hosted/Instructed 1-day PD workshop on TI-Nspire, Tuscaloosa, AL (Jun 2018)
- Hosted/Instructed 1-day PD workshop on TI-Nspire, Muscle Shoals, AL (Jan 2018)
- Hosted/Instructed 1-day PD workshop on TI-Nspire, Tuscaloosa, AL (Jun 2017)
- Instructed 2-day PD workshop on TI-84+ CE, Birmingham, AL (Jul 2016)
- Hosted/Instructed 2-day PD workshop on TI-Nspire, Tuscaloosa, AL (Jun 2016)
- Hosted/Instructed 3-day PD workshop on TI-Nspire, Daphne, AL (Jul 2015)
- Hosted/Instructed 2-day PD workshop on TI-Nspire, Tuscaloosa, AL (Jun 2015)
- Hosted/Instructed 3-day PD workshop on TI-Nspire, Birmingham, AL (Jul 2014)
- Hosted/Instructed 3-day PD workshop on TI-Nspire, Athens, AL (Jun 2013)
- Hosted/Instructed 3-day PD workshop on TI-Nspire, Birmingham, AL (Jun 2012)
- Lead a professional development workshop at SECME Tuscaloosa, AL (Jun 2011)
- Presented (per invitation) at two Appalachia regional meetings (Nov 2008 & May 2009)
  - ACCLAIM, AAMTE

### State of Alabama

- Blind reviewer, 2018-19 Alabama Course of Study in Mathematics Standards Committee
- Co-Chair, Lead Writer, 2017 Mathematics Strategic Planning Committee, ALSDE Superintendent Appointment
- MTE-P Alabama informative summit at Birmingham Southern University, 15 state institutions represented
- Praxis II Test 5161 Standards setting panel, 2012, ALSDE
- ACTM President, 2014-16 (2-yr term)
- ACTM Vice-President, Fall Forum Program Chair, President-Elect 2012-2014 (2-yr term)
- ACTM's NCTM Government Relations Officer 2010-2012 (2-yr term)
- AMTEA Treasurer – 2011-2020 (five consecutive 2-yr terms)
- AMTEA Board Member – 2009-2010 (2-yr term)
- Professional development workshop at AETC Birmingham, AL (Jun 2011)
- Participated in the Huntsville Education Summit (Nov 2009)
- AMSTI state meeting of mathematics & science teacher educators (Sept 2008)

### School-Based Professional Development

- Muscle Shoals High School, Muscle Shoals, AL
  - Spring 2018 one day
- Talladega County Schools, Talladega, AL
  - Spring 2017 ½ day
- Birmingham City Schools, Birmingham, AL
  - Summer 2016 two days
- Trinity Presbyterian School, Montgomery, AL

- Summer 2016 one day
- Vestavia Hills High School, Vestavia Hills, AL
  - Fall 2013 One day
  - Fall 2014 ½ day
  - Summer 2015 two days
  - Summer 2016 one day
  - Fall 2017 one day
- Baldwin County System High Schools, Bay Minette, AL
  - Summer 2015 ½ day
- Tuscaloosa Academy, Tuscaloosa, AL
  - Three years (2009-2012)
  - AP Calculus program improvements

#### University of Alabama

- Campus Master Plan Committee (2020-2023)
  - Appointed by the Provost's Office
- Faculty Senate Merger or Discontinuance of Academic Units Committee (2018-2021)
  - Elected by the University Faculty Senate
- University Benefits Committee (Fall 2015 – Spring 2018)
  - Appointed by the Provost's Office
- Information Technology University Committee (Fall 2012 – Spring 2015)
  - Appointed by Provost/Executive VP & the Vice Provost for Information Technology
- Redesign of SEMA TEP (sec math teacher ed program)
  - NCTM SPA National Recognition Reports writer, August 2015 through 2017
  - To meet MET1, MET2, NCTM, and AMTE recommendations
  - Cross-campus collaboration with A&S mathematics faculty for inclusion of two capstone content courses into program major
  - SEMA TEP program nationally recognized without conditions (twice, 2016 & 2023)

