**Mary Margaret Capraro**

Professor, Mathematics Education

Department of Teaching Learning & Culture

College of Education and Human Development

Texas A&M University

421 & 428 Harrington Tower

**Phone**: (979) 862-4665

**Fax:** (979) 845-9663

**E-mail:** [mmcapraro@tamu.edu](mailto:mmcapraro@tamu.edu)

**ORCID # 0000-0002-6516-6533**

Educational Background

**PhD** - Curriculum & Instruction emphasis in Mathematics Education, Minor in Research & Statistics, 1997 – 2000. University of Southern Mississippi, Hattiesburg, MS

**EdS**- Mathematics & Science Resource Specialist, 1991 – 1993. University of Miami, FL

**MS**- Administration & Supervision, 1973 – 1975. University of Miami, FL

**BA**- English with Elementary Education Minor, 1967 – 1971. Barry University, Miami, FL

Employment History

2016- present **Professor,** Texas A&M University

2011 - 2016 **Associate Professor,** Texas A&M University

2007 - 2011 **Assistant Professor**, Texas A&M University

2006 - 2007 **Clinical Associate Professor,** Texas A&M University

2000 - 2006 **Clinical Assistant Professor**, Texas A&M University

1999 - 2000 **Graduate Assistant,** University of Southern Mississippi

1994 - 1997 **Adjunct Professor,** Florida International University, Miami, FL

1986 - 1999 **Assistant Principal,** Miami-Dade County Public Schools, FL  
1971 - 1986 **Teacher,** Miami-Dade County Public Schools

Peer-reviewed journal articles

**Annotations of Publication show Impact Factors (IF) from the Web of Science for 2013; SCImago Journal Rank (SJR) from Scopus for 2013; citations from Google Scholar (GS) where Available –downloaded 2/17/15)**

