

Ali Bicer
Associate Professor of Mathematics Education
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Texas A&M University

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EDUCATION:

2016 Ph. D., Curriculum and Instruction, Emphasis in Mathematics Education, Texas A&M University, College Station, TX.

2012 M. Ed., Curriculum and Instruction, Emphasis in Mathematics Education, Texas A&M University, College Station, TX.

2009 M.S., Abstract Algebra, Izmir Institute of High Technology, Izmir, Turkey. (Left the program to continue graduate school at Texas A&M).

2006 B.S., Emphasis in Mathematics, Celal Bayar University, Turkey.

AWARDS AND HONORS:

2024, Presidential Scholarly Achievement Awards for Tenured Associate or Full Faculty, University of Wyoming.

2022, Presidential Scholarly Achievement Awards for Early Promising Faculty, University of Wyoming.

2021, Outstanding Research and Scholarship Award, College of Education, University of Wyoming.

2014, Strategic Research Award, College of Education, Texas A&M University, College Station, TX.

2013, Lechner Scholarship Award, Texas A&M University.

2009-2016, Graduate Education Scholarship Award, Ministry of Education, Turkey.

2002-2007, College Education Scholarship Award, Ministry of Education, Turkey.

PROFESSIONAL EXPERIENCES:

2024-Current, Associate Professor (Tenured), Mathematics Education, Texas A&M University, College Station, TX.

2023-2024, Associate Professor (Tenured), Mathematics Education, University of Wyoming, Laramie, WY.

2018-2023, Assistant Professor, Mathematics Education, University of Wyoming, Laramie, WY.

2016-2018, Post-Doctoral Research Scientist, Aggie STEM, College of Education, Texas A&M University, College Station, TX.

2014-2016, Research Assistant, Aggie STEM, College of Education, Texas A&M University, College Station, TX.

2010-2014, Teaching and Research Assistant, Department of Teaching Learning and Culture, College of Education, Texas A&M University, College Station, TX.

2006-2009, Mathematics Teacher, Karsiyaka School, Izmir, Turkey.

EDITORIAL EXPERIENCE:

2024-Present, Discovery Education. (Role: Editorial Board member).

2019-Present, Journal of Urban Mathematics Education. (Role: International Research Editor).

2024-2025, Journal of STEM Education. (Role: Managing Editor).

2018-Present, International Electronical Journal of Mathematics Education. (Role: Editorial Board member).

2016-Present, Electronic International Journal of Education, Arts, and Science. (Role: Editorial Board member).

PUBLICATIONS

Books

Bicer, A. (Eds.). (In press). *Mathematical creativity in 8th grade Common Core classrooms*. ISTES Organization.

Bicer, A. (Eds.). (2023). *Mathematical creativity in 5th grade Common Core classrooms*. ISTES Organization. <https://www.istes.org/creativity-directed-mathematical-tasks-for-5th-grade-common-core-classrooms-35-b.html>

Bicer, A. (2022). *Fostering mathematical creativity of 5th-grade students in Common Core adopted classrooms I*. ISTES Organization. <https://www.istes.org/mathematical-creativity-in-5th-grade-common-core-classrooms-30-b.html>

Macalalag, A. Z., Sahin, I., Johnson, J., & **Bicer, A.** (Eds.). (2022). *Internalization of STEM Education*. ISTES Organization. <https://www.istes.org/internalization-of-stem-education-21-b.html>

Book Chapters

Chamberlin, S. & **Bicer, A.** (2026). Secondary mathematics for high-ability students. In: Dixon, F., Kettler, T. (eds) *The Handbook of Secondary Gifted Education*. Routledge. <https://doi.org/10.4324/9781003492528>

Bicer, A., Sanders, M., Gooden, M., Kopparla, M., Lee, Y., Calabrese, J.E. (2026). Problem posing as a means for developing preservice teachers' mathematical creativity. In: Cai, J., Leikin, R. (eds) *Research in Mathematical Problem Posing. Research in Mathematics Education*. Springer, Cham. https://doi.org/10.1007/978-3-032-05493-7_26

Borowczak, A., Campbell, L. O., **Bicer, A.**, Fazio, X., & Borowczak, M. (2026). Systemic change in STEM teacher preparation: Transformative reformation and partnership. In: Johnson, C.C., Mohr-Schroder, M. J., Moore, T.J., English, L. D., and Jackson, C. (forthcoming 2026). *Handbook of Research on STEM Education Volume Two*. Routledge.

Bicer, A., & Mann, E. L. (2021). Mathematics tasks that promote creativity. In S. A. Chamberlin, S. & E.L. Mann (Eds.), *The relationship of affect and creativity in mathematical giftedness: How the five legs of creativity influence math talent*. Prufrock.

Nite, S. B., & **Bicer, A.** (2020). Online mathematics teacher professional development. In Wachira, P. & Keengwe, S. (eds.) *Handbook of Research on Online Pedagogical Models for Mathematics Teacher Education* (pp. 203-215). Hershey, PA: IGI Global.

Capraro, R. M., **Bicer, A.**, Lee, Y., & Vela, K. (2019). Putting the quantitative pieces together to maximize the possibilities for a successful project. In K. Leatham (Ed.), *Designing, Conducting, and Publishing Research in Mathematics Education* (pp. 97-110). Springer, Cham.

Bicer, A., Nite, S. B., Capraro, M. M., & Capraro, R. M. (2016). Assessment techniques in mathematics: A literature review. In R. V. Nata (Ed.), *Progress in Education Volume 39* (270-288). Hauppauge, NY: Nova Science Publishers, Inc.

Bicer, A. (2016). Soap making and packaging. In M. M. Capraro, J. G Whitfield, M. J. Etchells, & R. M. Capraro (Eds.). *A companion to interdisciplinary STEM project-based learning: For teachers by teachers* (2nd edition) (pp. 181-189). Rotterdam, The Netherlands: Sense.

Bicer, A., & Nite, S. B. (2016). Egg drop parachute PBL. In M. M. Capraro, J. G Whitfield, M. J. Etchells, & R. M. Capraro (Eds.). *A companion to interdisciplinary STEM project-based learning: For teachers by teachers* (2nd edition) (pp. 47-52). Rotterdam, The Netherlands: Sense.

Refereed Journal Articles

Bicer, A., Quiroz, F., Aldemir, T., Yalvac, B., Colak, M. A., Melek, Z. (In preparation). Redefining the Teacher's Role from Instructor to Facilitator of Mathematical Inquiry through Mathematical Creativity.

Bicer, A., Quiroz, F., Aldemir, T., & Colak, M. A. (Under Review). Implementing mathematical creativity: How two novice teachers engage their students. Paper submitted to *Journal of Urban Mathematics Education*.

Bicer, A., Aldemir, T., Sanders, M., Colak, M. A., & Gooden, M. (Under Review). Fostering Divergent and Convergent Thinking through Mathematics-Emphasized STEM Project-Based Learning. Paper submitted to *Thinking Skills and Creativity*.

Bicer, A., Aldemir, T., Lee, U. Moon, J., Rambo-Hernandez, K., & Sanders, M. (2026). How generative AI guided-professional development supports teachers' engagement with mathematical creativity, content knowledge, and pedagogical content knowledge. *ZDM Mathematics Education*. (<https://doi.org/10.1007/s11858-026-01816-1> (IF: 3.8, Five-year IF: 4.0)).

Bicer, A., Aldemir, T., Gooden, M., Colak, M. A. (2026). Examining middle school students' experiences with opportunities for mathematical creativity. *Mathematics Education Research Journal* <https://doi.org/10.1007/s13394-026-00594-z> (Impact factor: 2, Five-year Impact factor: 2.2).

Quiroz, F., & **Bicer, A.** (2026). The impact of professional development and coaching on implementing mathematical creativity: Fostering a domino effect in instruction. *Mathematics Education Research and Practice*, 29(1), 21-52. <https://doi.org/10.7468/jksmed.2026.29.1.21> (Impact factor: 0.23).

Chamberlin, S., **Bicer, A.**, & Payne, A. M. (2026). The Relationship Between Mathematical Creativity and Mathematical Giftedness. *Gifted Child Today*, 49(2), 148-159. <https://doi.org/10.1177/10762175251409250> (Cite Score: 1.8).

Bicer, A., Jung, H., Aldemir, T., Davis, T., Gooden, M., Sanders, M., & Krall, G. (2026). Not Just the Utility of Mathematics but Its Beauty in the Context of STEM PBL. *International Journal of Science and Mathematics Education*. <https://doi.org/10.1007/s10763-026-10652-4> (Impact factor: 2.1, Five-year Impact factor: 2.5).