#### College of Education

- Faculty Issues Committee – August 2020 to July 2022
- Academic Issues Committee – August 2013 to January 2016
  - Chair fall 2015
- College of Education Faculty Research & Development committee – Fall'08-Spring'2013
- College of Education Communications ad-hoc committee – Fall'09-Spring'10
- Served on college doctoral dissertations external to department

#### Department of Curriculum & Instruction

- Chair—Secondary Mathematics Education Faculty search committee (2019-20 year)
- Chair—Elementary Mathematics Education Faculty search committee (2018-19 year)
- Chair—Secondary Mathematics Education Faculty search committee (2018-19 year)
- Co-Chair—Elementary Mathematics Education Faculty search committee (2017-18 year)
- Chair—Elementary Mathematics Education Faculty search committee (2014-15 year)
- Chair—Secondary Mathematics Education Faculty search committee (2013-14 year)
- Co-Chair—Elementary Mathematics Education Faculty search committee (2011-12 year)
- SEMA program evaluation post-NCLB
  - Development of new advising guidelines for success and lower attrition
  - Researching previous ten years of SEMA program data
- Secondary Math Education Faculty search committee (2008-09 year), member, Holaway
- Elementary Math Education Faculty search committee (2009-10 year), member, unfilled



- Elementary Math Education Faculty search committee (2010-11 year), member, unfilled
- Elem. Math Education Faculty search committee (2011-12 year), co-chair, Livers&Weston
- Secondary Math Education Faculty search committee (2013-14 year), chair, Boyle
- Elementary Math Education Faculty search committee (2014-15 year), chair, Harbour
- Elementary Math Education Faculty search committee (2017-18 year), co-chair, Saclarides
- Secondary Math Education Faculty search committee (2018-19 year), chair, unfilled
- Elementary Math Education Faculty search committee (2018-19 year), chair, unfilled
- Secondary Math Education Faculty search committee (2019-20 year), chair, Thomas
- Graduate (masters, ed specialist, doctoral) comprehensive exams writer/reader
- Interview TEP candidates, approximately 10-20 students each fall semester
- Read and evaluate TEP candidates writing exams, between 15-20 each term thru 2018

#### Community Service

- Hoover Ahead—Advancing Community Equal & Equitable Rights, Hoover, AL
- Work with Tuscaloosa Academy's AP calculus program for four years
- Habitat for Humanity of Tuscaloosa (2008-2015)

#### **Student Advising:**

##### Completed Dissertations (8 as chair, 1 as co-chair, 10 as a member)

1. Dohyoung Ryang, summer 2010, committee member, secondary math
2. Paul Kustos, fall 2010, committee member, secondary math
3. Audrey Chatman, summer 2011, external committee member, educ. leadership
4. Amy Murphy, fall 2012, committee member, secondary science
5. **Hazel Truelove, fall 2013, co-chair (D. Goldston)**, secondary math
6. Barry Wiginton, fall 2013, committee member, instructional technology
7. **Kelli Fountain Smith, fall 2014, chair**, middle grades education
8. **Laura Crosby, fall 2014, chair**, secondary math
9. Tonya Nicki Collins, fall 2017, committee member, secondary science
10. Laura Erin Watley, fall 2017, committee member, mathematics
11. **Ginger Richey, spring 2018, chair**, secondary math
12. **Astin Sarrell, fall 2019, chair**, elementary math
13. **Patsy Glaze, spring 2020, chair**, secondary math
14. **Tye Campbell, spring 2021, chair**, secondary math
15. Carol Tower Jackson, member, secondary math
16. **Pam Smith, fall 2022, chair**, secondary math
17. **Jay Jackson, summer 2023, chair**, secondary math
18. Chalandra Gooden, member, secondary math
19. Felicia Smith, member, secondary math

##### Ongoing Dissertations (3 as chair, 1 as co-chair, 3 as member)

1. **Allison Mudd, co-chair (L. Johnson)**, secondary math (writing dissertation)
2. Eugene Glover, member, elementary math (revising proposal)
3. **Wendy Bryant, chair**, secondary math (drafting proposal)
4. **Robin Blair, chair**, secondary math (drafting proposal)