**Co-authored with \*Doctoral,\*\*Master’s, \*\*\*Undergraduate students**

1. \*Rosli, R., Goldsby, D., Onwuegbuzie, A. J., **Capraro, M. M.,** Capraro, R. M.& Gonzalez, E. G. Y. (2020). Elementary preservice teachers’ knowledge, perceptions and attitudes towards fractions: A mixed analysis. *Journal on Mathematics Education*, 11(1), 59-76. [http://doi.org/10.22342/jme.11.1.9482.59-76](https://urldefense.proofpoint.com/v2/url?u=http-3A__doi.org_10.22342_jme.11.1.9482.59-2D76&d=DwMFaQ&c=u6LDEWzohnDQ01ySGnxMzg&r=rrHE4F1l4lJ1wifPgFnNoCiNfjEICEG9Xxn5couHjrk&m=1NrY9K3ugElDVNpJ33Btrhdv7g6fXYiEsvVaMezd6v8&s=YRKUwOHaeNGYpH90PpJ-SPcAKGoN2qpUdreo8dEKehg&e=)
2. Rosli, R., & **Capraro, M. M.** (2020).Malaysian and American preservice teachers’ ability and perspective on mathematical problem posing. *Universal Journal of Educational Research, 8*(1), 151 - 155. doi: 10.13189/ujer.2020.080118
3. Alkeman, E., **Capraro, M. M** ., Creasy, T., Fleming, K., Hong, L.,Weiling, H., & \*Williams, A., (2019). Recycling plastics: Middle school students create solutions during a summer camp. *Journal of European STEM Education,* *4*(1). doi: 10 [.20897/ejsteme/6341](https://urldefense.proofpoint.com/v2/url?u=https-3A__doi.org_10.20897_ejsteme_6341&d=DwMGaQ&c=u6LDEWzohnDQ01ySGnxMzg&r=rrHE4F1l4lJ1wifPgFnNoCiNfjEICEG9Xxn5couHjrk&m=FR8rI0mIvRD7hDynfLIvaWVfG_Xv2h67E7v2rh7I0-0&s=kKXLZJJEYqFcbx-4l2ZF3MgW3Arx7B03HbdJa7QmTFQ&e=)
4. \*Franks, A., & C**apraro, M. M**. (2019). Motivated for STEM: Developing an understanding of highly motivated students’ self-image in STEM education. *Science Educator Journal. 27*(1), 1- 10.
5. Capraro, R. M., **Capraro, M. M**., & \*Calabrese, J. E. (2019). Special editorial team introduction: The foundation of STEM is mathematics education. *Journal of Mathematics Education*, *12*(1), 1-5.
6. Lyakhova, S., Joubert, M., Capraro, R. M., & **Capraro, M. M.** (2019). Designing a curriculum based on four purposes: Let mathematics speak for itself. *Journal of Curriculum Studies, 51*(4), 513-29.Manuscript ID TCUS-2018-0109. DOI:10.1080/00220272.2019.1594389. (SJR = .834 for 2017); <https://doi.org/10.1080/00220272.2019.1594389>
7. Siregar, N. C., Rosli, R. Maat, S. M., & **Capraro, M. M.** (2019). The effect of science, technology, engineering and mathematics (stem) program on students' achievement in mathematics: A meta-analysis. *International Electronic Journal of Mathematics Education,15* (1), 1-12 <https://doi.org/10.29333/iejme/5885>
8. \*Ortiz, N., **Capraro, M. M.,** & Capraro, R. M. (2018) Does it really matter?: Exploring cultural relevance within a majority white classroom. *Journal of Negro Education*, *87*(4), 404-419.
9. Maldonado, S. I., Mosqueda, E., Capraro, R. M., & **Capraro, M. M.** (2018). Language minority students’ mathematics achievement in urban schools: Coursework, ethnicity, and English-language proficiency. *Perspectives on Urban Education, 15*(1), [urbanedjournal.gse.upenn.edu/archive/volume-15-issue-1-summer-2018](https://urldefense.proofpoint.com/v2/url?u=http-3A__urbanedjournal.gse.upenn.edu_archive_volume-2D15-2Dissue-2D1-2Dsummer-2D2018&d=DwMFaQ&c=ODFT-G5SujMiGrKuoJJjVg&r=Vo7zFR3XCkmpyWlwXHk6mVd1Pqu9x4RasKyDJWurwJA&m=DmuM2pw0N94YWVa8PdVe0_HDiNBl_3z608uMo_EMG8M&s=RKyDHpjgdOlDH6taEelZoW3RR-ifkEUs9NWFlnARdgs&e=)
10. Young, J., **Capraro, M. M.,** Capraro, R. M., & Cason, M. (2018). Every student can’t succeed if every voice is not heard: Equity perspectives from STEM educators. *Teachers College Record,* *120*(13), <http://www.tcrecord.org/librar>y ID Number 22350(SJR, .953)
11. Rosli, R., **Capraro, M. M.**, & Mistima, M. S. (2018). Preservice teachers’ knowledge of division with a remainder. *Advanced Science Letters, 24*(11), 8526-8529.
12. \*Lee, Y., **Capraro, M. M.,** & Viruru, R. (2018). The factors motivating students’ STEM career aspirations: Personal and societal contexts.  *International Journal of Innovation in Science and Mathematics Education, 26*(5), 36-48.
13. \*Kwon, H., & **Capraro, M. M.** (2018). The effects of using manipulatives on students’ learning in problem posing: The instructors’ perspectives. *Journal of Mathematics Education, 11*(2), 35-47*.*
14. \*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://urldefense.proofpoint.com/v2/url?u=https-3A__doi.org_10.5539_ies.v11n10p42&d=DwMFaQ&c=ODFT-G5SujMiGrKuoJJjVg&r=Vo7zFR3XCkmpyWlwXHk6mVd1Pqu9x4RasKyDJWurwJA&m=bunMrq0snCayY9j0p3CbVRnEF8KG0hk2-I2SLe9fIJw&s=CF7t_Rgmfvraw2KU2oKFnXCC5_KfQ_epXU1V0tcZGRc&e=)
15. \*Kopparla, M., & **Capraro, M. M.** (2018). Portrait of a second grade problem poser. *European Journal of STEM Education, 3*(1), 03. 10.1080/03055698.2018.1509785. <https://doi.org/10.1080/03055698.2018.1509785>
16. \*Kopparla, M., Bicer, A., \*Vela, K., \*Lee, Y., \*Bevan, D., \*Kwon, H., \* \*Caldwell, C., **Capraro, M. M.,** & Capraro, R. M. (2018). The effects of problem-posing intervention strategies on elementary students' problem solving. *Educational Studies*. 708-725. DOI: 10.1080/03055698.2018.1509785. Available online first September 2018. (IF = .581; SRJ =.390)
17. \*Lee, Y., Capraro, R. M., & **Capraro, M. M.** (2018). Mathematics teachers’ subject matter knowledge and pedagogical content knowledge in problem posing. *International Electronic Journal of Mathematics Education*, 13(2), 75-90.
18. Bicer, A., Capraro, R. M., & **Capraro, M. M**. (2017). 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*. DOI: 10.1080/0020739X.2017.1410735
19. Barroso, L. R., Bicer, A., **Capraro, M. M**., Capraro, R. M., \*Foran, A., Grant, M. L., Lincoln, Y. S., Nite, S. B., Oner, A. T., & \*\*\*Rice, D. (ABC order) (2017). Run! Spot. Run! - Vocabulary development and the evolution of STEM disciplinary language for secondary teachers. *Zentralblatt für Didaktik der Mathematik (ZDM)*, *49*(2), 187-201. (SJR = .926)
20. Nite, S. B., **Capraro, M. M.,** Capraro, R. M., & \*Bicer, A. (2017). Explicating the characteristics of STEM teaching and learning: A meta-synthesis.  *Journal of STEM Teacher Education*, *52*(1), 31-53.
21. Bicer, A., Capraro, R. M., & **Capraro, M. M**. (2017). Integrated STEM assessment model. *International Journal of Education in Mathematics, Science, and Technology, 13*(7),3959-3968. DOI:10.12973/Eurasia.2017.00766a
22. Young, J. L., Young, J. R., & **Capraro, M. M.** (2017). Black girl’s achievement in middle grades mathematics: How can socializing agents help? *The Clearing House*, *90*(*3)*, 70-76.
23. **Capraro, M. M.,** \*Bicer, A., Grant, M. R., & Lincoln, Y. S. (2017). Using precision in STEM language: A qualitative look at how working in groups may help. *International Journal of Education in Mathematics, Science and Technolog*y, *5*(1), 29-39. DOI:10.18404/ijemst.15709
24. \*Godwin, A. J., **Capraro, M. M.,** Rupley, W. H., & Capraro, R. M. (2017). Meta-synthesis of factors that contribute to a child’s initial communication development and previously identified effects of reading mathematics storybooks to toddlers andpreschoolers. *Child Development Research,* 2017,1-10. https: doi.org/10.1155/2017/4506098
25. Suib, A. F., Rosli, R., & **Capraro, M. M.** (2016). A primary school mathematics teachers’ perspectives about problem posing activity. T*he Social Sciences, 11,* 4992-97.
26. \*Öner, A. T., Nite, S. B., Capraro, R. M., & Capraro, M. M. (2016). From STEM to STEAM: Students’ beliefs about the use of their creativity. *The STEAM Journal, 2*(2), Article 6. DOI: 10.5642/steam.20160202.06
27. \*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*(1), 49-59.
28. Han, S., Rosli, R., **Capraro, M. M**., & Capraro, R. M. (2016). The effect of science, technology, engineering and mathematics (STEM) project based learning (PBL) on students’ achievement in four mathematics topics. *Journal of Turkish Science Education*, *13*, 3-29.   doi: 10.12973/tused.10168a (SJR = .202).
29. Han, S. Y., Capraro, R. M., & **Capraro, M. M.** (2016).How science, technology, engineering, and mathematics project based learning affects high-need students in the U.S. *Learning and Individual Differences*, *51*,157-166. (IF = 1.631-(2015)
30. \*Oner, A. T., Capraro, R. M., & **Capraro, M. M.** (2016). The effect of T-STEM designation on charter schools: A longitudinal examination of students’ mathematics achievement. *Sakarya University Journal of Education, 6*(2), 80-96.
31. \*Godwin, A., Rupley, W., Capraro, R. M., & **Capraro, M. M.** (2016). Reading and math: Creating a family environment for reading*.* *Journal of Education and Learning, 5*(1), 44-59.
32. Capraro, R. M., **Capraro, M. M.,** Morgan, J., Scheurich, J., \*Jones, M., \*Huggins, K., Corlu, S. M., \*Han, S. Y., & \*Younes, R. (2016) The impact of sustained professional development in STEM in a diverse urban district. *Journal of Educational Research, 109*(2), 181-196. DOI 10.1080/00220671.2014.936997. Manuscript ID 03-13-298.R2. (IF = .847).
33. Capraro, R. M., **Capraro, M. M.,** Barroso, L. R., & Morgan, J. R. (2016). Through biodiversity and multiplicative principles Turkish students transform the culture of STEM education. *International Journal of STEM, 4(1), 1-8.*
34. \*Hao, H., **Capraro, M. M**., & Lee, K. (2016). Play with numbers from daily life: Number sense gaining progression and facilitating strategies of diverse young learners*.* *International Play Association/USA E-Journal*, 10-20.
35. **Capraro, M. M.,** & \*Kopparla, M. (2015). Writing math research papers: A guide for high school students and instructors. (4th Edition). Book Review in *Teachers College Record*, Date Published: October 21, 2015 ID Number: 18168,http://www.tcrecord.org/Content.asp?ContentId=18168 (SJR = 1.176)
36. \*Rosli, R., Goldsby, D., & **Capraro,** M. M. (2015) Using manipulatives in solving and posing mathematical problems. *Creative Education, 6,* 1718-1725. doi: 10.4236/ce.2015.616173
37. \*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.
38. Helfeldt, J., **Capraro, M. M**., Capraro, R. M., & \*Scott, C., & (2015). Full-time teaching internships: A public school – university partnership designed to increase retention in urban area schools. *Journal of Education and Human Development, 4*(2(1), 1-15.
39. \*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.
40. \*Cetin, S. C., Corlu M. S., **Capraro M. M.,** & Capraro R. M. (2015). A longitudinal study of the relationship between mathematics and science: The case of Texas. *International Journal of Contemporary Educational Research, 2*(1), 13-21.
41. \*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 on New Trends in Education and Their Implications, 6*(1), 138-150.
42. Booth, E. A., **Capraro, M. M.,** Capraro, R. M., Chaudhuri, N., Dyer, J., & Marchbanks, M. P. (2015). Innovative developmental education programs: A Texas model. *Journal of Developmental Education, 36,* 2-10, 18.
43. \*Han, S., Yalvac, B., **Capraro, M. M.,** & Capraro, R. M. (2015). In-service teachers’ implementation and understanding of STEM project based learning. *EURASIA Journal of Mathematics, Science & Technology Education*, *11*(1), 63-76.(SJR = .458)
44. \*Rosli, R., **Capraro, M. M.,** & Capraro, R. M. (2014). The effects of problem posing on student mathematical learning: A meta-analysis. *International Education Studies, 7*(13),227-241. (SJR = .131)
45. \*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), 40-51.
46. **Capraro, M. M.,** & Nite, S. B. (2014). STEM integration in mathematics standards. *Middle Grades Research Journal, 9*(3), 1-10.
47. \*Bicer, A., **Capraro, M. M.,** & Capraro, R. M. (2014). Integrating writing into mathematics classroom as one communication factor. *The Online Journal of New Horizons in Education, 4*(2), 58-67. (GS = 2)
48. \*Bicer, A., Capraro, R. M., & **Capraro, M. M.** (2014). Pre-service teachers’ linear and quadratic inequalities understandings. *International Journal for Mathematics Teaching and Learning*. Retrieved from <http://www.cimt.plymouth.ac.uk/journal/>
49. \*Bicer, A., \*Navruz, B., **Capraro, M. M.,** & Capraro, R. M. (2014). STEM schools vs. non-STEM schools: Comparing students’ mathematics state based test performance. *International Journal of Global Education, 3*(3), 8-18.
50. \*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.
51. **Capraro, M. M.,** Capraro, R. M., & \*Jones, M. (2014). Numeracy and algebra: A path to full participation in community and society? *Reading Psychology, 35*(5), 422-436. (SJR= .504)
52. Corlu, M. S., Capraro, R. M., **& Capraro, M. M.** (2014). Introducing STEM education: Implications for educating our teachers for an age of innovation. *Egitim ve Bilim-Education and Science, 39*(171), 74-85*.* (IF= .282; SJR = .346; GS = 2)
53. \*Han, S. Y., Capraro, R. M., & **Capraro, M. M.** (2014). How science, technology, engineering, and mathematics (STEM) project based learning (PBL) affects high, middle, and low achievers differently: The impact of student factors on achievement. *International Journal of Science and Mathematics Education*, *13*(5), 1089-1113. Published online. doi:10.1007/s10763-014-9526-0 (SJR = .759; GS = 2)
54. \*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 Sciences, 5*(2), 361-369. (GS = 4)
55. \*Rosli, R., \*Han, S., Capraro, R. M. & **Capraro, M. M.** (2013). Exploring preservice teachers’ computational and representational knowledge of content and teaching fractions. *Journal of the Korea Society of Mathematical Education Series D: Research in Mathematical Education*, *17*(4), 221-241.
56. \*Bicer, A., Capraro, R. M., & **Capraro, M. M.** (2013). The journey of a middle school student: Explorations of mathematics private tutoring in school life. *Sakarya University Journal of Education, 3*(3), 123-136.