- Aldemir, T., Moon, J., **Bicer, A.**, Byun, G., Perez, C. M., Sabanwar, V. (2025). How non-CS preservice teachers conceptualize and engage with computational thinking through 3D game design: Insights from an XR-enhanced maker experience. *Computers & Education: X Reality*, 6 (2025), 1-14. <https://doi.org/10.1016/j.cexr.2025.100099> (CiteScore: 4.5)
- Aldemir, T., **Bicer, A.**, Kilinc, S., Moon, J., & Kwok, M. (2025). Exploring emergent AI-TPACK competencies in a two-week AI literacy module for preservice teachers. *Teaching and Teacher Education*, 168, 105231. (Impact factor: 3.9)
- Aldemir, T., Kilinc, S., **Bicer, A.**, Grant, P., Davis, T., & Sweany, N. W. (2025). Intelligent-TPACK in practice: design and evidence from a three-week teacher preparation module. *Computers and Education Open*, 100306. (Impact factor: 5.7)
- Bicer, A.**, Gooden, M., Sanders, M., & Perihan, C. (2025). Enhancing pre-service teachers' mathematical creativity via STEM PBL: a mixed-methods study. *Research in Mathematics Education*, 1-25. <https://doi.org/10.1080/14794802.2025.2488773> (Impact factor: 1.1, Five-year impact factor: 1.4).
- Bicer, A.**, Quiroz, F., Aldemir, T. (2025). Revealing student processes in a mathematics classroom: An in-depth instrumental case study. *Learning, Culture and Social Interaction*, 52, 1-19. <https://doi.org/10.1016/j.lcsi.2025.100905> (Impact factor: 1.8, Cite Score: 5.0).
- Lv, J., Wang, K., Chen, F., & **Bicer, A.** (2025). A CAVE Survey for Measuring Mathematics Attitudes Based on the Characteristics of Students in Mainland China. *Behavioral Sciences*, 15(4), 412. <https://doi.org/10.3390/bs15040412> (Impact factor: 2.5, Cite Score: 3.1).
- Bicer, A.**, Aldemir, T., Davis, T. J., & Young, J. (2025). Exploring the Transferability of STEM PBL Instructional Principles from Higher Education to K-12 Classrooms. *Education Sciences*, 15(1), 39. <https://doi.org/10.3390/educsci15010039> (Impact factor: 2.6, Cite Score: 5.5).
- Kitchen, R., Gonzales, L., Martínez-Archuleta, M., & Bicer, A. (2025). Considering the political context of schooling to cultivate teacher leaders in mathematics. *International Journal of Mathematical Education in Science and Technology*, 1-21. (Impact factor: 0.6, Five-year Impact factor: 0.9, Cite Score: 3.9).
- Bicer, A.**, Colen, J., & Lee, M. Y. (2025). Reclaiming creativity as the heart of mathematics education. *Mathematics Education Research and Practice*, 28(3), 233-237. (Impact factor: 0.21).
- Li, Y., diSessa, A. A., Graesser, A. C., **Bicer, A.**, Zhuang, Y., & Xu, L. (2025). Promoting digital transformation in STEM education and beyond. *Journal for STEM Education Research*, 1-17. (0.87 Scimago-SJR).

- Bicer, A.**, Aldemir, T., Krall, G., Quiroz, F., Chamberlin, S., Nelson, J. L., Lee, Y., & Kwon, H. (2024). Exploring creativity in mathematics assessment: an analysis of standardized tests. *Thinking Skills and Creativity*, 101652. <https://doi.org/10.1016/j.tsc.2024.101652> (Impact factor: 4.5, Cite Score: 7.8).
- Perihan, C., **Bicer, A.**, & Bocanegra, J. (2024). Understanding anxiety-related problems of children with ASD in school settings. *Psychology in the Schools*. <https://doi.org/10.1002/pits.23283> (Impact factor: 1.7, Cite Score: 3.3).
- Bicer, A.**, Aleksani, H., Butler, C., Jackson, T., Smith, T. D., & Bostick, M. (2024). Mathematical creativity in upper elementary school mathematics curricula. *Thinking Skills and Creativity*, 51(101462), 1-17. <https://doi.org/10.1016/j.tsc.2024.101462> (Impact factor: 4.5, Cite Score: 7.8).
- Lee, Y., **Bicer, A.**, & Park, J. H. (2024). Effect of coding integrated mathematics program on affective mathematics engagement. *Research in Mathematical Education*, 27(2), 223-239. (Impact factor: 0.21).
- Bicer, A.**, Bicer, A., & Capraro, M. M., & Lee, Y. (2023). Mathematical connection is at the heart of mathematical creativity. *Creativity-Theories-Research-Applications*, 10 (1), 1-24. (Impact factor: 0.52, Cite Score: 2.4).
- Bicer, A.**, Chamberlin, S., Matute, K., Jackson, T., & Krall, G. (2023). The relationship between pre-service teachers' spatial thinking ability and their mathematical creativity in the context of problem-posing. *Research in Mathematics Education*, 1-25 (Impact factor: 1.1, Five-year impact factor: 1.4).
- Lee, Y., Capraro, R. M., Capraro, M. M., & **Bicer, A.** (2023). School and student factors and their influence on affective mathematics engagement. *Journal of Ethnic and Cultural Studies*, 10(1), 45–61. <https://doi.org/10.29333/ejecs/1212> (0.58 Scimago-SJR)
- Bicer, A.**, & Bicer, A. (2023). Understanding young students' mathematical creative processes through eye-tracking simulated interview. *Mathematics Education Research Journal*. (Impact factor: 1.3, Five-year impact factor: 1.9). <https://doi.org/10.1007/s13394-022-00429-7>
- Bicer, A.**, Bicer, A., Perihan, C., & Lee, Y. (2022). Pre-service teachers' preparations for designing and implementing creativity-directed mathematical tasks and instructional practices. *Mathematics Education Research Journal*. <https://doi.org/10.1007/s13394-022-00409-x> (Impact factor: 1.3, Five-year impact factor: 1.9).
- Lee, Y., Capraro, R. M., Capraro, M. M., & **Bicer, A.** (2022). Cultural affordance, motivation, and affective mathematics engagement in Korea and the US. *Research in Mathematical Education*, 25(1), 21-43. (Impact factor: 0.21).

- Capraro, R. M., Capraro, M. M., Lewis, C., Grant, M., James, M., Mosqueda, E., Young, J., Young, J., **Bicer, A** ... & Chang, J. (2022). Reflecting back to forge the path forward. *Journal of Urban Mathematics Education*, 15(1), 1-8.
- Bicer, A.** (2021). Multiple representations and mathematical creativity. *Thinking Skills and Creativity*, 100823. (Impact factor: 4.5, Cite Score: 7.8).
- Kitchen, R., Martinez, M. A., Gonzales, L., & **Bicer, A.** (2021). Actualizing change after experiencing significant mathematics PD: Hearing from teachers of color about their practice and mathematical identities. *Educational Sciences*, 11, 710. <https://doi.org/10.3390/educsci11110710> (Impact factor: 2.6, Cite Score: 5.5).
- Bicer, A.**, Marquez, A., Colindres, K. V. M., Schanke, A. A., Castellon, L. B., Audette, L. M., ... & Lee, Y. (2021). Investigating creativity-directed tasks in middle school mathematics curricula. *Thinking Skills and Creativity*, 100823. (Impact factor: 4.5, Cite Score: 7.8).
- Bicer, A.** (2021). A systematic literature review: Discipline-specific and general instructional practices fostering the mathematical creativity of students. *International Journal of Education in Mathematics, Science, and Technology (IJEMST)*, 9(2), 252-281. <https://doi.org/10.46328/ijemst.1254> (0.47 Scimago-SJR)
- Perihan, C. & **Bicer, A.** (2021). The effects of function-based communication intervention for a student with emotional disturbance in a general education setting. *Journal of Research in Special Educational Needs*. <https://doi.org/10.1111/1471-3802.12499> (Impact factor: 1.0, Cite Score: 2.2).
- Perihan, C., **Bicer, A.**, & Bocanegra, J. (2021). Assessment and treatment of anxiety in children with autism spectrum disorder in school settings: A systematic review and meta-analysis. *School Mental Health*, 1-12. (Impact factor: 3.7, Five-year impact factor: 4.0).
- Capraro, R. M., Capraro, M. M., Leonard, J., Lewis, C., Grant, M., James, M., Mosqueda, E., Young, J., **Bicer, A.**, ... & Chang, J. (2021). The end or beginning? Either way, the credits are not rolling yet!. *Journal of Urban Mathematics Education*, 14(1), 1-11.
- Bicer, A.**, Lee, Y., Perihan, C., Capraro, M. M., & Capraro, R. M. (2020). Considering mathematical creative self-efficacy with problem posing as a measure of mathematical creativity. *Educational Studies in Mathematics*, 1-29. (Impact factor: 1.9, Five-year impact factor: 3.1).
- Bicer, A.**, Chamberlin, S., & Perihan, C. (2020). A meta-analysis of the relationship between mathematics achievement and creativity. *The Journal of Creative Behavior*. <https://doi.org/10.1002/jocb.474> (Impact factor: 3, Cite Score: 7.3).
- Bicer, A.**, Lee, Y., & Perihan, C. (2020). Inclusive STEM high school factors influencing ethnic minority students' STEM preparation. *Journal of Ethnic and Cultural Studies*, 7(2), 147-172. <http://dx.doi.org/10.29333/ejecs/384> (0.58 Scimago-SJR).