##### Doctoral Programs of Study (coursework)

- Becca Phillips, **chair**, mathematics education; 2023-
- Laurel Drake, **chair**, mathematics education; 2023-
- Kaleigh Pate, **chair**, mathematics education; 2020-2024
- Felicia Smith, **chair**, mathematics education; 2020-2024

- Chalandra Gooden, **chair**, mathematics education; 2020-2024
- Haley Parker, **chair**, mathematics education; 2019-2022
- Wendy Bryant, **chair**, secondary math; 2016-2020
- Tye Campbell, **chair**, secondary math; 2017-2019
- Robin Blair, **chair**, secondary math; 2016-2019
- Pam Smith, **chair**, secondary math; 2016-2019
- Jay Jackson, **chair**, secondary math; 2014-2019
- Eugene Glover, **chair**, elementary math; 2017-2018
- Allison Mudd, **chair**, secondary math; 2015-2018
- Patsy Glaze, **chair**, secondary math; 2015-2018
- Astin Sarrell, **chair**, elementary math; 2016-2017
- Carol Jackson, **chair**, secondary math; 2012-2020
- Ginger Richey, **chair**, secondary math; 2012-2015
- Kelli Fountain Smith, **chair**, elementary education; 2012-2012
- Robert Cavin, member, elementary education; 2011-2012
- Kendra Tolleson, member, secondary math; 2011-2011
- Victoria Evans, member, secondary science; 2010-2011
- Kimberly Qualls, **chair**, secondary math; 2009-2013
- Amy Murphy, member, secondary science; 2009-2012
- Shelia Ingram, **co-chair**, secondary math; 2008-2012
- Tasha Parrish, member, instructional leadership; 2008-2011
- Hazel Truelove, **co-chair**, secondary math; 2008-2011

#### Educational Specialist (EdS) Thesis

- Spring 2019, Wendy Bryant – **Chair**
- Fall 2018 & Fall 2019, Krista Mintz – Committee Member
- Fall 2017, Wendy Blackmon – Committee Member
- Spring 2017, Zachary Searels – **Chair**
- Spring 2016, Elaine Page – Committee Member
- Spring 2016, Kerry Shaw – **Chair**
- Spring 2016, Brandy Whitmire – **Chair**
- Spring 2015, Robin Blair – **Chair**
- Spring 2015, Patsy Glaze – **Chair**
- Spring 2011, Hazel Truelove – **Chair**

#### Independent Study/Honors by Contract

- I.S.—Cassandra Burton, Fall 2009
- I.S.—Laura Crosby, Fall 2009
- I.S.—Laura Jones, Fall 2011
- I.S.—Shelia Ingram, Fall 2011
- H.b.C.—Kelsey Deason, Fall 2011
- I.S.—Bobby Cavin, Spring 2012
- I.S.—Lauren Woltjen, Spring 2012
- I.S.—Jeffrey Peavy, Spring 2012
- I.S.—Kelli Davis Fountain Smith, Fall 2012
- I.S.—Laurie Rickard, Spring 2013
- I.S.—Jeffrey Darby, Spring 2013
- I.S.—Drew Jackson, Summer 2013
- I.S.—William Brazelton, Spring 2014
- I.S.—Whitney Anderson, Fall 2014

- I.S.—Carol Tower Jackson, Fall 2015
- H.b.C.—Julianna Messineo, Fall 2017
- I.S.—Lindsey Elkins, Fall 2017
- I.S.—Carol Tower Jackson, Fall 2018
- I.S.—Allison Papaleo, Fall 2018
- I.S.—Tye Campbell, Spring 2020
- I.S.—Chalandra Gooden, Fall 2021
- I.S.—Felicia Smith, Fall 2021
- I.S.—Alicia Ware, Winter 2023

General Advising of Undergraduate & Graduate Secondary Mathematics Education students

- Annually, ~60 hours, ~50-60 students, ~85-15 undergraduate/graduate ratio