57. \*Rosli, R., Goldsby, D., & **Capraro, M. M**. (2013). Assessing students’ mathematical problem-solving and problem-posing. *Asian Social Science*, *9*(16*)*, 54-60. (SJR = .139)
58. \*Bicer, A., Capraro, R. M., & **Capraro, M. M.** (2013). Integrating writing into mathematics classrooms to increase students’ problem solving skills. *International Online Journal of Educational Sciences, 5*(2), 361-369. (GS = 4)
59. \*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.
60. \*An, S., **Capraro, M. M.,** & Tillman, D. A. (2013). Elementary teachers integrate music activities into regular mathematics lessons: Effects on students’ mathematical abilities. *Journal for Learning through the Arts: A Research Journal on Arts Integration in Schools and Communities*, *9*(1). class\_lta\_12867. Retrieved from <http://www.escholarship.org/uc/item/0js732gf> (GS = 9)
61. \*Sokolowski, A., & **Capraro, M. M**. (2013). Constructivist approach to embodying motion problems in mathematics. *Mediterranean Journal for Research in Mathematics Education, 12*(1-2), 121-133.
62. Ding, M., Li, X., & **Capraro, M. M.** (2012). Preservice elementary teachers’ knowledge for teaching the associative property of multiplication: A preliminary analysis. *The Journal of Mathematical Behavior, 32,* 36-52. DOI: 10.1016/j.jmathb.2012.09.002 (SJR = .766)
63. Sahin, A., \*Erdogan, N., Morgan, J., **Capraro, M., M.,** & Capraro, R. M. (2012). The effects of high school course taking and SAT scores on college major selection. Sa*karya University Journal of Education*, *2*(3), 96-109.
64. Capraro, R. M., **Capraro, M. M.,** \*Younes, R., \*Han, S. Y., & \*\*\*Garner, K. (2012*).* Changes in equality problem types across four decades in four second and sixth grade textbook series. *Journal of Mathematics Education,* *5*, 166-189.
65. **Capraro, M. M., \***An, S. A., \*Ma, T., \*Rangel-Chavez, A. F., & Harbaugh, A. (2012). An investigation of preservice teachers’ use of guess and check in solving a semi open-ended mathematics problem. *The Journal of Mathematical Behavior, 31*(1), 105*-*116*.* doi:10.1016/j.jmathb.2011.10.002 (SJR = .766)
66. Ding, M., Li. X., **Capraro, M. M.,** & Capraro, R. (2012). Supporting meaningful initial learning of the associative property: Cross-cultural differences in textbook presentations. *International Journal for Studies in Mathematics Education/ Jornal Internacional de Estudos em Educação Matemática, 5*(1), 114-130.
67. Stearns, L. M., Morgan, J., **Capraro, M. M.,** & Capraro, R. M. (2012). A teacher observation instrument for PBL classroom instruction*. Journal of STEM Education: Innovations and Research*, *13*(3), 7-16. (GS = 7)
68. **Capraro, M. M**., Capraro, R. M., & Cifarelli, V. (2012). Open-ended problem solving tasks for pre-service middle-grades teachers that elicit mathematical reasoning. *International Journal of University Teaching and Faculty Development, 2*(2), 99 - 120. (GS = 4)
69. **Capraro, M. M**. (2012). A tale of two cities: Do textbooks account for differences in Latino second grade students understanding of the equal sign. *The National* *Journal of* *Urban Education and Practice, 5*(3), 317-333.
70. \*Matteson, S., **Capraro,** **M. M.,** Capraro, R. M., & Lincoln, Y. S. (2012). Extricating justification scheme theory in middle school problem solving. *Investigations in Mathematics Learning, 5*(1),38-62.
71. Rupley, W. H., Capraro, R. M., & **Capraro, M. M.** (2011). Theorizing an integration of reading and mathematics: Solving mathematical word problems in the elementary grades. *Mind, Brain and Education: Implications for Educators, 5*(1)*,* 227-250.
72. Capraro, R. M., \*Yetkiner, Z. E., \*Özel, S., \*Corlu, M. S., **Capraro, M. M.,** Ye, S., & Kim, H. G. (2011). An international perspective between problem types in textbooks and students’ understanding of relational equality*.* *Mediterranean Journal for Research in Mathematics Education: An International Journal, 10,* 187-213. (GS = 5)
73. \*Han, S. Y., \*Rosli, R., Capraro R. M. & **Capraro, M. M.** (2011). The textbook analysis on probability: The case of Korea, Malaysia, and US textbooks. *Journal of the Korean Society of Mathematics Education Series D: Research in Mathematical Education, 15*(2), *127-140.*
74. Capraro, R. M., **Capraro, M. M.,** & Rupley, W. H. (2011).  Reading-enhanced word problem solving: A theoretical model. *European Journal of Psychology of Education, 27*(1),91-114.DOI:10.1007/S10212-011-0068-3. (IF = .800; SJR = .363; GS = 8)
75. \*An, S, **Capraro, M. M.**, & \*Hao, H. (2011). Ideological representations in Chinese mathematics textbooks during the cultural revolution decade: A relational analysis of selected textbooks from 1966–1976. *Journal of Curriculum Theorizing, 27,* 239-256.
76. **Capraro, M. M.,** & Shih, J. (2011). Middle school mathematics: Current issues in teacher preparation and student learning. *Middle Grades Research Journal, 5*(4), ix-x.
77. \*Ding, M., \*Li, X., **Capraro, M. M**., & Kulm, G. (2011). A case study of teacher responses to doubling error and difficulty in learning equivalent fractions. *Investigations in Mathematics Learning*, *4(*2), 42-73.
78. \*Piccolo, D., **Capraro, M. M**., & Capraro, R. M. (2011). Student teachers’ general and content-specific pedagogical development within a mathematics milieu. *Middle Grades Research Journal, 5*(4), 169-183.
79. +\*An, S.A., \*Ma, T., & **Capraro, M. M.** (2011). Preservice teachers’ beliefs and attitude about teaching and learning mathematics through music: An intervention study. *School Science and Mathematics, 111,* 235-247. (GS = 16)
80. \*\*Kilgore, K., & **Capraro M. M.** (2010). Teaching factorization with smartboard technology*. Journal of Mathematics Education, 3*(2), 115-125.
81. **Capraro, M. M.,** Capraro, R. M., Carter, T., & Harbaugh, A. (2010). Questioning, curiosity, and representing: What makes a difference mathematically in middle-school classrooms? *Research in Middle Level Education Online, 34*(4), 1-19.
82. Capraro, R. M., **Capraro, M. M.,** & Rupley, W. H. (2010). Semantics and syntax: A theoretical model for how students may build mathematical mis-understandings. *Journal of Mathematics Education, 3(2), 58-66.* (GS = 4)
83. **Capraro, M. M.,** Capraro, R. M., \*Yetkiner, Z. E., \*Rangel-Chavez, A. F., & Lewis, C. W. (2010). Examining Hispanic student mathematics performance on high-stakes tests: An examination of one urban school district in Colorado. *The* *Urban Review, 42*, 193-209. (SJR = .292; GS = 9)
84. **\*\***Rowntree, R., & **Capraro, M. M.** (2010). Understanding and aiding students’ perceptions of algebraic inequalities*.* *Texas Mathematics Teacher. Fall,* 10-17.
85. Capraro, R. M., \*Özel, S., **Capraro, M. M.**, \*Yetkiner, Z. E., Kim, H. G., & Küçük, A. R. (2010). An international comparison of the equal sign: An update. *Psychological Reports.* *106*(1), 49-53. (IF = .402; SJR = .282)
86. \*Piccolo, D., **Capraro, M. M**., & Capraro, R. M. (2010). Mentoring urban interns: Amalgamation of experiences in the formation of mathematics teachers*. The Teacher Educator, 45*(1), 37-53. (SJR = .273; GS = 2)
87. **Capraro, M. M.,** & **\*\***Belliston, A. (2009). Middle school preservice teachers’ notions of representativeness: A replication study. *Tennessee Association of Middle School Journal. 41,* 1-10.
88. **Capraro, M. M.,** Capraro, R. M., & Helfeldt, J. (2010). Do differing types of field experiences make a difference in teacher candidates’ perceived level of competence*?* *Teacher Education Quarterly*, *37(1),* 131-154. (GS = 39)
89. Ye, S., Kulm, G., & **Capraro, M. M.** (2009).Middle grade teachers’ use of textbooks and their classroom instruction. *Journal of Mathematics Education*, *2*(2), 20-37.
90. Capraro, R. M., & **Capraro, M. M.** (2009). Quantitative reporting practices in middle-grades research journals: Lessons to learn. *Middle Grades Research Journal, 4*(2), 1-10.
91. \*Yetkiner, Z. E., & **Capraro, M. M.** (2009). *Teaching fractions* *in middle grades mathematics*. Retrieved January 27, 2009, from <http://www.nmsa.org/Research/ResearchSummaries/TeachingFractions/tabid/1866/Default.aspx> (GS = 8)
92. Helfeldt, J., Capraro, R. M., **Capraro, M. M.,** Foster, E. S., & Carter, N. (2009). An urban schools-university partnership that prepares and retains quality teachers for "high need" schools. *The Teacher Educator*, *44*(1), 1-20. (GS = 28)
93. \*Piccolo, D., \*Carter, T., \*Harbaugh, A., **Capraro, M. M**., & Capraro, R. M. (2008). Quality of instruction: Examining discourse in middle school mathematics instruction. *Journal of Advanced Academics, 19,* 376-410. (GS = 33)
94. Zientek, L., **Capraro, M. M.** &, Capraro, R. M. (2008*).* Reporting practices in quantitative teacher education research: One look at the evidence cited in the AERA panel report. *Educational Researcher, 37*, 208-216.(IF = 2.963; GS = 43)
95. Li, X., Ding M., **Capraro, M. M.,** & Capraro, R. M. (2008). Sources of differences in children's understandings of mathematical equality: Comparative analysis of teacher guides and student texts in China and the United States. *Cognition and Instruction, 26,* 195-217. (IF = 1.750; SJR = 1.544; GS = 60)
96. Slate, J. R., **Capraro, M. M.,** & Onwuegbuzie, A. J. (2007). Students’ stories of their best and poorest K-5 teachers: A mixed data analysis. *Journal of Educational Research & Policy Studies, 7*(2), 53-79. (GS = 2)
97. Capraro, R. M., **Capraro, M. M.,** \*Ding, M., & \*Li, X. (2007). Thirty years of research: Interpretations of the equal sign. *Psychological Reports*, *101,* 784-86. (IF = .402; SJR = .282; GS = 5)
98. Capraro, R. M., & **Capraro, M. M.** (2007). Pedagogy and curriculum: Antithetical constructs or a nexus in mathematics education? *Journal of Curriculum and Pedagogy, 4*(1), 34-39.
99. Kulm, G., Capraro, R. M., & **Capraro, M. M.** (2007). Teaching and learning middle grades mathematics with understanding. *Middle Grades Research Journal, 2,* 23-48.(GS = 8)
100. **Capraro, M. M.,** \*Ding, M., \*Matteson, S., Capraro, R. M., & \*Li, X. (2007). Representational implications for understanding equivalence. *School Science and Mathematics Journal, 107*, 86-88. (GS = 14)
101. **Capraro, M. M.** (2006). Electronic teaching portfolios: Technology skills + portfolio development: Do they = powerful preservice teachers*? Teacher Education and Practice, 19,* 380-390.(GS = 9)
102. **Capraro, M. M.,** & \*\*Joffrian, H. (2006). Algebraic equations: Can middle-school students meaningfully translate from words to mathematical symbols?*Reading Psychology, 27*, 147 – 164. (SJR = .504; GS = 53s)
103. Capraro, R. M., & **Capraro, M. M.** (2006). Are you really going to read us a story? Learning geometry through children’s mathematics literature. *Reading Psychology, 27,* 21-36. (SJR = .504; GS = 18)
104. **Capraro, M. M.** (2005). An introduction to confidence intervals for both statistical estimates and effect sizes. *Research in the Schools, 12*(2),22 – 32. (GS = 13)
105. Capraro, R. M., **Capraro, M. M.,** Parker, D., Kulm, G., & Raulerson, T. (2005). The mathematics content knowledge role in developing preservice teachers’ pedagogical content knowledge.  *Journal of Research in Childhood Education, 20,* 102-118. (SJR = .246; GS = 39)
106. **Capraro, M. M.,** Kulm, G., & Capraro, R. M. (2005). Middle grades: Misconceptions in statistical thinking. *School Science and Mathematics Journal, 105*, 165-174. (GS = 23)
107. **Capraro, M.M.** (2005). A more parsimonious mathematics beliefs scales. *Academic Exchange Quarterly*, *9*(3), 83-88. (GS = 4)
108. Henson, R., Capraro, R. M., & **Capraro, M. M.** (2004). Reporting practice and use of exploratory factor analysis in educational research journals. *Research in the Schools, 11*(2), 61-72. (GS = 79)
109. **Capraro, M. M.** (2003). Measure for measure. *Illinois Mathematics Journal, 54*(1), 3-5.
110. **Capraro, M. M.** (2003). Measuring with nonstandard units. *Wisconsin Teachers of Mathematics Journal, 54*(1), 7-10*.*
111. **Capraro, M. M.**, & Capraro, R. M. (2003). Exploring the APA fifth edition publication manual’s impact on the analytic preferences of journal editorial board members. *Educational and Psychological Measurement, 63*, 554-565*.* (IF = 1.167; SJR = 1.062; GS = 13)
112. **Capraro, M. M.** (2003). Tired of using worksheets? *Texas Mathematics Teacher, 45* (1), 9-11.
113. **Capraro, M. M.** (2002). Defining constructivism: Its influence on the problem solving skills of students. *Educational Technology Research and Development, 50*(4), 97. (SJR = 1.785; GS = 18s)
114. Capraro, R. M., & **Capraro, M. M**. (2002). Treatment of effect sizes and statistical significance tests in textbooks. *Educational and Psychological Measurement, 62*, 771-782*.* (IF = 1.167; SJR = 1.062; GS = 28)
115. Capraro, R. M., & **Capraro, M. M.** (2002). Myers-Briggs type indicator score reliability across studies: A meta-analytic reliability generalization study. *Educational and Psychological Measurement*, *62,* 590-602. (IF = 1.167; SJR = 1.062; GS = 105).
116. **Capraro, M. M.,** Capraro, R. M., & Henson, R. K. (2001). Measurement error of scores on the mathematics anxiety rating scale across studies*.* *Educational and Psychological Measurement, 61,* 373-386. (IF = 1.167; SJR = 1.062; GS = 82)
117. **Capraro, M. M.,** & Capraro, R. M. (2001). Bigger is not better: Seeking parsimony in canonical correlation analysis via variable deletion strategies. *Multiple Linear Regression Viewpoints, 27*(2), 24-33. (GS = 4)
118. Capraro, R. M., & **Capraro M. M.** (2001). Commonality analysis: Understanding variance contributions to overall canonical correlation effects of attitude toward mathematics on geometry achievement. *Multiple Linear Regression Viewpoints, 27*(2), 16-23. (GS = 13)