- Bicer, A.,** Perihan, C., & Lee, Y. (2020). A Meta-Analysis: The effects of cognitive behavioral therapy on students' mathematics anxiety. *International Electronic Journal of Mathematics Education*, 15 (2). doi.org/10.29333/iejme/7598 (0.24 Scimago -SJR).
- Perihan, C., Burke, M.D., Bowman-Perrott, L., **Bicer, A.**, Gallup, J. Thompson, J. & Salles, M.R. (2020). Effects of cognitive behavioral therapy for reducing anxiety in children with high functioning ASD: A systematic review and meta-analysis. *Journal of Autism and Developmental Disorders*. (Impact factor: 2.8, Five-year impact factor: 4.3).
- Bicer, A.,** & Lee, Y. (2019). Effect of STEM PBL embedded informal learning on student interest in STEM majors and careers. *Journal of Urban Mathematics Education*, 12(1), 49-65. Indexed in SCOPUS.
- Lee, Y., Capraro, R. M., & Bicer, A. (2019). Gender difference on spatial visualization by college students' major types as STEM and non-STEM: a meta-analysis. *International Journal of Mathematical Education in Science and Technology*, 50(8), 1241-1255. (Impact factor: 0.6, Five-year Impact factor: 0.9, Cite Score: 3.9).
- Bicer, A.,** & Capraro, R. M. (2019). Mathematics achievement in the secondary high school context of STEM and non-STEM Schools. *School Science and Mathematics*. doi: 10.1111/ssm.12321. (Impact factor: 0.9, Cite Score: 2).
- Lee, Y., Capraro, R. M., & **Bicer, A.** (2019). Affective Mathematics Engagement: A Comparison of STEM PBL versus Non-STEM PBL Instruction. *Canadian Journal of Science, Mathematics and Technology Education*, 1-20. DOI: <https://doi.org/10.1007/s42330-019-00050-0> (Impact factor: 0.9, Five-year impact factor: 1.2).
- Kopparla, M., **Bicer, A.**, Vela, K., Lee, Y., Bevan, D., Kwon, H., Caldwell, C., Capraro, M. M., & Capraro, R. M. (2019). The effects of problem-posing intervention strategies on elementary students' problem solving. *Educational Studies*. (Impact factor: 1.6, Cite Score: 7.2).
- Lee, Y., **Bicer, A.**, Kwon, H., & Capraro, R. M. (2019). Pre-service teachers' preparedness for problem posing: Pedagogical content knowledge and subject matter knowledge. *Electronic International Journal of Education, Arts, and Science*, 4(10).
- Bicer, A.,** Capraro, R. M., Capraro, M. M. (2018). Hispanic students' mathematics achievement in the context of their high school types as STEM and non-STEM schools. *International Journal of Mathematical Education in Science and Technology* (TMES). DOI : 10.1080/0020739X.2017.1410735. (Impact factor: 0.6, Five-year Impact factor: 0.9, Cite Score: 3.9).
- Bicer, A.,** Perihan, & Lee, Y. (2018). The Impact of writing practices on students' mathematical attainment. *International Electronic Journal of Mathematics Education*, 13 (4), 1-9. Indexed in Web of Science (Clarivate Analytics), ERIC. (.24 Scimago -SJR).

- Lee, Y., Capraro, M. M., & Capraro, R. M., & **Bicer, A.** (2018). A meta-analysis: Improvement of algebraic reasoning through metacognitive training. *International Education Studies*, 11(10), 42-49. doi:[10.5539/ies.v11n10p42](https://doi.org/10.5539/ies.v11n10p42). (.228 Scimago-SJR).
- Barroso, L. R., **Bicer, A.**, Capraro, M. M., Capraro, R. M., Foran, A., Grant, M.,... Rice, D. (2017). Run! Spot. Run! - Vocabulary development and the evolution of STEM disciplinary language for secondary teachers. *Zentralblatt für Didaktik der Mathematik (ZDM)*. (Impact factor: 2.4, Five-year Impact factor: 3.1).
- Bicer, A.**, Capraro, R.M., & Capraro, M. M. (2017). Integrated STEM assessment model. *Eurasia Journal of Education in Mathematics, Science and Technology*, 13(7), 3959-39685. DOI: 10.12973/eurasia.2017.00766a (.325 Scimago-SJR).
- Bicer, A.**, & Capraro, R. M., (2017). Longitudinal effects of technology integration and teacher professional development on students' mathematics achievement. *Eurasia Journal of Mathematics, Science, and Technology Education*, 13(3), 1-19. (.325 Scimago-SJR).
- Capraro, M.M., **Bicer, A.**, Grant, M.A., & Lincoln, Y.S. (2017). Using precision in STEM language: A qualitative look. *International Journal of Education in Mathematics, Science and Technology*, 5(1), 29-39. DOI:10.18404/ijemst.15709. (0.47 Scimago-SJR).
- Hill, K. K., **Bicer, A.**, & Capraro, M. M. (2016). Do teachers have the opportunities they need to learn to teach with manipulatives? *Electronic International Journal of Education, Arts, and Science*, 2(3), 49-50.
- Hill, K. K., **Bicer, A.**, & Capraro, R. M. (2016). Effect of teachers' professional development from MathForward™ on students' math achievement. *International Journal of Research in Education & Science*. Indexed in SCOPUS, ERIC.
- Bicer, A.**, Boedeker, P., Capraro, R. M., Capraro, M.M. (2015). The effects of STEM PBL on students' mathematical and scientific vocabulary knowledge. *International Journal of Contemporary Educational Research*, 2(2), 69-75. Indexed in ERIC.
- Nite, S. B., Capraro, M. M., Capraro, R. M., & **Bicer, A.** (2015). Explicating the characteristics of STEM teaching and learning: A meta-synthesis. *Journal of STEM Teacher Education*, 52(1), 6.
- Navruz, B., Capraro, R. M., **Bicer, A.**, & Capraro, M. M. (2015). A review of higher-order factor analysis interpretation strategies. *Journal of Measurement and Evaluation in Education and Psychology*, 6(1), 72-94. Indexed in Web of Science (Clarivate Analytics).
- Bicer, A.**, Navruz, B., Capraro, R. M., Capraro, M.M., Oner, T.A., & Boedeker, P. (2015). STEM schools vs. non-STEM schools: Comparing students' mathematics growth rate on high-stakes test performance. *International Journal of New Trends in Education and Their Implications*, 6(1), 138-150. Indexed in EBSCO.

- Bicer, A.**, Capraro, R. M., & Capraro, M. M. (2014). Pre-service teachers' linear and quadratic inequalities understanding. *International Journal for Mathematics Teaching and Learning*. Retrieved from <https://www.cimt.org.uk/ijmtl/index.php/IJMTL/about/>
- Bicer, A.**, Navruz, B., Capraro, R. M., & Capraro, M. M. (2014). STEM schools vs. non-STEM schools: Comparing students' mathematics state-based test performance. *International Journal of Global Education*, 3(3), 8-18.
- Navruz, B., Erdogan, N., **Bicer, A.**, Capraro, R. M., & Capraro, M. M. (2014). Would a STEM school 'by any other name smell as sweet'? *International Journal of Contemporary Educational Research*, 1(2), 67-75. Indexed in ERIC.
- Oner, A. T., Navruz, B., **Bicer, A.**, Peterson, C. A., Capraro, R. M., & Capraro, M. M. (2014). T-STEM academies' academic performance examination by education service centers: A longitudinal study. *Turkish Journal of Education*, 3(4), 4-14. Indexed in Web of Science.
- Bicer, A.**, Capraro, R. M., & Capraro, M. M. (2014). Integrating writing into mathematics classroom as one communication factor. *The Online Journal of New Horizon in Education*, 4(2), 58-67. Indexed in DOAJ.
- Bicer, A.**, Capraro, M. M., & Capraro, R. M. (2013). The effects of parent's SES and education level on students' mathematics achievement: Examining the mediation effects of parental expectations and parental communication. *The Online Journal of New Horizons in Education*, 3(4), 89-97. Indexed in DOAJ.
- Bicer, A.**, Capraro, R. M., & Capraro, M. M. (2013). Integrating writing into mathematics classroom to increase students' problem-solving skills. *International Online Journal of Educational Science*, 5(2), 361-369. Indexed in EBSCO.
- Bicer, A.**, Capraro, M. M., & Capraro, R. M. (2013). The journey of a middle school student: Explorations of mathematics private tutoring in school life. *Sakarya University of Journal of Education*, 3(3), 123-136. Indexed in EBSCO.

CONFERENCE PRESENTATIONS

National/International Presentations and Papers (Refereed)

- Bicer, A.**, Aldemir, T., Gooden, M., Bicer, A., & Quiroz, F. (2026). *Fostering mathematical creativity, content Knowledge, and pedagogical content knowledge through generative AI driven creativity-directed professional development*. Paper presented at the American Educational Research Association Annual Meeting, Los Angeles, CA, United States.
- Bicer, A.**, Quiroz, F., Bicer, A., Aldemir, T., Gooden, M., & Melek, Z. (2026). *Mathematical creativity as a unifying lens: A case study of instructional shifts in elementary classrooms*

- through sustained professional development*. Paper presented at the American Educational Research Association Annual Meeting, Los Angeles, CA, United States.
- Bicer, A.**, & Gooden, M. (2026, February 5-7). *AI-Supported Professional Development for Teachers' Mathematical Creativity, Content Knowledge, and Pedagogical Content Knowledge*. Paper presented at the 30th Annual Conference for Association of Mathematics Teacher Educators (AMTE), Portland, Oregon, United States.
- Kilinc, S., Aldemir, T., Sabanwar, V., **Bicer, A.**, & Song, D. (2026). *Computational thinking and participation in rural Ag-STEM: A comparative case study of two middle school teams* [Paper presentation]. American Educational Research Association Annual Meeting, Los Angeles, CA, United States.
- Kilinc, S., Aldemir, T., Sabanwar, V., **Bicer, A.**, & Song, D. (2026). *The AI as cognitive mentor: Scaffolding student scientific inquiry through dialogue* [Paper presentation]. American Educational Research Association Annual Meeting, Los Angeles, CA, United States.
- Sabanwar, V., Aldemir, T., Kilinc, S., **Bicer, A.**, & Song, D. (2026). *Teacher conceptualization of student challenges and solutions for CT in a non-CS classroom* [Poster presentation]. American Educational Research Association Annual Meeting, Los Angeles, CA, United States.
- Kilinc, S., Aldemir, T., Sabanwar, V., **Bicer, A.**, & Song, D. (2026). Planners and tinkerers: A comparative case study of K-12 students' engagement with data practices in an Ag-STEM. In B. K. Litts, D. DeLiema, C. Lee, S. Krist, A. Mawasi, L. Martin, & K. Kumpulainen (Eds.), *Proceedings of the 20th International Conference of the Learning Sciences - ICLS 2026* (pp. 727-736). International Society of the Learning Sciences.
- Sabanwar, V., Aldemir, T., Kilinc, S., **Bicer, A.**, & Song, D. (2026). How middle school students engage in computational literacies in an agricultural class. In B. K. Litts, D. DeLiema, C. Lee, S. Krist, A. Mawasi, L. Martin, & K. Kumpulainen (Eds.), *Proceedings of the 20th International Conference of the Learning Sciences - ICLS 2026* (pp. 1657-1661). International Society of the Learning Sciences.
- Aldemir, T., Kilinc, S., Sabanwar, V., **Bicer, A.**, & Song, D. (2026). Disciplinary computational thinking in AI-mediated problem framing: A rural Ag-STEM context. In B. K. Litts, D. DeLiema, C. Lee, S. Krist, A. Mawasi, L. Martin, & K. Kumpulainen (Eds.), *Proceedings of the 20th International Conference of the Learning Sciences - ICLS 2026* (pp. 2985–2988). International Society of the Learning Sciences.
- Kilinc, S., Aldemir, T., Sabanwar, V., **Bicer, A.**, & Song, D. (2025, October 20-24). *Enhancing Research Questions and Hypothesis Development Through AI Chatbot Assistance in Rural Agricultural Education*. [Conference presentation]. 2025 AECT International Convention, Las Vegas, NV, United States.