peer-reviewed proceedings

1. \*Fidai, A., \*\*\*Jarvis, C., \*\*\*Benzor, M., \*\*\*Verma, S., **Capraro, M. M.,** & Capraro, R. M. (2019, October). *Motivating future engineers: Building situation sensing Mars Rover with elementary school students*. Proceedings in the 49th Frontiers in Education Conference (FIE), Cincinnati, U.S.A.
2. \*Fidai, A., \*Kwon, H., \*\*\*Buettner, G., Capraro, R. M., **Capraro M. M.,** \*\*\*Verma, S., \*\*\*Jarvis, C. & \*\*\*Benzor, M. (2019, October). *Internet of Things (IoT) instructional devices in STEM classrooms: Past, present and future directions.*Proceedings in the 49th Frontiers in Education Conference (FIE), Cincinnati, U.S.A.
3. Bicer, A., \*Lee, Y., Capraro, R. M., **Capraro, M. M.,** Barroso, L. R., & \*Rugh, M. S. (2019, October).  *Examining the effects of STEM PBL on students' divergent thinking attitudes related to creative problem solving*.Proceedings in the 49th Frontiers in Education Conference (FIE), Cincinnati, U.S.A.
4. \*Lee, Y., Bicer, A., \*Kwon, H., \*Rugh, M. S., Capraro, R. M., **Capraro, M. M.,** & Barroso, L. R. (2019, October). Post-secondary ready: Does the STEM curriculum matter. *Proceedings in the 49th Frontiers in Education Conference* (FIE), Cincinnati, U.S.A.
5. \*Vela, K. N., \*Caldwell, C., Capraro, R. M., & **Capraro, M. M.** (2019, October). *The nexus of confidence, STEM, and engineering projects.* Paper presented at the 49th Frontiers in Education Conference (FIE), Cincinnati, U.S.A
6. \*Vela, K. N., \*Bevan, D., \*\*\*Caldwell, C., Capraro, R. M., **Capraro, M. M.,** & \*Lee, Y. (2019). STEM project-based learning activities: Opportunities to engage in creative mathematical thinking? In M. Nolte (Ed.), *Including the Highly Gifted and Creative Students – Current Ideas and Future Directions. International Conference on Mathematical Creativity and Giftedness*(pp. 215-221).
7. \*Lee, Y., Capraro, R. M., **Capraro, M. M.,** \*Vela, K. N., \*Bevan, D., \*\*\*Caldwell, C. (2019). Students' conceptions of mathematical creative thinking and critical thinking in STEM PBL activities. In M. Nolte (Ed.), *Including the Highly Gifted and Creative Students – Current Ideas and Future Directions. International Conference on Mathematical Creativity and Giftedness*(pp. 197-201).
8. **Capraro, M. M**., Vela, K. N., Caldwell, C., Bevan, D., Lee, Y., & Capraro, R. M. (2019). Mathematizing creative STEM PBL activities. In M. Nolte (Ed.), *Including the Highly Gifted and Creative Students – Current Ideas and Future Directions. International Conference on Mathematical Creativity and Giftedness*(pp. 336-339).
9. \*Calabrese, J. E., \*Williams, A. M., & **Capraro, M. M.** (2019, August). *Problem-posing strategies: Showcasing elementary student responses.* Proceedings of the International Symposium on Elementary Mathematics Teaching (pp. 105-113). Prague, Czech Republic: Charles University Press.
10. \*Bevan, D., \*Williams, A. M., & **Capraro, M. M.** (2019, August). *Strike a pose: The impact of problem posing on elementary students’ mathematical attitude and achievement.* Proceedings of the International Symposium on Elementary Mathematics Teaching. (pp. 80-88). Prague, Czech Republic: Charles University Press.
11. \*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. In *Proceedings of the 48th annual IEEE Frontiers in Education Conference (FIE)* (pp. 1-8). Piscataway, NJ. IEEE. (IF = .159, SJR .220).
12. \*Fidai, A., Barroso, L. R., **Capraro, M. M**., & Capraro, R. M. (2018, October). Can building an electric bicycle build an engineering identity? In *Proceedings of the 48th annual IEEE Frontiers in Education Conference (FIE)* (pp. 1-5). Piscataway, NJ. IEEE. (IF = .159, SJR .220).
13. \*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*. In *Proceedings of the 48th annual IEEE Frontiers in Education Conference (FIE)*. IEEE, Piscataway, NJ. (IF = .159, SJR=.220).
14. 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*.* In *Proceedings of the 48th annual IEEE Frontiers in Education Conference (FIE)*. IEEEE, Piscatawy, NJ. (IF = .159, SJR .220).
15. Bicer, A., Nite, S. B., Capraro, R. M., **Capraro, M. M.,** & Barroso, L. R. (2017, October). Moving from STEM to STEAM: The effects of informal STEM learning on students’ creativity and problem solving skills with 3D printing. Proceedings in the *IEEE Frontiers in Education Conference: The Crossroads of Engineering and Business.* Indianapolis, IN (.159 impact factor SCOPUS.com)
16. **Capraro, M. M**., Capraro, R. M., & De Miranda, M. (2017, March). *The hidden supports of high school engineering and technology science fair winners.* Paper presented and published at the seventy-ninth conference of the International Technology and Engineering Educators Association, Dallas, TX. Retrieved from [https://www.iteea.org/39488.aspx](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.iteea.org_39488.aspx&d=DwMFAg&c=ODFT-G5SujMiGrKuoJJjVg&r=Vo7zFR3XCkmpyWlwXHk6mVd1Pqu9x4RasKyDJWurwJA&m=sKKEXYqmuKvoG-ev_Tp_8ww1PtY7BgMDwsnwKvVjDH8&s=W41NZ7rI7pZRfkzW9CRPLAH6fy-iYh4yJxhQko1Yj8g&e=)
17. \*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. *Proceedings of the 2016 IEEE Frontiers in Education Conference: The Crossroads of Engineering and Business*. Erie, PA (.159 impact factor SCOPUS.com)
18. Capraro, R. M., Barroso, L. R., **Capraro**, **M. M.,** S. B. Nite, S. B., & \*Brooks, C. (2016). Impact for female students of an integrated STEM PBL summer curriculum on content knowledge mastery and post-secondary matriculation.  Proceedings of the *46th Annual Frontiers in Education Conference (FIE), 2016*. Erie, PA.
19. Barroso, L. R., Nite, S. B., Morgan, J. R., \*Bicer, A., Capraro, R. M., & **Capraro, M. M.** (2016). *Using the engineering design process as the structure for project-based learning: An informal STEM activity on bridge-building*. Proceedings of the 6th IEEE Integrated STEM Education Conference (ISEC '16), Princeton University.
20. Nite, S. B., Morgan, J., Allen, G. D., Capraro, R. M., & **Capraro, M. M.** (2015, December). Effective technology for a calculus bridge program: Bringing education home. In A. Oo, A. Patel, T. Hilditch, & S. Chandran. *Proceedings of the 26th Annual Conference of the Australasian Association for Engineering Education*.  Australasian Association for Engineering Education Conference: Blended Design and Project Based Learning: A future for Engineering Education, Geelong, Australia: School of Engineering, Deakin University, Victoria, Australia.
21. **Capraro, M. M.,** Nite, S., \*Kopparla, M., Capraro, R. M., Morgan, J., & Barroso, L. (2015, October). Appropriate technology in STEM education: Using a rubric to assess iPad apps. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2015* (pp. 1584-1590). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
22. Nite, S., \*Bicer, A., \*Reeves, L., Barroso, L. & **Capraro, M. M**. (2015, October). 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. 384-390). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
23. **Capraro, M. M.,** \*LeBlanc, J., Stuessy, C., & Capraro R. M. (2015, October). Identifying researchable topics for an EdD record of study. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2015* (pp. 477-482). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
24. Nite, S. B., Allen, G. D., Pilant, M. Capraro, R. M., **Capraro, M. M.,** & Morgan, J. (2015, October). A bridge to engineering: A personalized precalculus (bridge) program. In *Proceedings of the Frontiers in Education 2015: Launching a New Vision in Engineering Education* (pp. 2053-2058). El Paso, TX: IEEE.
25. \*Boedeker, P., Capraro, R. M., **Capraro, M. M.,** & Nite, S. (2015, October). Women in STEM: The impact of STEM PBL implementation on performance, attrition, and course choice of women. In *Proceedings of the Frontiers in Education 2015: Launching a New Vision in Engineering Education* (pp. 952-959). El Paso, TX: IEEE.
26. \*Bicer, A., \*Boedeker, P., \*Kopparla, M., Capraro, R. M., & **Capraro, M. 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.
27. \*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.
28. Slough, S., Sampson, P., Capraro, R., & **Capraro, M. M**. (2015, June). Making thinking visible in mathematics though technology. In S. Carliner, C. Fulford, & N. Ostashewski (Eds.), *Proceedings of EdMedia:World Conference on Educational Media and Technology 2015* (pp. 1001-1006). Chesapeake, VA: AACE.
29. Morgan, J., Capraro, R. M., **Capraro, M. M.,** & Nite, S. B. (2015, June). Increasing the STEM pipeline: Impact of a multi-faceted STEM organization. In QScienceProceedings. *World Congress on Engineering Education, 2014, 23.* <http://dx.doi.org/10.5339/qproc.2015.wcee2014.23>. (DOI: 10.5339/qproc.2015.wcee2014.23)
30. Morgan, J., Nite, S. B., Allen, G. D., **Capraro, M. M.,** Capraro, R. M., & Pilant, M. (2015, April). Improving engineering calculus success through a summer program. In C. A. Shoniregun & G. A. Akmayeva. *IICE-2015 Proceedings*. Ireland International Conference on Education, Dublin, Ireland: Infonomics Society.
31. Nite, S. B., Morgan, J., Capraro, R. M., Allen, G. D., & **Capraro, M. M.** (2014, December). Improving success in engineering calculus: Design of a bridge program. In A. Bainbridge-Smith, Z. Qi, & G. Gupta. *Proceedings of the 25th Annual Conference of the Australasian Association for Engineering Education*. Australasian Association for Engineering Education Conference: Engineering the Knowledge Economy: Collaboration, Engagement and Employability, Wellington, New Zealand: School of Engineering and Advanced Technology, Massey University.
32. **Capraro, M. M.,** Capraro, R. M., Morgan, J. R., Nite, S., & Peterson, C. A.(2014, October). Science, Technology, Engineering and Mathematics (STEM) Education: A longitudinal examination of secondary school intervention. *Proceedings in the 2014 Frontiers in Education Conference, Madrid, Spain*. (Full paper abstract number 1569906323).
33. Nite, S., **Capraro, M. M.,** Morgan, J. R., Peterson, C. A., & Capraro, R. M. (2014, October). *Pathways to engineering: Mathematics as a mediator of engineering succes*s. *Proceedings in the 2014 Frontiers in Education Conference, Madrid, Spain.* (Full paper abstract number 1569906331).
34. Morgan, J. R., Capraro, R. M., & **Capraro, M. M**. (2012, July). Science, technology, engineering and mathematics (STEM) education: Methods to improve PSAT scores using a STEM focus. In J. Björkqvist, M. Laakso, J. Roslöf, R. Tuohi, & Seppo Virtanen (Eds.). *Proceedings of the International Conference on Engineering Education* (ICEE-2012). Turku, Finland: Finland University of Turku.
35. \*Rosli, R., Gonzalez y Gonzalez, E., & **Capraro, M. M**. (2011, October). A case study of three preservice teachers on the units and unitizing of fractions. In L. R. Wiest, & T. Lamberg, (Eds.), *Proceedings of the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1682-1689). Reno, NV: University of Nevada. (GS = 2)
36. \*Rosli, R., Goldsby, D., & **Capraro, M. M.** (2011, October). Exploring preservice teachers’ abilities to pose division scenarios. In L. R. Wiest & T. Lamberg, (Eds.), *Proceedings of the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1125-1132). Reno, NV: University of Nevada.
37. \*Cetin, S. C., Corlu, M. S., **Capraro, M. M.,** & Capraro, R. M. (2011, July). A latent growth model: Longitudinal investigation of student achievement in mathematics and science. In B. Ubuz (Ed.). *Proceedings of the 35th Conference of the International Group for the Psychology of Mathematics Education* 1,440. Ankara, Turkey.
38. **Capraro, M. M**., Capraro, R. M., \*Rosli, R., \*Han, S. Y., Harbaugh, A., & Moch, P. L.  (2011, August). Teacher educator strategies for improving preservice teachers’ knowledge of fractions. In J. Novotna & H. Moraova (Eds.), *Proceedings of the International Symposium on Elementary Mathematics Teaching* (pp. 88-95)*.* Prague, Czech Republic: Charles University Press.
39. **Capraro, M. M.,** Capraro, R. M., Stearns, L., & Morgan, J. (2011, January). Development of an observation instrument: Looking at PBL classroom instruction. *Proceedings of the 9th annual Hawaii International Conference on Education* (pp. 3315-3330). Honolulu, HI.
40. **Capraro, M. M**., Capraro, R. M., Harbaugh, A., Cifarelli, V., Pugalee, D., & Lamm, M. (2009, August). Developing proportional reasoning across ideas of equality (Series of Workshops). In J. Novotna & H. Moraova (Eds.), *Proceedings of the International Symposium on Elementary Mathematics Teaching* (pp. 267-268)*.* Prague, Czech Republic: Charles University Press.
41. **Capraro, M. M.,** \*Rangel-Chavez, A., & Capraro, R. M. (2008, July). Effective preparation for teaching of algebra at the primary level. *Proceedings of the 11th meeting of the International Congress on Mathematical Education.* Monterrey, México.
42. **Capraro, M. M.,** Capraro, R. M., & Cifarelli, V. V. (2007, September). *What are students thinking as they solve open-ended mathematics problems?* In D. K. Pugalee, A. Rogerson, & A. Schnick (Eds.), *Proceedings of the ninth international conference of Mathematics Education in a Global Community* (pp. 124-128). Charlotte, NC: The University of North Carolina. (GS = 4)
43. Capraro, R. M., Kulm, G., \*\*Hammer, M., & **Capraro, M. M.** (2002, October). The origin and persistence of misconceptions in statistical thinking. In D. S. Mewborn, P. Sztajn, D. Y. White, H. G. Wiegel, R. L. Bryant, & K. Nooney (Eds.), *Proceedings of the twenty-fourth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education.* (Vol. 3. pp. 1339-1340). Athens, GA: ERIC Clearinghouse for Science, Mathematics, and Environmental Education. (GS = 5)