- Sabanwar, V., Aldemir, T., Kilinc, S., **Bicer, A.**, & Song, D. (2025, October 20-24). *Exploring Computational Thinking (CT) skills in the era of GenAI in K–12 education*. [Conference presentation]. 2025 AECT International Convention, Las Vegas, NV, United States.
- Bicer, A.**, & Aldemir, T. (2025, November). Fostering Mathematical Creativity Through AI-Driven Professional Development. Paper presented at the *2025 School Science and Mathematics Association Convention*, Fort Worth, TX.
- Rugh, M., & **Bicer, A.** (2025, November). Leveling up learning: Integrating VR, gaming, and tutoring to enhance math and science learning. Paper presented at the *2025 School Science and Mathematics Association Convention*, Fort Worth, TX.
- Lee, Y., & **Bicer, A.** (2025). Student Experiences and Barriers in Mathematical Creativity. *9th ICMI-East Asia Regional Conference on Mathematics Education*, Jung-gu, Seoul, Korea.
- Lee, Y., & **Bicer, A.** (2025). The Role of Professional Development in Enhancing Mathematical Creativity: A Case Study of Novice Teachers. *9th ICMI-East Asia Regional Conference on Mathematics Education*, Jung-gu, Seoul, Korea.
- Bicer, A.**, Aldemir, T., Krall, G., Quiroz, F., Chamberlin, S., Nelson, J., Lee, Y., & Kwon, H. (2025, Accepted). Creativity in mathematics assessment. *9th ICMI-East Asia Regional Conference on Mathematics Education*, Jung-gu, Seoul, Korea.
- Bicer, A.**, Bicer, A., Aldemir, T., Gooden, M., Sanders, M., Lee, Y., Perihan, C., & Quiroz, F. (2025). Enhancing PSTs' mathematical creativity via STEM PBL: A mixed-methods study. Paper is accepted to be presented at the annual meeting of the *American Educational Research Association (AERA)*, Denver, CO.
- Bicer, A.**, Bicer, A., Aldemir, T., Gooden, M., Erdogan, N., Sanders, M., & Quiroz, F. (2025, April). STEM PBL in the context of mathematical creativity. Paper is accepted to be presented at the annual meeting of the *American Educational Research Association (AERA)*, Denver, CO.
- Bicer, A.**, Gooden, M., Sanders, M., Aldemir, T., Kopparla, M., Lee, Y., & Calabrese, J. (2025, April). Problem-posing as a means for developing pre-service teachers' mathematical creativity. Paper is accepted to be presented at the annual meeting of the *American Educational Research Association (AERA)*, Denver, CO.
- Bicer, A.**, & Quiroz, F. (2024, November). Exploring the impact of professional development on new teachers' mathematical creativity. Paper presented at the *2024 School Science and Mathematics Association Convention*, Knoxville, TN.
- Quiroz, F., & **Bicer, A.** (2024, November). Coaching to implement mathematical creative instructional practices. Paper presented at the *2024 School Science and Mathematics Association Convention*, Knoxville, TN.

- Bicer, A., Bicer, A., & Lee, Y.** (2024). Do we measure students' creativity in mathematics through PARCC and SBAC? Paper is accepted to be presented at the annual meeting of the *American Educational Research Association (AERA)*, Philadelphia, PA.
- Bicer, A., Bicer, A., & Lee, Y.** (2024). Mathematical creativity in upper elementary school mathematics curricula. Paper is accepted to be presented at the annual meeting of the *American Educational Research Association (AERA)*, Philadelphia, PA.
- Quiroz, F., & **Bicer, A.** (2023, November). Do students approach mathematical creativity in the classroom individually, collectively, or both? Paper presented at the *2023 School Science and Mathematics Association Convention*, Colorado Springs, CO.
- Bicer, A., Bicer, A., Chamberlin, S., & Payne, A.** (2023, November). Mathematical connection and mathematical creativity. Paper presented at the *2023 School Science and Mathematics Association Convention*, Colorado Springs, CO.
- Chamberlin, S., **Bicer, A.**, & Payne, A. (2023, November). Explicating the conception of mathematical promise. Paper presented at the *2023 School Science and Mathematics Association Convention*, Colorado Springs, CO.
- Bicer, A.** (2023, April). The relationship between spatial visualization and mathematical creativity. Paper is presented at the annual meeting of the *American Educational Research Association (AERA)*, Chicago, IL.
- Bicer, A., Bicer, A., Erdogan, N., & Lee, Y.** (2023, April). Elementary school students' creative processes in mathematics. Paper is presented at the annual meeting of the *American Educational Research Association (AERA)*, Chicago, IL.
- Nite, S. B., Erdogan, N., **Bicer, A.**, Currens, K. A., & Lee, S. (2023, October). Spatial visualization in informal learning. Paper presented at the *2023 IEEE ASEE Frontiers in Education (FIE) Conference: Engineering Education in a Diverse, Global World*, College Station, TX.
- Bicer, A., Bicer, A., & Chamberlin, S.** (2022). Young Students' Mathematical Creative Thinking Processes. Paper is presented at the annual meeting of the *International Group for Mathematical Creativity and Giftedness, Las Vegas, UT.*
- Chamberlin, S., Karaduman, G., & **Bicer, A.** (2022). A review of research at the intersection of mathematical problem posing and affect. Paper is presented at the annual meeting of the *International Group for Mathematical Creativity and Giftedness, Las Vegas, UT.*
- Bicer, A., Bicer, A., Perihan, C., & Lee, Y.** (2022, April). Multiple representations and mathematical creativity. Paper presented at the annual virtual meeting of the *American Educational Research Association.*

- Bicer, A., & Bicer, A.** (2021, November). Investigating mathematical creativity in middle school curricula. Paper presented at the *2021 virtual School Science and Mathematics Association Convention*.
- Bicer, A., Bicer, A., & Lee, Y.** (2021, November). Multiple representational skills and mathematical creativity. Paper presented at the *2021 virtual School Science and Mathematics Association Convention*.
- Lee, Y., Epling, B., & **Bicer, A.** (2021, November). Professional STEM teacher identity of elementary teacher candidates. Paper presented at the *2021 virtual School Science and Mathematics Association Convention*.
- Bicer, A.** (2021, April). Pre-service Teachers' Preparations for Teaching Creativity in Mathematics. Paper presented at the annual virtual meeting of the *American Educational Research Association*.
- Bicer, A., & Lee, R.** (2021, April). Mathematical Creativity: A statement of the particular aspect of affect associated with problem posing. Paper presented at the annual virtual meeting of the *American Educational Research Association*.
- Bicer, A., Lee, Y., Capraro, M. M., & Capraro, R. M.** (2020, November). Mathematical Creativity and Creative Self-Efficacy. Paper presented at the *2020 virtual School Science and Mathematics Association*.
- Lee, Y., Capraro, R. M., Capraro, M. M., & **Bicer, A.** (2020, November). Analysis of affective mathematics engagement with hierarchical linear modeling (HLM). Paper presented at the *2020 virtual School Science and Mathematics Association Convention*.
- Bicer, A., Lee, R., & Perihan, C.** (2020, April). *Discipline-Specific & General Instructional and Pedagogical Practices Fostering the Mathematical Creativity*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. Conference canceled due to COVID-19.
- Lee, Y., Capraro, R. M., Capraro, M. M., & **Bicer, A.** (2020, April). *Effects of motivation on students' affective mathematics engagement*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. Conference canceled due to COVID-19.
- Perihan, C., Burke, M., & **Bicer, A.** (2020, April). *Cognitive Behavioral Interventions for Reducing Anxiety in Children with ASD: The Quality of the Evidence-Base*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. Conference canceled due to COVID-19.
- Nite, S. B., **Bicer, A.**, Currens, K.A., & Tejani, R. (October, 2020). Increasing STEM interest through coding with microcontrollers. Paper presented at the *2020 virtual IEEE Frontiers in Education Conference: Education for a Sustainable Future*.