Co-authored with \*Doctoral,\*\*Master’s, \*\*\*Undergraduate students;

+indicates a publication accepted for publication during the time I was associate editor)

books, book chapters, encyclopedia entries and white papers

**Books**

1. \*An, S. A., & **Capraro, M. M.** (2011). *Music-mathematics integrated activities for elementary and middle-grade students.* Irvine, CA: Education for All. (GS = 6).

**Edited Books**

1. **Capraro, M. M**., \*Whitfield, J. G., \*Etchells, M. J., & Capraro, R. M. (Eds.). (2016). *A companion to interdisciplinary STEM project-based learning: For educators by educators* (2nd edition). Rotterdam, The Netherlands: Sense.
2. Capraro, R. M., **Capraro, M. M.,** & Morgan, J. (Eds.) (2013). *STEM Project-based learning: An integrated science, technology, engineering, and mathematics (STEM) approach* (2nd Ed.). Rotterdam, The Netherlands: Sense. (GS = 7)
3. **Capraro, M. M.,** Capraro, R. M., & Lewis, C. W. (Eds.). (2013). *Improving urban schools: Equity and access in k-16 STEM education for all students*. Charlotte, NC: Information Age.
4. Capraro, R. M., **Capraro, M. M**., Morgan, J., & Scheurich, J. (Eds.). (2010). *A companion to interdisciplinary STEM project-based learning: For teachers by teachers*. Rotterdam, The Netherlands: Sense.

**Book Chapters**

1. Foster, E. S., Gaytan, R., & **Capraro, M. M.** (2019). How to mentor and coach the leadership team. In D. Bevan, R. M. Capraro, M, A. Madson, & B. J. Irby (Eds.), *Coaching and mentoring: A handbook for leadership success* (pp. 53-70). College Station, TX: Aggie STEM and the Education Leadership Research Center.
2. \*Bicer, A., Nite, S. B., Capraro, R., M., & **Capraro, M., M.** (2016). Assessment techniques in mathematics: A literature review. In R. V. Nata (Ed.), *Progress in education*, Volume 39 (pp. 270-288). Haulage, NY: Nova Science Publishers.
3. \*Ketsetzi, A., & **Capraro, M. M**. (2016). Renewable energy sources (Chapter 17). In **Capraro, M. M**., \*Whitfield, J. G., \*Etchells, M. J., & Capraro, R. M. (Eds.). (2016). *A companion to interdisciplinary STEM project-based learning: For teachers by teachers*(2nd edition). Rotterdam, The Netherlands: Sense.
4. \*Lunsford, A., & **Capraro, M. M.** (2016). Qualitative and quantitative analysis of white powders and clear liquids (Chapter 20). In **Capraro, M. M**., \*Whitfield, J. G., \*Etchells, M. J., & Capraro, R. M. (Eds.). (2016). *A companion to interdisciplinary STEM project-based learning: For teachers by teachers* (2nd edition). Rotterdam, The Netherlands: Sense.
5. \*Rosli, R., **Capraro, M. M.,** Goldsby, D., Gonzalez y Gonzalez E., Onwuegbuzie, A. J., & Capraro, R. M. (2015). Middle grade preservice teachers’ mathematical problem solving and problem posing (Chapter 16). In F. M. Singer, N. Ellerton, & J. Cai (Eds.). *Mathematical problem posing: From research to effective practice* (pp. 333-354). New York, NY: Springer.
6. **Capraro, M.** M., & \*Jones, M. (2013). *Interdisc*iplinary STEM project-based learning. In R. M. Capraro, M. M. Capraro, & J. Morgan (Eds.) *Project-based learning: An integrated science, technology, engineering, and mathematics (STEM) approach* (2nd Ed., pp. 47-54). Rotterdam, The Netherlands: Sense. (GS = 7)
7. Muzhave, M., **Capraro, M. M.,** & Capraro, R. M. (2013). *The private sector, building STEM partnerships, and moving models forward*. In M. M. Capraro, R. M. Capraro, & C. W. Lewis (Eds.). Improving urban schools: Equity and access in k-16 STEM education for all students (pp. 25-38). Charlotte, NC: Information Age.
8. Capraro, R. M., & **Capraro, M. M.** (2010). Quantitative reporting practices in middle-grades research journals: Lessons to learn. In D. Hough (Ed.), *Research supporting middle grades practice* (pp. 79-89). Charlotte, NC: Information Age. (Best Paper- Reproduced as a chapter in edited volume).
9. \*\*\*Cetiner, N., & **Capraro, M. M.** (2010). Selling handmade items in a Turkish school kermes (Chapter 24). In R. M. Capraro, M. M. Capraro, J. Morgan, & J. Scheurich (Eds.), *A companion to interdisciplinary STEM project-based learning: For teachers by teachers* (pp. 213-222). Rotterdam, The Netherlands: Sense.
10. Boyd, D., & **Capraro, M. M.** (2010). Where do earthquakes occur? In R. M. Capraro, M. M. Capraro, J. Morgan, & J. Scheurich (Eds.), *A companion to interdisciplinary STEM project-based learning: For teachers by teachers* (pp. 3-10). Rotterdam, The Netherlands: Sense.
11. Paul, W., & **Capraro, M. M.** (2010). The depression now and then. In R. M. Capraro, M. M. Capraro, J. Morgan, & J. Scheurich (Eds.), *A companion to interdisciplinary STEM project-based learning: For teachers by teachers* (pp. 119-126). Rotterdam, The Netherlands: Sense.
12. **Capraro, M. M.** (2008). Interdisciplinary STEM project-based learning. In R. M. Capraro & S. W. Slough (Eds.), *Project-based learning: An integrated science, technology, engineering, and mathematics (STEM) approach* (p. 91-102). Rotterdam, The Netherlands: Sense.
13. **Capraro, M. M.,** English, S., \*\*Fisseler, S., \*Matteson, S., \*\*Grimi, E., \*\*Kotara, D., & \*Rangel, A. (2008). Looking into middle school mathematics classrooms: Lessons learned from research In G. Kulm (Ed.), *Teacher knowledge and practice in middle grades mathematics* (pp. 287-309). Rotterdam, The Netherlands: Sense

**Encyclopedia Entries**

1. \*Kopparla, M., & **Capraro, M. M.** (2016). STEM in middle grades. In S. B. Mertens, M. M. Caskey, & N. Flowers (Eds.), *The encyclopedia of middle grades education* (2nd edition, pp. ). Charlotte, NC: Information Age Publishing.
2. **Capraro, M. M.** (2014). Section editor for Mathematics In C. R. Reynolds, K. J. Vannest, & E. Fletcher-Janzen (Eds.), *Encyclopedia of special education: A reference for the education of children, adolescents, and adults with disabilities and other exceptional individuals* (4th Ed; pp.1622 – 1634). Hoboken, NJ: John Wiley & Sons.
3. **Capraro, M. M.** (2006). Variable deletion. In N. J. Salkind (Ed.), *The encyclopedia of measurement statistics* (pp. 1037-1041). Thousand Oaks, CA: Sage.
4. Capraro, M. M. (2006). Confidence intervals. In N. J. Salkind (Ed.), *The encyclopedia of measurement statistics* (pp. 177 – 178). Thousand Oaks, CA: Sage.

**White Papers**

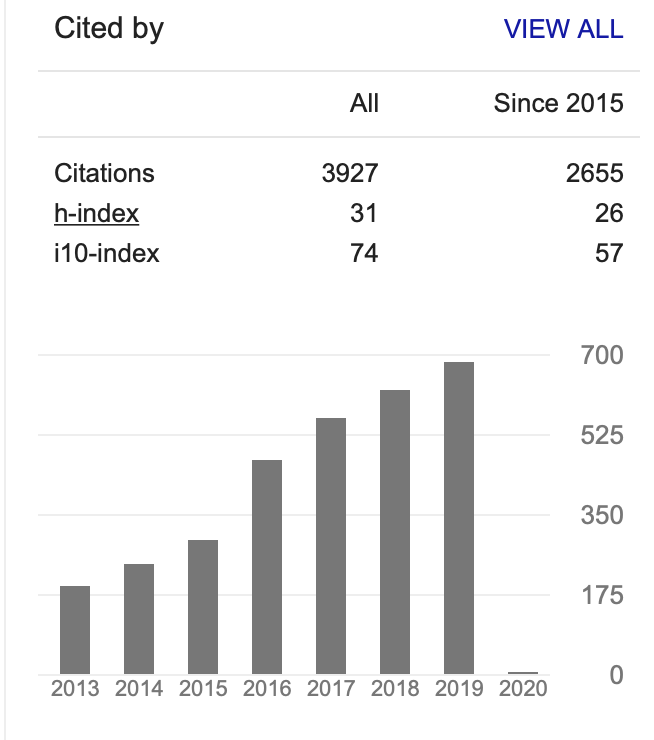
1. **Capraro, M. M.,** Capraro, R. M., Scheurich, J., Morgan, J. R., & Stearns, L. (2011). *Supporting teachers’ implementation of STEM project-based learning: An observation instrument, 1*(1) 1-4[White paper]. Retrieved from Texas A&M University Aggie STEM Center website: <http://aggiestem.tamu.edu/sites/aggiestem.tamu.edu/files/whitepapers/whitepaper3.pdf>
2. Capraro, R. M., Scheurich, J., **Capraro, M. M.,** Morgan, J. R., & Stearns, L. (2011). *STEM project-based learning professional development effects on student achievement in an urban district, 1*(2) 1-4[White paper]. Retrieved from Texas A&M University Aggie STEM Center website: http://aggiestem.tamu.edu/sites/aggiestem.tamu.edu/files/whitepapers/whitepaper2.pdf
3. Stearns, L. **Capraro, M. M.,** Capraro, R. M., Scheurich, J., & Morgan, J. R. (2011). *Access for all: Equity in advanced classes, 1*(3) 1-4[White paper]. Retrieved from Texas A&M University Aggie STEM Center website: http://aggiestem.tamu.edu/sites/aggiestem.tamu.edu/files/whitepapers/whitepaper4.pdf
4. Scheurich, J., Capraro, R. M., **Capraro, M. M.,** Morgan, J. R., & Stearns, L. (2011). *Reflections of high school teachers on implementing professional learning communities and project-based learning* *1*(4) 1-4 [White paper]. Retrieved from Texas A&M University Aggie STEM Center website: http://aggiestem.tamu.edu/sites/aggiestem.tamu.edu/files/whitepapers/whitepaper1.pdf