- Bicer, A.**, Lee, Y., Capraro, R. M., Capraro, M. M., Barroso, L. R., & Rugh, M. (2019, October). Examining the Effects of STEM PBL on Students' Divergent Thinking Attitudes Related to Creative Problem Solving. Paper presented at the 49th Annual *IEEE Frontiers in Education Conference (FIE)* (pp. 1-6). IEEE.
- Lee, Y., **Bicer, A.**, Kwon, H., Rugh, M. S., Capraro, R. M., Capraro, M. M., & Barroso, L. (2019, October). Post-Secondary Ready: Does the STEM curriculum Matter?. Paper presented at the 49th Annual *IEEE Frontiers in Education Conference (FIE)* (pp. 1-6). IEEE.
- Bicer, A.**, Lee, R., Capraro, R. M., Capraro, M. M., Barroso, L. R., & Rugh, M (2018, February). *Cracking the code: The effects of using microcontrollers to code on students' interest in computer and electrical engineering*. Paper presented at the 49th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Cincinnati, OH. (IF = .159, SJR = .220).
- Lee, Y., **Bicer, A.**, Capraro, R. M., Capraro, M. M., Barroso, L. R., Kwon, H., & Rugh, M. (2018, February). Post-Secondary Ready: Does the STEM Curriculum Matter? Paper presented at the 48th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Cincinnati, OH.
- Rugh, M. S., Calabrese, J. E., Madson, M. A., Capraro, R. M., Barroso, L. R., Capraro, M. M., **Bicer, A.** (2018, October). *STEM Language can be the Stem of the Problem*. Paper presented at the 48th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Cincinnati, OH.
- Bicer, A.**, Lee, Y., & Chamberlin, S. (2019, October). Discipline-Specific & General Instructional and Pedagogical Practices Fostering the Mathematical Creativity. Paper presented at the 2019 *School Science and Mathematics Association Convention*, Salt Lake City, UT.
- Lee, Y., & **Bicer, A.**, (2019, October). Affective Mathematics Engagement: A Comparison of the United States and Korea. Paper presented at the 2019 *School Science and Mathematics Association Convention*, Salt Lake City, UT.
- Bicer, A.** & Nite, S. B. (2019, May). Dilutions of poisons as a toll for understanding proportions more deeply. Paper presented at the *National IBL Conference: Inquiry-based Learning and Teaching in Mathematics* (IBL SIGMAA). Denver, CO.
- Bicer, A.**, & Nite, S. (2019, April). *Effects of professional development series on math teachers' self-efficacy*. Paper presented at the NCTM Research Conference, San Diego, CA.
- Bicer, A.**, & Lee, Y. (2019, April). *The Effects of Informal Learning on Student Interest in STEM Fields*. Paper presented at the NCTM Research Conference, San Diego, CA.

- Lee, Y., Capraro, R. M., **Bicer, A.**, Capraro, M. M., & Park, J. (2019, April). *Gender difference on spatial visualization (STEM vs non-STEM)*. Paper presented at the NCTM Research Conference, San Diego, CA.
- Bicer, A.**, Kitchen, R., Lee, Y., Aydin, H., & Capraro, R. M. (2019, April). *Institutional Characteristics Influencing Underrepresented Students' STEM Preparation in Inclusive STEM High Schools*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, ON, Canada.
- Lee, Y., Capraro, R. M., **Bicer, A.**, Capraro, M. M. (2019, April). *The impact of STEM PBL students' affective mathematics engagement*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, ON, Canada.
- Lee, Y., Capraro, R. M., **Bicer, A.**, Capraro, M. M. (2019, April). *Gender difference on spatial visualization (STEM vs. non-STEM)*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, ON, Canada.
- Capraro, M. M., Capraro, R. M. **Bicer, A.**, Lee, Y., & Kopparla, M. (2018, November). *Problem posing in elementary classrooms*. Paper presented at the International Conference on Urban Education, Nassau, Bahamas.
- Bicer, A.**, Lee, Y., Capraro, R. M., Capraro, M. M, Perihan, C. (2018, October). *Informal STEM Learning & Student Interest in STEM Fields*. Paper presented at the 2018 School Science and Mathematics Association Convention, Little Rock, AR.
- Lee, Y., Kwon, H., **Bicer, A.**, Capraro, R. M., & Capraro, M. M. (2018, October). *Mathematics Teacher Knowledge (SMK, KCT, and KCS) in Problem posing*. Paper presented at the 2018 School Science and Mathematics Association Convention, Little Rock, AR.
- Lee, Y., Kwon, H., **Bicer, A.**, Capraro, M. M., & Capraro, R.M. (2018, April). *Pre-service teachers' content and pedagogical knowledge in problem posing*. Paper presented at the NCTM Research Conference, Washington, D.C.
- Bicer, A.**, Capraro, R. M., Capraro, M.M., & Lee, R. (2018, April). *A meta-analysis: Writing in Mathematics Classroom*. Paper presented at the NCTM Research Conference, Washington, D.C.
- Bicer, A.**, Perihan, C., Capraro, R. M., Capraro, M. M., & Lee, Y. (2018, April). *The impact of writing practices on students' mathematical attainment*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Bicer, A.**, Capraro, R. M., Capraro, M. M., & Nite, S. B. (April, 2017). *Improving educational opportunities for underrepresented students: The educational impact of T-STEM academies*. Paper presented at the annual American Educational Research Association (AERA), San Antonio, TX.

- Bicer, A.**, Ozfidan, B., Capraro, M. M., Capraro, R. M., & Nite, S. B. (2017, April). *A meta-analysis: The effects of writing interventions on students' mathematics success*. Paper presented at the annual American Educational Research Association (AERA), San Antonio, TX.
- Bicer, A.**, Nite, S. B., Reeves, L., Capraro, R. M., & Morgan, J. R. (2017, April). *Mathematics teacher collaboration with online technology integration*. Paper presented at the *NCTM Research Conference*. San Antonio, Texas.
- Nite, S. B., Allen, G. D., Capraro, R. M., **Bicer, A.**, & Morgan, J. (2016, December). *Supporting engineering education through calculus success*. Paper presented at the 27th Australasian Association for Engineering Education Conference. Coffs Harbour, Australia.
- Nite, S. B., Allen, G. D., **Bicer, A.**, & Capraro, R. M. (2017, April). Strengthening precalculus skills in a summer program for engineering students. Paper presented at *2017 AERA Annual Meeting, Knowledge to Action: Achieving the Promise of Equal Education Opportunity*. San Antonio, Texas.
- Nite, S. B., Allen, G. D., **Bicer, A.**, & Capraro, R. M. (2017, April). *Precalculus program for prospective engineering students*. Paper presented at the NCTM Research Conference. San Antonio, Texas.
- Nite, S. B., Allen, G. D., Morgan, J., **Bicer, A.**, & Capraro, R. M. (2016, June). Engineering calculus bridge program success: Comparing variation results. In *Proceedings of the American Society for Engineering Education 2016*. Paper ID# 16610 presented at ASEE's 123rd National Conference and Exposition. New Orleans, LA: American Society for Engineering Education, Washington DC.
- Nite, S. B., Allen, G. D., **Bicer, A.**, & Morgan, J. (2016, June). Student engagement in a summer bridge program for engineering calculus success. *Electronic Proceedings of the 2016 Hawaii University International Conferences Science, Technology Engineering, Art, Math & Education Conference*. Honolulu, HI: Hawaii University International Conferences.
- Nite, S. B., Allen, G. D., Capraro, R. M., **Bicer, A.**, & Morgan, J. (2016, December). Supporting engineering education through calculus success. Paper presented at the 27th Australasian Association for Engineering Education Conference. Coffs Harbour, Australia.
- Bicer, A.**, Nite, S. B., Capraro, R. M., Barroso, L. R., Capraro, M. M., & Froyd, J. (2016, October). *Informal STEM Camp Influences on Engineering Confidence*. Paper presented at the 2016 IEEE Frontiers in Education Conference: The Crossroads of Engineering and Business. Erie, PA.
- Nite, S. B., **Bicer, A.**, & Capraro, R. M. (2017) Mathematics teacher two-year journey: Project-based learning. Paper presented at the *Annual Perspectives in Mathematics Education*.

- Nite, S. B., **Bicer, A.**, & Kirby, K. (2016, October). *Learning how to manage money: A financial literacy project for middle school students*. Paper presented at Annual Conference for Middle School Education. Austin, TX.
- Nite, S. B., Allen, G. D., Morgan, J., & **Bicer, A.**, & Capraro, R. M. (2016, June). *Engineering calculus bridge program success: Comparing program variation results*. Paper presented at the 123rd American Society for Engineering Education Annual Conference and Exposition. New Orleans, LA.
- Bicer, A.**, Capraro, R. M., & Capraro, M. M. (2016, April). *STEM schools vs. non-STEM schools: Comparing Hispanic students' mathematics growth rate on high-stakes test performance*. Paper presented at the American Educational Research Association (AERA), Washington, D.C.
- Bicer, A.**, Kopparla, M., Capraro, R. M., & Capraro, M. M. (2016, April). *Longitudinal effects of technology integration and teacher professional development on students' mathematics achievement*. Paper presented at the American Educational Research Association (AERA), Washington, D.C.
- Bicer, A.**, Boedeker, P., Kopparla, M., Capraro, R. M. (2015, October). Comparing students' mathematics achievement by their school types: Inclusive STEM schools that implemented PLTW curriculum with inclusive STEM schools that did not implement PLTW. In *Proceedings of the Frontiers in Education 2015: Launching a New Vision in Engineering Education* (pp. 1363-1367). El Paso, TX: IEEE.
- Boedeker, P., **Bicer, A.**, Capraro, R. M., Capraro, M. M., Morgan, J., & Barroso, L. (2015, October). STEM summer camp follow up study: Effects on students' SAT scores and postsecondary matriculation. In *Proceedings of the Frontiers in Education 2015: Launching a New Vision in Engineering Education* (pp. 1875-1882). El Paso, TX: IEEE.
- Bicer, A.**, Cavlazoglu, B., & Erdogan, N. (2013, March). *Integrating writing into mathematics classroom to understand students' mathematical background*. Paper presented at the Society for Information and Teacher Education, New Orleans, TX.
- Cavlazoglu, B., & **Bicer, A.** (2013, March). *Descriptive analysis of a 6th grade Turkish math text with recommendations for development of future e-resources for multi-touch tablets*. Paper presented at the Society for Information and Teacher Education, New Orleans, TX.
- Nite, S. B., Bicer, A., Reeves, L., Barroso, L., & Capraro, M. M. (2015, October). Online professional development: challenges of observation of secondary classroom simulation. Paper presented at the *E-Learn 2015: World Conference on E-Learning*. Kona, Hawaii.
- Bicer, A.**, Navruz, B., Capraro, R. M., & Capraro, M. M. (2015, April). *STEM schools vs. non-STEM schools: Comparing students' mathematics growth rate on high-stakes test performance*. Paper presented at the annual Educational Research Association (AERA), Chicago, IL.