## Non-Peer Reviewed Articles

1. Bicer, A., Barroso, L. R., **Capraro, M. M.,** & Capraro, R. M. (2017). *Aggie STEM   
   through the decade.* Texas A&M University, College Station, TX: Aggie STEM.
2. Capraro, R. M., Capraro, M. M., Nite, S., & Morgan, J. (2014). STEM project based learning: A workforce enhancing model. *Tex’s CEO Magazine, May/June,* 16 -17.
3. Capraro, R. M., **Capraro, M. M.,** Rupley, W. H., & Slough, S. W. (2010). *The confluence of reading and mathematics strategies to enhance mathematical cognition.* Policy Brief (pp. 1-4). College Station, TX: Texas A&M University.
4. Capraro, R. M., **Capraro, M. M**., Dighans, K., & \*\*Hammer, M. (2002*). A revision protocol design: Item revision and impact analysis report* (pp. 1-104). College Station, TX: Texas A&M University, Teaching, Learning, and Culture.
5. Capraro, R. M., & **Capraro, M. M.,** & Wiggins, B. B. (2000). *An investigation of the effects gender, socioeconomic status, race, and grades on standardized test scores?* (pp. 1-25). (ERIC Document Reproduction Service No. ED444 867) (Cited by 12 – GS).
6. Capraro, R. M., & **Capraro, M. M**. (1998). Teacher talk. In C. Randall (Ed). *Middle school mathematics, course 1 and course 3*. Chicago, IL: Scott Foresman-Addison Wesley.

Submitted or Under Revision

1. Whitfield, J., Banerjee, M., Waxman, H., Scott, T. Capraro, M. M. (2019). Recruitment and retention of STEM teachers through the Noyce scholarship: A longitudinal study. Submitted 11/16/19 to Teaching and Teacher Education (TATE\_2019\_2085)
2. Quok, M., Vela, K., Rugh, M., Lincoln, Y. S., Capraro, R. M., & Capraro, M. M. (2019). *STEM words and their multiple meanings: The intricacies of asking a clarifying question*. Submitted revised manuscript on 10/27/19 to *Communication Education* (manuscript ID is RCED-19-Jul-0004.R1); revise and resubmit third time 12/4/19; 1/03/20.
3. Vela, K., Caldwell, C., Lohmann, Rodriquez, S., & **Capraro, M. M**. (2019). Female students’ p“her”ceptions of STEM disciplines and careers" Submitted to *International Journal of Science Education*. Manuscript ID TSED-2019-0775-A. Manuscript ID is TSED-2019-0775-A.
4. Bicer, A., Lee, Y., Capraro, R. M., & **Capraro, M. M**. *Mathematical creative self-efficacy: Problem posing as a measure of mathematical creativity*. Submitted to ESM (Special Issue – Problem posing – Dr. Jinfa Cai ) on 7/15/19, submitted to system on 11/1/19.
5. Lee, Y., Capraro, R. M., Capraro, M. M., & Bicer, A. *School and student factors and their influence on affective mathematics engagement.* Submitted to Mathematics Education Research Journal, 7/17/19; rejected working on for another journal 12/1/19.
6. Lee, Y., Capraro, R. M., Capraro, M. M., & Bicer, A. Cultural affordance and affective mathematics engagement in Korea and U.S. Submitted to *International Journal of Educational* 9/5/19. Research IJER\_2019\_1859;checked under review 12/1/19.
7. Calabrese, J. E., Kopparla, M. & **Capraro, M. M.** *Examining young children’s multiplication understanding through problem posing*. Submitted on 1/10/19 to *For the Learning of Mathematics. Submitted to Educational Studies –* Revise & Resubmit – *10/29/19.*
8. Bevan, D., & Capraro, M. M. (2019). STEM project-based learning fostering creativity and 21st century skills. Submitted to *Kappan Delta Pi Record; working on for resubmission to another journal.*
9. Mistima, S., Rosali, R., **Capraro, M. M**., & Siregar, N. S. (2018). The effect of science, technology, engineering and mathematics (STEM) program on students' achievement in mathematics: A meta-analysis. Manuscript # EDUREV\_2018\_292. Submitted 9/25/18 to *Journal of STEM Education.*
10. Judi, H. M., Rosli, R., & **Capraro, M. M**. (2017). Engaging students for meaningful statistics learning using gamification (IJILT-10-2017-0098). Submitted 10/2/17 to *International Journal of Information and Learning Technology.*
11. Younes, R. G., Capraro, R. M., **Capraro, M. M.,** Rosli, R., \*Lee, Y., \*Vela, K., & \*Bevan, D. (2020). Jack and Jill went up the hill: but Jill won both ways: the true story about differential academic achievement.  Submitted to International Journal of Innovation in Science and Mathematics Education. (1/6/20).
12. Mosqueda, E., Maldonado, S. I., **Capraro, M. M**., & Capraro, R. M. Systematized discrimination: The relationship between students’ English-language background, race-ethnicity, and college preparatory mathematics. Submitted to *Urban Education,* August 2019*. Manuscript #* UE-19-08-181



Professional Activities and Memberships

* Texas Council of Teachers of Mathematics

Kappa Delta Pi Educational Society

National Council of Teachers of Mathematics

School Science and Mathematics Association

Research Council on Mathematics Learning (2000-07)

American Mathematics Teacher Educators (2000-07)

Southwest Educational Research Association

American Educational Research Association

Advanced Trainings and Workshops Attended

2019 **Enhancing Your Skills in Qualitative Research** – FAC TAMU, College Station, TX.

2019 **Camtasia** Training for online courses. College Station, TX.

2019 **Engineering is Elementary** at the Boston Museum of Science – 3 days

2014 **MetaAnalysis Training**, American Educational Research Association, Philadelphia, PA. Workshop presented by Terri Pigott, Joshua Richards, & Ryan Williams.

2013 **Quality Matters,** Texas A&M. Workshop presented by Rene Mercer.

2013 **Introduction to MKT Training,** American Educational Research Association, San Francisco, CA. Workshop presented by Heather Hill & Geoffrey Phelps.

2012       **Propensity Score Matching using R**. American Educational Research Association, Vancouver, CA. Workshop presented by Drs. Haiyan Bai, Wei Pan, & Ning Rui.

2010 ***Multilevel SEM.*** College of Education-TAMU, Workshoppresented byDr. Ehri Ryu, Boston College.

2010 ***A Gentle Introduction to Meta-Analysis.*** Southwest Educational Research Workshop presented by Robin K. Henson & Tammi Vacha-Haase.

2009 ***An Introduction to Structural Equation Modeling.*** Southwest Educational Research Workshop presented by Vic Willson.

2008 ***Agile Mind.*** Austin Texas presented by Linda Chaput.

2008 ***The Qualitative Analysis of Video: Using Video and Audio as a Data Source.*** AERA Workshop, New York City presented by David Woods and Kay Uchiyama.

2007 ***Virtual Online Instructor Certification.*** Texas A&M Center for Distance Learning presented by Melissa Magnussen.

2007 ***Mixed Methods Data Analysis.*** Southwest Educational Research Association presented by Anthony Onwuegbuzie & John Slate.

2006 ***Qualitative Data Collection and Data Analysis***. Texas A&M University presented by Yvonna Lincoln.

2006 ***Quasi-Experimental Design Workshop***. Northwestern University. Co-Sponsored by Spencer Foundation and Department of Education presented by Thomas D. Cook & William Shadish.

2006 ***Hierarchical Linear Modeling for Applied Research***. Southwest Educational Research Association presented by Tasha Beretvas & Kyle Roberts.

2006 ***Mixed Methods Research Designs and Analysis***. Southwest Educational Research Association presented by Anthony Onwuegbuzie & John Slate.

2005 ***Introduction to******Hierarchical Linear Modeling***. Southwest Educational Research Association presented by Tasha Beretvas & Kyle Roberts.

2005 ***Factor Analytic Designs in Educational Research***. Southwest Educational Research Association presented by Bruce Thompson.

2004 ***Using S-PLUS: Basic Statistics to Simulations.*** American Educational Research Association presented byRandall E. Schumacker & J. Kyle Roberts.

2004 ***Structural Equation Modeling Faculty Collaborative****.* Texas A&M University presented by Victor Willson

2000-02 ***Faculty Statistics Refresher****.* Texas A&M University presented by Bruce Thompson

National/International Presentations

1. \*Lee, Y., Capraro, R. M., **Capraro, M. M.,** & Bicer, A. (2019, April, Accepted). Effects of motivation on students' affective mathematics engagement. Paper accepted to *the annual meeting of the American Educational Research Association*, San Francisco, CA.
2. \*Calabrese, J. E., Capraro, R. M., & **Capraro, M. M.** (2019, July, Accepted). *Using problem posing*

*during instruction on decimals.* Paper accepted for presentation at ICME-14, Shanghai, China.