- Navruz, B., Erdogan, N., **Bicer, A.**, & Capraro, R. M. (2013, October). *A longitudinal study: Does STEM education really help students achieve on math?* Paper presented at the annual meeting of School Science and Mathematics Association (SSMA), San Antonio, TX.
- Goldsby, D., & **Bicer, A.** (2013, November). *Enhancing classroom communication of geometry through "Geometry Draw"*. Paper presented at the annual meeting of the School Science and Mathematics Associations (SSMA), San Antonio, TX.
- Goldsby, D., & **Bicer, A.** (2013, November). *Assessing students' perceptions of mathematics through writing prompt*. Paper submitted to annual meeting of the School Science and Mathematics Associations (SSMA), San Antonio, TX.
- Erdogan, N., Navruz, B., B., Cavlazoglu, B., & **Bicer, A.** (2013, October). *Does TAKS measure the same math knowledge in STEM and non-STEM schools?* Paper presented at the annual meeting of School Science and Mathematics Association (SSMA), San Antonio, TX.
- Bicer, A.**, Ritter, N., Capraro, M. M., Cavlazoglu, B., & Sahin, A. (2013, November). *Integrating writing into mathematics classroom through Facebook*. Paper presented at the annual meeting of the School Science and Mathematics Associations (SSMA), San Antonio, TX.
- Bicer, A.**, & Capraro, M. M. (2013, November). *Pre-service teachers' linear inequality understanding*. Paper presented at the annual meeting of the School Science and Mathematics Association (SSMA), San Antonio, TX.
- Bicer, A.**, Cavlazoglu, B., & Erdogan, N. (2013, March). *Integrating writing into mathematics classroom to understand students' mathematical background*. Paper presented at 24th annual meeting of the Society for Information and Teacher Education, New Orleans, TX.
- Cavlazoglu, B., & **Bicer, A.** (2013, March). *Descriptive analysis of a 6th grade Turkish math text with recommendations for development of future e-resources for multi-touch tablets*. Paper presented at 24th annual meeting of the Society for Information and Teacher Education, New Orleans, TX.
- Peterson, C. A., Oner, A. T., Nite, S., **Bicer, A.**, Capraro, R. M., Capraro, M. M., Morgan, J. R., & Sahin, A. (2013, September). *Aggie-STEM: Improving Student Outcomes with Professional Development that Incorporates STEM-Based Project-Based Learning and Professional Learning Communities*. Paper presented at the regional meeting of the MSP Program, Washington D.C.
- Cavlazoglu, B., & **Bicer, A.** (2013, September). *Descriptive analysis of a 6th grade Turkish math text with recommendations for development of future e-resources for multi-touch tablets*. Paper presented at the Creativity and Innovation in Educational Research. Istanbul, Turkey.

State/Local Presentations and Papers (Refereed)

- Bicer, A., & Kitchen, R.** (2019, April). The design and development of the discursive assessment protocol: An instrument intended to support the mathematical learning of ELLs. Paper presented at the 4th Annual Wyoming English as a Second Language Conference, Casper, Wyoming.
- Bicer, A., Nite, S. B., Capraro, M. M., Barroso, L. R., Suarez, M., Kwon, J., & Rice, D.** (2017, February). The effects of STEM summer camp on student interest in STEM careers. Paper presented at Southwestern Educational Research Association Conference, San Antonio, TX.
- Bicer, A., Perihan, C., Nite, S. B., Capraro, R. M., Currens, K. A., Suarez, M., & Lee, Y., & Capraro, R. M.** (2017, February). The effects of cognitive behavior therapy on students' mathematics anxiety. Paper presented at Southwestern Educational Research Association Conference, San Antonio, TX.
- Nite, S. B., **Bicer, A.**, Salazar, K., Lee, Y., Barroso, L. R., & Capraro, R. M. (2017, February). The effect of STEM project-based learning on mathematics teacher instruction. Paper presented at Southwestern Educational Research Association Conference, San Antonio, TX.
- Nite, S. B., **Bicer, A.**, Currens, K. A., Salazar, K., & Capraro, M. M. (2017, February). STEM summer camp affect on spatial drawing ability. Paper presented at Southwestern Educational Research Association Conference, San Antonio, TX.
- Nite, S. B., **Bicer, A.**, Currens, K. A., Lee, Y., Bevan, D., & Barroso, L. R. (2017, February). Summer precalculus bridge program: Use of electronic resources. Paper presented at Southwestern Educational Research Association Conference, San Antonio, TX.
- Nite, S. B., **Bicer, A.**, & Kirby, K. (2016, October). Learning how to manage money: A financial literacy project for middle school students. Paper presented at *Annual Conference for Middle School Education*. Austin, TX.
- Bicer, A., Kopparla, M., Capraro, R. M., Capraro, M. M.** (2016, February). *Longitudinal Effects of Technology Integration and Teacher Professional Development on Students' Mathematics Achievement*. Paper presented at the Southwest Educational Research Association 39th annual meeting, New Orleans, LA.
- Bicer, A., Boedeker, P. J., Foran, A. L., Hill, K., Lopez, N., Capraro, R. M., & Capraro, M. M.** (2015, February). *Examining the effects of STEM PBL on students' mathematical and scientific vocabulary knowledge*. Paper presented at the Southwest Educational Research Association 38th annual meeting, San Antonio, TX.
- Navruz, B., **Bicer, A.**, Capraro, M. M., Capraro, R. M. (2015, February). *Should students enroll as freshmen in STEM high schools?* Paper presented at the Southwest Educational Research Association 38th Annual Meeting, San Antonio, TX.
- Bicer, A., Navruz, B., Capraro, R. M., & Capraro, M. M.** (2015, February). *STEM schools vs.*

- non-STEM schools: Examining Hispanic students' mathematics achievement.* Paper presented at the Southwest Educational Research Association 38th annual meeting, San Antonio, TX.
- Foran, A. L., **Bicer, A.**, & Boedeker, P. J. (2015, February). *Pre-service teachers' perception of mathematics.* Paper presented at the Southwest Educational Research Association 38th annual meeting, San Antonio, TX.
- Nite, S. B., Capraro, M. M., Capraro, R. M., **Bicer, A.**, Navruz, B. Metoyer, S., et al. (October, 2014). *Effective STEM teaching and learning: A meta synthesis and meta-analysis.* Presented at the NSTEM Collaborative Colloquium, Austin, TX.
- Navruz, B., **Bicer, A.**, & Ritter, N. L. (2015, February). *Reliability generalization of the survey of attitudes toward statistics (SATS).* Paper presented at the Southwest Educational Research Association 38th Annual Meeting, San Antonio, TX.
- Foran, A., **Bicer, A.**, Boedeker, P., Hill, T. & Kopparla, M. (2015, January). *Implementing STEM project-based learning in an inquiry-based classroom.* Paper presented at the 8th annual Texas STEM Conference: Pathways to Student Success in STEM, Austin, TX.
- Boedeker, P., **Bicer, A.**, Foran, A., Hill, K., & Kopparla, M. (2015, January). *Are you ready for the challenge? Teaching integrated STEM in grades 3-5. A model home and its thermostat.* Paper presented at the 8th annual Texas STEM Conference: Pathways to Student Success in STEM, Austin, TX.
- Bicer, A.**, Foran, A., Boedeker, P., Hill, K., & Kopparla, M. (2015, January). *Interdisciplinary STEM project based learning for meaningful understanding.* Paper presented at the 8th annual Texas STEM Conference: Pathways to Student Success in STEM, Austin, TX.
- Bicer, A.**, Capraro, M. R., & Cetin, C. S. (2012, February). *Parental involvement effects on students' mathematics achievement.* Paper presented at 35th annual meeting of Southwest Educational Research Association. New Orleans, LA.
- Bicer, A.**, Gallegos, C., & Capraro, R. M. (2013, February). *Problem solving and the writing process: A case of cognitive complexity.* Paper presented at 36th annual meeting of the Southwest Educational Research Association. San Antonio, TX.
- Bicer, A.** (2013, February). *A review of Pearson's r and Spearman's ρ , and what factors affect Pearson's r .* Paper presented at 36th annual meeting of the Southwest Educational Research Association. San Antonio, TX.
- Bicer, A.** (2013, February). *Pre-service teachers' mathematical inequality misconceptions.* Paper presented at 36th annual meeting of the Southwest Educational Research Association. San Antonio, TX.
- Bicer, A.**, Navruz, B., Perihan, C., Capraro, M. M., & Capraro, R.M. (2014, February). *Higher order confirmatory factor analysis.* Paper presented at 37th annual meeting of the Southwest Educational Research Association (SERA), New Orleans, LA.

Bicer, A., Capraro, M. M., & Capraro, R. M. (2014, February). *Distribution free vs. non-distribution free factor analysis*. Paper presented at 37th annual meeting of the Southwest Educational Research Association (SERA), New Orleans, LA.