1. \*Lee, Y., Capraro, R. M., **Capraro, M. M.,** \*Vela, K. N., \*Bevan, D., \*\*\*Caldwell, C. (2019, August). *Students' conceptions of mathematical creative thinking and critical thinking in STEM PBL activities*. Paper presented at the 11thInternational Conference on Mathematical Creativity and Giftedness. Hamburg, Germany.
2. Vela, K. N., Bevan, D., Caldwell, C., Capraro, R. M., **Capraro, M. M.,** & Lee, Y. (2019, August). *STEM project-based learning activities: Opportunities to engage in creative mathematical thinking?* Paper presented at the 11thInternational Conference on Mathematical Creativity and Giftedness. Hamburg, Germany.
3. **Capraro, M. M.,** Vela, K. N., Caldwell, C., Bevan, D., Lee, Y., & Capraro, R. M. (2019, August). *Mathematizing creative STEM PBL activities*. Workshop for the 11th International Conference on Mathematical Creativity and Giftedness, Hamburg, Germany.
4. \*Calabrese, J. E., \*Williams, A. M., & **Capraro, M. M.** (2019, August). *Problem-posing strategies: Showcasing elementary student responses.* Paper presented at the International Symposium on Elementary Mathematics Teaching. Charles University: Prague, Czech Republic.
5. \*Bevan, D., \*Williams, A. M., & **Capraro, M. M.** (2019, August). *Strike a pose: The impact of problem posing on elementary students’ mathematical attitude and achievement* Paper presented at the International Symposium on Elementary Mathematics Teaching. Charles University: Prague, Czech Republic.
6. \*Lee, Y., **Capraro, M. M., &** Capraro, R. M. (2019, June*). An exploration of students’ affective mathematics engagement.*Paper presented at the British Society for the Learning of Mathematics, Birmingham, UK.
7. \*\*\*Caldwell, C., \*Vela, K. N., Capraro, R. M., **Capraro, M. M**., \*Lee, Y., & \*Bevan, D. (2019, August). *Bridging the gap between mathematics and creativity through STEM PBLs*. Poster accepted for presentation at the 11th International Conference on Mathematical Creativity and Giftedness, Hamburg, Germany.
8. 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.
9. \*Vela, K. N., \*Bevan, D., \*Caldwell, C., Capraro, R. M., & **Capraro, M. M.** (2019, April). *Empowering girls, one STEM camp at a time.*Poster session presented the National Council of Teachers of Mathematics Research Conference, San Diego, California.
10. \*Rugh, M. S., Wang, X., Lin, J., Barroso, L. R., **Capraro, M. M**., & Capraro, R. M. (2019, April). Computer generated dynamic graphic organizer's effect on learning outcomes. Paper presented at the NCTM Research Conference, San Diego, CA.
11. **Capraro, M. M**., Capraro, R. M., Rosli, R., \*Kopparla, M., Kwon, H., \*Vela, K., \*Bevan, D., & \*Lee, Y. (2019, April). *Benefits of problem posing activities with elementary students and preservice teachers.* Paper presented at the annual meeting of the American Educational Research Association, Toronto, ON, Canada.
12. \*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.
13. \*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.
14. \*Whitfield, J., & **Capraro, M. M.** (2019, Feb). The impacts and perceived effects of scholarship programs to recruit STEM teachers. Presented at the annual meeting of the   Association of Mathematics Teacher Educators (AMTE) Twenty-Second Annual Conference, Orlando, FL.
15. **Capraro, M. M.,** Capraro, R. M. Bicer, A., \*Lee, Y., & \*Kopparla, M. (2018, November). *Problem posing in elementary classrooms*. Paper presented at the third biennial International Conference on Urban Education, Nassau, Bahamas.
16. \*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 2018 School Science and Mathematics Association Convention, Little Rock, AR.
17. \*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 annual meeting of the School Science and Mathematics Association Conference, Little Rock, AR.
18. Lyakhova, S., Neate, A., **Capraro, M. M**., & Capraro, R. M. (2018, April). *Mathematics outreach: Fun or rigorous, systematic or fragmented?* Paper presented at the British Congress of Mathematics Education, Warwick, UK.
19. Bicer, A., Capraro, R. M., **Capraro, M. M.,** & \*Lee, R. (2018, April). *A-meta analysis: Writing in mathematics classrooms*. Paper presented at theNCTM Research Conference, Washington, D.C.
20. \*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, DC.
21. \*Bicer, A., Capraro, R. M., Capraro, M. M., & Lee, Y. (2018, April). *College students reflect back on their inclusive STEM high school.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
22. 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.
23. Rosali, R., & **Capraro, M. M.** (2017, November). *Middle school preservice teachers' knowledge of division with a remainder*. Paper presented at the third international conference on education ICOED, Maleka, Malaysia.
24. Bicer, A., Nite, S. B., Capraro, R. M., Barroso , L. R.,   [**Capraro**](https://edas.info/showPerson.php?p=1042681&c=23020)**, M. M**.,  & [\*Lee](https://edas.info/showPerson.php?p=1490506&c=23020), Y. (2017, October). *Moving from STEM to STEAM: The effects of informal stem learning on students' creativity and problem solving skills with 3D printing*. Paper presented at the annual meeting of Frontiers in Education (FIE), Indianapolis, IN.
25. Viruru, R., **Capraro, M. M.,** Hill-Jackson, V., Matthews, S., Neshyba, M., & Capraro, R. M. (2017, June). *Developmental pathways to the record of study*. Paper presented at the Carnegie Project on the Educational Doctorate, Pittsburgh, PA.
26. 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.
27. Bicer, A., Capraro, R. M., **Capraro, M. M.,** & Nite, S. B. (2017, April). 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.
28. \*Wang, K., & **Capraro, M. M**. (2017, April). *A modeling result on concrete-pictorial-abstract representations.* Poster accepted for the annual American Educational Research Association (AERA), San Antonio, TX.
29. **Capraro, M. M**., Capraro, R. M., Bicer, A., Erdogan, N. & Oner, A. T. Capraro, M. M., Capraro, R. M., Bicer, A., Erdogan, N. & Oner, A. T. (2017, April). *Teacher of an integrated STEM language.* Paper presented at the annual meeting of National Association for Research in Science Teaching (NARST), San Antonio, TX.
30. Capraro, R. M., **Capraro, M. M.,** Erdogan, N., Corlu, S., Adiguzel, T., & Oner, A. T. (2017, April). *Developing scientific language through Interactive STEM.* Paper presented at the annual meeting of National Association for Research in Science Teaching (NARST), San Antonio, TX.
31. **Capraro, M. M.,** Capraro, R. M., & DeMiranda, M. (2017, March). *The hidden supports of high school engineering and technology science fair winners*. Paper presented at 2017 International Technology and Engineering Educators Association, Dallas, TX.
32. **Capraro, M. M.,** & Capraro, R. M. (2016, November). *Dynamic problem posing through reciprocal problem solving*. Paper presented at the Second Biennial International Conference on Urban Education, San Juan, PR.
33. Öner, A. T., Nite, S., **Capraro, M. M.,** Capraro, R. M., & Barroso, L. (2016, May). *Examination of students’ creativity in a STEM camp: Exploring STEAM.* International Conference on Education in Mathematics, Science and Technology (ICEMST), Bodrum, Turkey.
34. Barroso, L. R., Nite, S. B., Morgan, J. R., Bicer, A., Capraro, R. M., & **Capraro, M. M**. (2016, April). *Using the engineering design process as the structure for project-based learning: An informal STEM activity on bridge-building*.  6th IEEE Integrated STEM Education Conference (ISEC '16), Princeton University.
35. Erdogan, N., \*Oner, A. T., Capraro, R. M., & **Capraro, M. M.** (2016, April). *Examination of students’ attitudes towards STEM and interest in STEM careers: A STEM camp example*. Paper presented at the annual meeting of National Association for Research in Science Teaching (NARST), Baltimore, MD.
36. \*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 annual American Educational Research Association (AERA), Washington, D.C.
37. \*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 annual American Educational Research Association (AERA), Washington, DC.
38. Howard, T., Capraro, R. M., **Capraro, M. M.,** \*Ortiz, N. A., & Emdin, C. (2016, April). *The apparent proliferation of “separate but equal” in STEM environments*. Paper presented at the annual conference of the *American Educational Research Association Annual Meeting*. Washington, DC.
39. Nite, S. B., Morgan, J., Allen, G. D., Capraro, R. M., & **Capraro, M. M.** (2015, December). *Effective technology for a calculus bridge program: Bringing education home*. Presented at the Australasian Association for Engineering Education Conference 2015, Geelong, Australia.
40. **Capraro, M. M**., Nite, S. B., Capraro, R. M., Morgan, J., Barroso, L., & \*Kopparla, M. (2015, October). *Appropriate technology in STEM education: Using a rubric to assess iPad apps*. Paper presented at the E-Learn 2015: World Conference on E-Learning, Kona, Hawaii.
41. Nite, S. B., \*Bicer, A., 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.
42. \*Boedeker, P., Capraro, R. M., **Capraro, M. M.,** & Nite, S. (2015, October). *Women in STEM: The impact of STEM PBL implementation on performance, attrition, and course choice of women.* Paper presented at the annual meeting of Frontiers in Education (FIE), El Paso, TX.
43. \*Boedeker, P., \*Bicer, A., Capraro, R. M., **Capraro, M. M.,** Morgan, J., & Barroso, L. (2015, October). *STEM summer camp follow up–study: Correlations between PSAT, SAT, and matriculation.* Paper presented at the annual meeting of Frontiers in Education (FIE), El Paso, TX.
44. Nite, S. B., Morgan, J., Allen, G. D., Capraro, R. M., **Capraro, M. M.,** & Pilant, M. (2015, October). *A bridge to engineering: A personalized precalculus (bridge) program*. Paper presented at the Frontiers in Education 2015: Launching a New Vision in Engineering Education, El Paso, TX.
45. \*Bicer, A., \*Boedeker, P., \*Kopparla, M., Capraro, R.  M., & **Capraro, M. M.** (2015, October). *Comparing inclusive STEM schools that implemented PLTW curriculum with inclusive STEM schools that did not Implement PLTW*. Paper presented at the annual meeting of Frontiers in Education (FIE), El Paso, TX.
46. **Capraro, M. M.,** \*Leblanc, J., Capraro, R. M., & Stuessy, C. (2015, October*). Identifying researchable topics for an EdD record of study.* Paper presented at the World Conference on E-Learning, Kona, HI.
47. \*Hao, H., Lee, K., & **Capraro, M. M.** (2015, July). *Play with numbers from daily life: Number sense gaining progression and facilitating strategies of diverse young learners*. Paper presented at the 67th OMEP World Assembly and Conference, Washington, DC.
48. Morgan, J., Nite, S. B., Allen, G. D., **Capraro, M. M**., Capraro, R. M., & Pilant, M. (2015, April). *Improving engineering calculus success through a summer program*. Paper presented at the Ireland International Conference on Education, Dublin, Ireland.
49. **\***Erdogan, N., \*Oner, A. T., Capraro, R. M., & **Capraro, M. M.** (2015, April). *Effects of input and process factors on academic achievement in Texas public high schools.* Paper presented at the International Conference on Education in Mathematics, Science and Technology (ICEMST), Antalya, Turkey.
50. Nite, S. B., Allen, G. D., Morgan, J., Capraro, R. M., & **Capraro, M. M**. (2014, December). *Improving success in engineering calculus: Design of a bridge program.* Presented atAustralian Association for Engineering Education Conference. Wellington, New Zealand.
51. Morgan, J., Capraro, R. M., **Capraro, M. M.,** & Nite, S. B. (2014, November) *Increasing the STEM pipeline: Impact of a multi-faceted STEM organization.* Presented at Engineering Leaders Conference on Engineering Education, Doha, Qatar.
52. **Capraro, M. M.,** Capraro, R. M., Nite, S., Morgan, J. R., & Peterson, C. A. (2014, November). *Does inclusion of the arts in STEM project-based learning increase motivation for learning for urban students in informal settings?* Presented at the International Conference on Urban Education, Montego Bay, Jamaica.