Oner, A. T., Navruz, B., **Bicer, A.**, Erdogan, N., Peterson, C., Capraro, R. M., Capraro, M. M. (2014, February). *A longitudinal examination of T-STEM academies' academic performance by education service center*. Paper presented at 37th annual meeting of Southwest Educational Research Association (SERA), New Orleans, LA

Conference Proceedings (Refereed)

Kilinc, S., Aldemir, T., Sabanwar, V., **Bicer, A.**, & Song, D. (2025). AI chatbot coaching for elevating student research. In *Proceedings of the 2025 ACM conference on international computing education research V. 2* (pp. 1-2).

Nite, S. B., Erdogan, N., **Bicer, A.**, Currens, K. A., & Lee, S. (2023). Spatial visualization in informal learning. *Proceedings of the 2023 IEEE ASEE Frontiers in Education (FIE) Conference: Engineering Education in a Diverse, Global World*, College Station.

Chamberlin, S., Karaduman, G., & **Bicer, A.** (2022). A review of research at the intersection of mathematical problem posing and affect. *Proceedings of the annual meeting of the International Group for Mathematical Creativity and Giftedness*.

Bicer, A., Bicer, A., & Chamberlin, S. (2022). Young Students' Mathematical Creative Thinking Processes. *Proceedings of the annual meeting of the International Group for Mathematical Creativity and Giftedness*.

Nite, S. B., **Bicer, A.**, Currens, K.A., & Tejani, R. (October, 2020). Increasing STEM interest through coding with microcontrollers. *Proceedings of the 50th Annual IEEE Frontiers in Education Conference (FIE): Education for a Sustainable Future*. (IF = .159, SJR = .220).

Bicer, A., Lee, Y., Capraro, R. M., Capraro, M. M., Barroso, L. R., & Rugh, M. (2019, October). Examining the Effects of STEM PBL on Students' Divergent Thinking Attitudes Related to Creative Problem Solving. *Proceedings of the 49th Annual IEEE Frontiers in Education Conference (FIE)* (pp. 1-6). IEEE.

Lee, Y., **Bicer, A.**, H Kwon., Rugh, M. S., Capraro, R. M., Capraro, M. M., & Barroso, L. (2019, October). Post-Secondary Ready: Does the STEM curriculum Matter?. *Proceedings of the 49th Annual IEEE Frontiers in Education Conference (FIE)* (pp. 1-6). IEEE.

Vela, K. N., **Bicer, A.**, Capraro, R. M., Barroso, L. R., & Caldwell, C. (2018, October). *What matters to my future: STEM int-her-est and expectations*. *Proceedings of the 48th Annual IEEE Frontiers in Education Conference (FIE)*. IEEE, Piscatawy, NJ. (IF = .159).

Bicer, A., Lee, R., Capraro, R. M., Capraro, M. M., Barroso, L. R., Bevan, D., & Vela, K. N. (2018, October). *Cracking the code: The effects of using microcontrollers to code on*

- students' interest in computer and electrical engineering*. Proceedings of the 48th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Piscataway, NJ. (IF = .159, SJR = .220).
- Lee, Y., **Bicer, A.**, Capraro, R. M., Capraro, M. M., Barroso, L. R., Kwon, H., & Rugh, M. (2018, October). *Comparing mathematics and science achievement of students from schools with PLTW versus schools without PLTW*. Proceedings of the 48th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Piscataway, NJ. (IF = .159, SJR=.220).
- Rugh, M. S., Calabrese, J. E., Madson, M. A., Capraro, R. M., Barroso, L. R., Capraro, M. M., **Bicer, A.** (2018, October). *STEM Language can be the Stem of the Problem*. Proceedings of the 48th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Piscataway, NJ. (IF = .159, SJR=.220).
- Nite, S. B., Allen, G. D., Morgan, J., **Bicer, A.**, & Capraro, R. M. (2016, June). Engineering calculus bridge program success: Comparing variation results. In *Proceedings of the American Society for Engineering Education 2016*. Paper ID# 16610 presented at ASEE's 123rd National Conference and Exposition. New Orleans, LA: American Society for Engineering Education, Washington DC.
- Nite, S. B., Allen, G. D., Capraro, R. M., **Bicer, A.**, & Morgan, J. (2016, December). Supporting engineering education through calculus success. In S. T. Smith, Y. Y. Lim, A. Bahadori, N. Lake, R. V. Padilla, A. Rose, & K. Doust. *Proceedings of the 27th Annual Conference of the Australasian Association for Engineering Education*. Australasian Association for Engineering Education Conference: The Changing Role of the Engineering Educator for Developing the future Engineer. Coffs Harbour, Australia: Southern Cross University, Lismore, NSW 2480, Australia.
- Nite, S. B., Allen, G. D., **Bicer, A.**, & Morgan, J. (2016, June). Student engagement in a summer bridge program for engineering calculus success. *Electronic Proceedings of the 2016 Hawaii University International Conferences Science, Technology Engineering, Art, Math & Education Conference*. Honolulu, HI: Hawaii University International Conferences.
- Bicer, A.**, Nite, S. B., Capraro, R. M., Barroso, L. R., Capraro, M. M., & Froyd, J. E. (2016, October). Informal STEM camp influences on engineering confidence. Paper accepted to the *2016 IEEE Frontiers in Education Conference: The Crossroads Engineering and Business*. Erie, PA.
- Nite, S., **Bicer, A.**, Reeves, L., Barroso, L. & Capraro, M. (2015). Online Professional Development: Challenges of Observation of Secondary Classroom Simulation. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2015* (pp. 358-364). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

- Bicer, A.**, Boedeker, P., Kopparla, M., Capraro, R. M. (2015, October). Comparing students' mathematics achievement by their school types: Inclusive STEM schools that implemented PLTW curriculum with inclusive STEM schools that did not implement PLTW. In *Proceedings of the Frontiers in Education 2015: Launching a New Vision in Engineering Education* (pp. 1363-1367). El Paso, TX: IEEE.
- Boedeker, P., **Bicer, A.**, Capraro, R. M., Capraro, M. M., Morgan, J., & Barroso, L. (2015, October). STEM summer camp follow up study: Effects on students' SAT scores and postsecondary matriculation. In *Proceedings of the Frontiers in Education 2015: Launching a New Vision in Engineering Education* (pp. 1875-1882). El Paso, TX: IEEE.
- Bicer, A.**, Cavlazoglu, B., & Erdogan, N. (2013, March). *Integrating writing into mathematics classroom to understand students' mathematical background*. In *Proceedings of the Society for Information and Teacher Education*, New Orleans, TX.
- Cavlazoglu, B., & **Bicer, A.** (2013, March). *Descriptive analysis of a 6th grade Turkish math text with recommendations for development of future e-resources for multi-touch tablets*. In *Proceedings of the Society for Information and Teacher Education*, New Orleans, TX.

GRANT ACTIVITY

- Funded. *AI-Guided Professional Learning to Strengthen Pre-Service Teachers' Content Knowledge, Pedagogical Content Knowledge, and Mathematical Creativity*. **Bicer, A. (PI)**, with Aldemir, T. and Song, D. (Co-PIs). National Science Foundation, Improving Undergraduate STEM Education (NSF-IUSE), \$1,989,298, 2026–2031.
- Funded. *CAREER: AI-Guided, Authentic, Ag-STEM Inquiry for Cultivating Computational Thinking in Rural Middle Schools*. Aldemir, T. (PI), with **Bicer, A.** (Advisory Board Member). National Science Foundation, Innovative Technology Experiences for Students and Teachers (NSF-ITEST), Award No. 2541320, \$1,616,223, 2026–2031.
- Unfunded. *Creative STEM Summer Camp*. **PI Bicer, A.** with Co-PI Aldemir, T. and Young, J. Submitted to Texas Workforce Commission (TWS), \$84,000.
- Funded. 12/1/2024-05/1/2026. *Emerge: Artificial Intelligence Mentorship for Rural Education (AIM4Rural)*. PI Aldemir, T. with **Co-PI Bicer, A.**, Song, D., and Lee, P. Funded by College of Education, Texas A&M University, \$49,436.
- Funded. 12/1/2024-05/1/2026. *AI-Enhanced Computational Thinking and Agricultural Science in Rural Schools*. PI Aldemir, T. with **Co-PI Bicer, A.**, Song, D., and Lee, P. Funded by College of Education, Texas A&M University, \$30,000.
- Funded. 7/1/2023-8/1/2025. *Beginning Teachers' Mathematics Learning and Teaching for Creativity*. **PI Bicer, A.** Submitted to Everett D. & Elizabeth Lantz Grant in Wyoming, \$50,000.

- Unfunded. 8/1/2023-7/31/2027. Design and Development of the Discursive Assessment Protocol. **Co-PI Bicer, A.** and PI Kitchen, R. Submitted to Institute of Education Science (IES), \$3000,000.
- Funded. 5/20/2022-5/20/2023. *Creating open textbook for developing upper elementary and middle school students' mathematical creativity.* **PI Bicer, A.** Accepted by the library of the University of Wyoming, \$3,000.
- Funded. 5/20/2022-5/20/2023. *Who is Being Creative in Mathematics Classrooms? Individuals, Whole-Class, or Both?* **PI Bicer, A.**, with Fay Quiroz. Accepted by School of Teacher Education, College of Education, University of Wyoming, \$10,000.
- Funded. 8/1/2019-5/1/2022. *Fostering Creativity in Mathematics Classroom.* **PI Bicer, A.** Awarded Mary Garland Early Career Fellowship by the John P. Ellbogen Foundation. School of Teacher Education, College of Education, University of Wyoming, \$25,000.
- Unfunded. 8/1/2022-8/1/2027. *STEM PBL Professional Preparation Program for Pre-Service Elementary School Teachers.* Co-PI with Yujin Lee at the University of North Dakota. Submitted to National Science Foundation Early Career Grant, \$1,248,736.
- Unfunded. 7/1/2022 - 6/30/2025. Refining an Instructional Intervention Designed to Support English Learners During Problem Solving Lessons. Co-PI with Kitchen, R. Submitted to U.S. Department of Education/Institute of Education Sciences, \$ 1,561,757.
- Unfunded. 8/1/2019-7/31/2022. Design and Development of the Discursive Assessment Protocol. Co-PI with Kitchen, R. Submitted to National Science Foundation Discovery Research PreK-12, \$3000,000.
- Funded. 11/1/2019-6/30/2020. *Fostering Seeds for STEM.* **PI Bicer, A.** Awarded by the dean's office of College of Engineering, University of Wyoming, \$5,000.
- Unfunded. 8/1/2019-7/31/2021. *Fostering STEM.* **PI Bicer, A.**, with Co-PIs Nite, S. B., & Griffiths, Shawn. Submitted to National Science Foundation Advancing Informal STEM Education, \$300,000.
- Funded. 11/1/2018-6/30/2019. *Fostering Seeds for STEM.* **PI Bicer, A.**, with Co-PI Nite, S. B. Accepted by School of Teacher Education, College of Education, University of Wyoming, \$5,000.
- Funded. *Aerospace Engineering: Designing and Building Machines That Fly.* Co-PI with Barroso, L., Capraro, M. M., de Miranda, M., & Bicer, A., National Competitive Award. American Society for Engineering Education. 5/1/17-10/1/17.
- Funded. *Experiencing STEM Through the Eyes of Women STEM Professionals.* Co-PI with Capraro, R.M., Barroso, L., Nite, S. B., & Bicer, A. Funded by High Tech High Heels, 5/17-8/17. \$21,000.

Funded. 2016. *State Farm Empowering Underrepresented Students to Enter STEM Fields*.
Accepted by State Farm, Bloomington, IL (2016). Co-PI with Robert M. Capraro, James Morgan, Mary Margaret Capraro, **Ali Bicer**, & Luciana Barroso. \$40,000.

PROFESSIONAL AFFILIATIONS (may include licenses and certifications)

American Educational Research Association (AERA)
National Council of Teachers of Mathematics (NCTM)
Southwest Educational Research Association (SERA)
School Science and Mathematics (SSMA)
American Society for Engineering Education (ASEE)
Frontiers in Education (FIE)

Licenses/Certificates

Advanced Research Method Certificate, Texas A&M University, USA
Secondary School Teacher of Mathematics, Ministry of Education, Turkey

SERVICE

Conferences Proposal Reviews:

Reviewer of proposals for National Council of Teachers of Mathematics Conference, 2015-present

Reviewer of proposals for *American Education Research Associate* Conference, 2015-Present

Reviewer of proposals for *Southwest Educational Research Association* Conference, 2015-Present

Reviewer of proposals for *Frontiers in Education Conference*, 2015-Present

Reviewer of proposals for *Undergraduate Mathematics Education Conference*, 2018-present

Conference Chair Roles:

Chair for AERA-2023 conference for the session “Learning and Instruction: Mathematics”

Chair for AERA-2023 conference for the session “Understanding Fractions”

Chair for AERA-2022 conference for the session “Research in Mathematics Education”

Chair for AERA-2022 conference for the session “Fostering Learning”

Chair for AERA-2021 conference for the session “Exploring pre-service teachers in mathematics education” in SIG-Research in Mathematics Education

Chair for AERA-2021 conference for the session “Problem-based learning in diverse places: Motivation, Processes, and Beliefs” in SIG-Research in Mathematics Education

Chair for AERA-2020 conference for the session “Improving mathematics teaching learning: Focus on problem posing and problem-based learning” in SIG-Research in Mathematics Education

Chair for AERA-2019 conference for the session “Research in Mathematics Education”

Chair for AERA-2019 conference for the session “Problem Activities and Assessment in PBL”

Chair for AERA-2018 conference for the session “Problem Activities and Assessment in PBL”

Invited manuscript reviews by academic journals:

Reviewer of manuscripts for *Journal of Mathematics Teacher Education*, 2020-present

Reviewer of manuscripts for *ZDM*, 2020-present

Reviewer of manuscripts for *Educational Studies in Mathematics*, 2019-present

Reviewer of manuscripts for *Mathematical Thinking and Learning*, 2018-present

Reviewer of manuscripts for *International Journal of STEM Education*, 2018-present

Reviewer of manuscripts for *Eurasia Journal of Mathematics, Science, and Technology Education*, 2016-present

Reviewer of manuscripts for *International Journal of STEM Education*, 2017-present

Reviewer of proposals for *Educational Research and Reviews*, 2016-present

Reviewer of proposals for *Educational Research*, 2016-present

Review of proposals for *International Research Journal of Teacher Education*, 2016-present

Review of proposals for *International Research Journal of Curriculum and Pedagogy*, 2016-present

Review of proposals for *Psychology Research*, 2015-present

Academic Service (University):

Academic Service (College and Department):

- A member of Board of School of Computing, University of Wyoming, Fall 2022-Ongoing
- Elementary school representative for ACTE, University of Wyoming, Fall 2019-Ongoing

- Elementary science education hiring committee member, University of Wyoming, Fall 2019-Summer 2020
- Starting Gold STEM summer camp for K-12 students, University of Wyoming, Spring 2019-Ongoing
- Member for Mursion implementation group, University of Wyoming, Spring 2019-Fall-2019

Courses Taught:

Graduate Level Teaching:

EDCI 628 Analyzing and Reporting Field Based Research (Spring 2026), Texas A&M University
 EDCI 5250 *Advanced Topic in Mathematics Pedagogy*, (Fall 2023), University of Wyoming.
 NASC 5225 *Middle School Assessment* (Summer 2023), University of Wyoming.
 EMAT 5150 *Middle School Mathematics from an Advanced perspective* (Spring 2022), University of Wyoming
 EMAT 5200 *Middle and High School Mathematics Education Curriculum, Assessment, and Evaluation* (Spring 2020), University of Wyoming
 EDCI 617 *Early Childhood and Elementary Mathematics* (Spring 2017), Texas A&M University

Undergraduate Level Teaching:

EDSE 3271 *Secondary Mathematics Method I*, (Fall 2023), University of Wyoming.
 EDSE 4271 *Secondary Mathematics Method II*, (Fall 2023), University of Wyoming.
 EDEL 4410 *Elementary & Middle School Mathematics Method* (Fall 2023), University of Wyoming.
 EDEL 4409 *Elementary & Middle Mathematics and Science Method* (Fall 2018, 2019, 2020, 2022), University of Wyoming.
 EDEL 2410 *Mathematics Seminar Course Section II-III* (Summer 2019, Spring, 2020), University of Wyoming.
 EDEL 1410 *Mathematics Seminar Course Section II-III* (Fall 2018, 2020), University of Wyoming.
 MASC 351 *Problem Solving* (Fall 2016, Spring, 2017, Fall 2017, Spring 2018, Fall 2024, Fall, 2025), Texas A&M University.
 EDEL 4500 *Residency in Teaching* (Spring 2018, 2019, 2020, 2021), University of Wyoming.

GRADUATE ADVISING

Texas A&M Graduate Advising

Chair for Mehmet Akif Colak in TLAC, Ph.D. (ongoing).
 Co-Chair for Micayla Gooden in TLAC, Ph.D. (ongoing).
 Co-Chair for Thomas Hallmart in TLAC, Ph.D. (ongoing).
 Co-Chair for Ivan Ramos-Medina in TLAC, Ph.D. (ongoing).

University Wyoming-Graduate Advising

Chair for Shane Zeidler in EDCI, master's degree (successfully completed, Summer, 2020)

Chair for Jennifer Millard in EDCI, master's degree (successfully completed, Spring 2023)

Committee member for Amy Elizabeth Schick in EDCI, master's degree (successfully completed, Fall, 2020)

Outside Committee member for Samuel David Neirman in EDCI, master's degree (successfully completed, Spring 2019)

Committee member for Caitlin Luise Kennedy in EDCI, master's degree (successfully completed, Summer-2021)

Committee member for Angela Ann Schanke in EDCI, PhD (successfully completed, summer 2021)

Committee member for Karla Valesca Matute Colindres in EDCI, PhD (successfully completed, summer 2022)

Committee member for Libni Berenice Castellon in EDCI, PhD (successfully completed, Spring 2022)

Committee member for Amy K. Kassel in EDCI, PhD (successfully completed, Spring 2022)

Committee member for Michael Gundlach in EDCI, PhD (successfully completed, Summer 2023)

Chair for Geoff Michael Krall in EDCI, PhD (successfully completed, Summer 2024)

Member for Helen Aleksani in EDCI, EdD (successfully completed, Fall 2025)

Member for Melena Osborne in EDCI, EdD (successfully completed, Fall 2025)

Committee member for Jennifer Kellner in EDCI, EdD (successfully completed, Fall 2025)

Committee member for Traci Jakson in EDCI, PhD (successfully completed, Fall 2025)

Committee member for Tricia Smith in EDCI master's degree (successfully completed, Spring 2024)

Committee member for Chuck Butler in EDCI, EdD (successfully completed, Summer 2023)

Committee member for Fay Quiroz in EDCI, PhD (successfully completed, Spring 2024)

Committee member for Michael Bostick in EDCI, PhD (successfully completed, Fall 2025)