53. **Capraro, M. M**., Capraro, R. M., Morgan, J. R., Nite, S., & Peterson, C. A. (2014, October). *Science, Technology, Engineering and Mathematics (STEM) Education: A longitudinal examination of secondary school intervention*. Presented at the 2014 Frontiers in Education Conference, Madrid, Spain. (Full paper abstract number 1569906323).
54. Nite, S., **Capraro, M. M.,** Morgan, J. R., Peterson, C. A., & Capraro, R. M. (2014, October). *Pathways to engineering: Mathematics as a mediator of engineering success.* Presented at the 2014 Frontiers in Education Conference, Madrid, Spain. (Full paper abstract number 1569906331).
55. \*Navruz, B., Bicer, A., Capraro, R. M., & **Capraro, M. M.** (2014, November). Examining students’ algebra, geometry, and statistics objective scores in both STEM and non-STEM schools. Paper presented at the annual meeting of the School Science and Mathematics Association. Jacksonville, FL.
56. \*Bicer, A., \*Navruz, B., Capraro, R. M., & **Capraro, M. M.** (2014, November). A longitudinal study: Comparing STEM schools to non-STEM schools in terms of high school students’ mathematics achievement. Paper presented at the annual meeting of the School Science and Mathematics Association. Jacksonville, FL.
57. \*Erdogan, N., \*Oner, A. T., Sahin, A., **Capraro, M. M.,** & Capraro, R. M. (2014, March). An exploratory study: How do extracurricular robotics activities change students' attitudes toward science? Paper presented at the annual conference of National Association for Research in Science Teaching, Pittsburgh, PA.
58. \*Erdogan, N., \*Oner, A. T., Sahin, A., Capraro, M. M., & Capraro, R. M. (2014, April). *Effects of input and process factors on academic achievement in Texas public high schools*. Paper presented at the annual meeting of American Educational Research Association (AERA), Philadelphia, PA.
59. Han, S. Y., Capraro, R. M., & **Capraro, M. M.** (2014, April). *The effect of science, technology, engineering, and mathematics project based learning on Hispanic and at-risk students’ mathematics achievement.* Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
60. Han. Y., Capraro, R. M., & **Capraro, M. M.** (2013, November). *The effect of science, technology, engineering and mathematics project based learning on students’ achievement: A longitudinal study.* Paper presented at the School Science and Mathematics Association, San Antonio, TX.
61. \*Rosli, R., \*Han, S., Capraro, R. M., & **Capraro, M. M.** (2013, November).  *Exploring preservice teachers’ computational and representational knowledge of content and teaching fractions.* Paper presented at the International Conference on Mathematics Education, Seoul Nat’l University, Seoul, Korea.
62. **Capraro, M. M**., Peterson, C. A, \*Oner, A. T., Nite, S., \*Bicer, A., Capraro, R. M., Morgan, J. R., & Sahin, A. (2013, November). Interactive Poster Presentation of *Aggie STEM summer camp PBLS*. Interactive Poster presented at the School Science and Mathematics Association, San Antonio, TX.
63. 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 Mathematics and Science Partnerships Program, Washington DC.
64. \*Erdogan, N., \*Oner, A. T., \*Cavlazoglu, B., Capraro, R. M., & **Capraro, M. M.** (2013, September). *A case study: The effect of STEM activities on students’ attitudes toward science*. Paper presented at the annual meeting of European Conference on Educational Research (ECER), Istanbul, Turkey.
65. \*Erdogan, N., \*Oner, A. T., Sahin, A., **Capraro, M. M.,** & Capraro, R. M. (2013, April). *What factors affect STEM schools’ math and science performance?* Paper presented at the annual meeting of the American Educational Research Association (AERA), San Francisco, CA.
66. \*Oner, A. T., & Erdogan, N., Sahin, A., **Capraro, M. M.,** & Capraro, R. M. (2013, April). *An investigation of state based data: What factors affects STEM schools’ math and science performance?* Paper presented at the annual meeting of American Education Researchers Association (AERA), San Francisco, CA.
67. **Capraro, M. M.,** Capraro, R. M., Morgan, J., Sahin, A., & \*Erdogan, N. (2013, April). *Long-term effects of science focused summer camp on SAT scores*. Paper presented at the annual conference of National Association for Research in Science Teaching (NARST), Rio Grande, Puerto Rico.
68. Sahin, A., Akgun, O. E., **\***Erdogan, N**.,** Oren, M., Capraro, R. M., & **Capraro, M. M**. (2013, April). *Exploring benefits of an international science olympiad: STEM career interests*. Paper presented at the annual conference of National Association for Research in Science Teaching (NARST), Rio Grande, Puerto Rico.
69. **Capraro, M. M.** (2012, November). *Understanding, questions, and representing mathematics: What makes a difference in middle school classrooms?* Paper presented at the 39th annual conference for Middle Level Education as part of the Focus on Research Symposium, Portland, OR.
70. Sahin, A., Eskicumali, A., \*Jones, M., Capraro, R. M., & **Capraro, M. M.** (2012, November). *The relationship between a multi-school charter system’s school culture and respective school’s state test achievement on mathematics and science*. Paper presented at the annual convention of School Science and Mathematics Association (SSMA), Birmingham, AL.
71. Sahin, A., Akgun, O. E., \*Erdogan, N., \*Cavlazoglu, B., \*\*Cetin, C. S., Capraro, R. M., & **Capraro, M. M.** (2012, November). *Effects of STEM-related activities on high school students’ motivation, learning strategy use, and self-regulation*. Paper presented at the annual meeting of School Science and Mathematics Association (SSMA), Birmingham, AL.
72. Sahin, A., Akgun, O. A., \*Erdogan, N., \*Cavlazoglu, B., \*Cetin, C. S., Capraro, R. M., & **Capraro, M. M.** (2012, November). *The students on the stage: Results of a new model to engage students in a successful afterschool STEM program.*Paper presented at the annual convention of School Science and Mathematics Association (SSMA), Birmingham, AL.
73. **Capraro, M. M.,** Capraro, R. M., Booth, E., Chaudhuri, N., & Dyer, J. (2012, Nov.).  *Developmental education: Which factors support success*.Paper presented at the annual convention of School Science and Mathematics Association (SSMA), Birmingham, AL.
74. \*Godwin, A. J., **Capraro, M. M.,** Capraro, R. M., & Rupley, W. H.  (2012, November). *(Reading + math) + interactive shared Readings = something* *sweet.* Paper presented at the Association of Literacy Educators and Researchers, Grand Rapids, MI.
75. \*Godwin, A. J., **Capraro, M. M.,** Capraro, R. M., & Rupley, W. H. (2012, December). *Conceptualizing: Reading and math getting to know each other.* Paper presented at the annual conference of the American Reading Forum, Sanibel Island, FL.
76. Capraro, R. M., **Capraro, M. M.,** Booth, E., Chaudhuri, N., & Dyer, J. (2012, November). *The bridging high school and college: Evaluating post secondary developmental education programs*.Paper presented at the annual convention of School Science and Mathematics Association (SSMA), Birmingham, AL.
77. Morgan, J, Capraro, R. M., & **Capraro, M. M.** (2012, August). *Science, technology, engineering and mathematics (STEM) education: Methods to improve PSAT scores using a STEM focus*. Paper presented at the International Conference on Engineering Education (ICEE-2012), Turku, Finland.
78. \*Han, S. Y., Yalvac, B., **Capraro, M. M.,** & Capraro, R. M. (2012, July). *In-service teachers’ implementation of and understanding from the project-based Learning (PBL) in science, technology, engineering, and mathematics (STEM) fields*. Paper presented at the 12th International Congress on Mathematical Education, Seoul, Korea. (GS = 2)
79. \*Han, S. Y., Capraro, R. M., & **Capraro, M. M.** (2012, July). *The effect of science, technology, engineering and mathematics (STEM) project based learning (PBL) on students’ achievement.* Paper presented at the 12th International Congress on Mathematical Education, Seoul, Korea.
80. \*Rosli, R., \*Han, S., Capraro, R. M., & **Capraro, M. M.** (2012, July*). Elementary preservice teachers pedagogical content knowledge of place value: A mixed analysis*. Paper presented at the 12th International Congress on Mathematical Education, Seoul, Korea.
81. Capraro, R. M., & **Capraro, M. M.** (2012, April). *Understanding the need for algebra teaching in K-7.* In symposium with Spielhagen, F., Aguirre, J., Bolling, M., Fennell, S., Maxwell-West, M., Moses, R., Ready or not: The promise of 8th grade algebra*.* Symposium presented at annual meeting of the National Council of Teachers of Mathematics research presession, Philadelphia, PA.
82. \*Erdogan, N., Ayar, M., Corlu, M. S., **Capraro, M. M.,** & Sahin, A. (2012, March). *Exploring a summer camp based on robotics activities prepared for underrepresented groups: A pilot study*. Paper presented annual conference of National Association for Research in Science Teaching (NARST), Indianapolis, IN.
83. \*Rosli, R., Goldsby, D., & **Capraro, M. M**. (2012, April). *A mixed analysis of middle school preservice teachers' mathematical problem solving and problem posing*. Paper presented at National Council of Teachers of Mathematics research presession, Philadelphia, PA.
84. Goldsby, D., \*Rosli, R., & **Capraro, M. M.** (2012, April). *Examining the effects of fraction instruction on elementary preservice teachers' knowledge and attitudes: A mixed analysis*. Paper presented at National Council of Teachers of Mathematics research presession, Philadelphia, PA.
85. \*\*Cetin, S. C., \*Corlu, M. S., **Capraro, M. M.,** & Capraro, R. M. (2011, November). A correlational study: Mathematics and science scores of underrepresented students in state achievement tests. Paper presented at the annual School Science and Mathematics Association (SSMA), Convention, Colorado Springs, CO.
86. **Capraro, M. M**., Capraro, R. M., & \*Oner, T. A. (2011, November*). Observations of STEM PBL teachers and their student’s scores.* Paper presented at the annual meeting of the School Science and Mathematics Association, Colorado Springs, CO.
87. \*\*\*Heyen, K., \*\*\*Hollowell, E., \*\*\*Kever, E., \*\*\*Mullins, D., \*\*\*Murphy, K., \*\*\*Taylor, D., \*\*\*Wayne, S., \*\*Easterling, J., \*Nite, S., **Capraro, M. M.,** & Capraro, R. M. (2011, August). Pr*oblem posing around the Czech Republic.* Poster presentation at the International Symposium on Elementary Mathematics Teaching. Charles University: Prague, Czech Republic.
88. \*\*Cetin, S. C., \*Corlu, M. S., **Capraro, M. M.,** & Capraro, R. M. (2011, June). *A latent growth model: Longitudinal investigation of student achievement in mathematics and science.* Poster presented at the thirty-fifth conference of the international group for the Psychology of Mathematics Education, Ankara, Turkey.
89. Scheurich, J., Morgan, J., \*Huggins, K., **Capraro, M. M.,** Avery, R., & Capraro, R. M. (2011, April). *Facilitating urban high school improvement in mathematics and science through a university STEM center-district-business collaboration.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
90. Capraro, R. M., Scheurich, J., Morgan, J., Avery, R., Yakman, G., \*Corlu, M. S., **Capraro, M. M.,** \*Han, S., Younes, R., & \*Huggins, K. (2011, April). *Building STEM centers for excellence in educational innovation.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
91. \*An, S., \*Hao, H., & **Capraro, M. M**. (2011, April). *Ideological representations in mathematics textbooks in China during the cultural revolution decade: A relational analysis of selected textbooks from 1966–1976.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
92. \*An, S., Lee, A., & **Capraro, M. M.** (2011, April). *Teaching geometry through music instrument making and designing.* Paper presented at the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
93. \*Corlu, S. M., Capraro, R. M., & **Capraro, M. M.** (2011, April). *Turkish student teachers’ attitudes towards mathematics and science integration*. Poster presented at the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
94. \*Rosli, R., \*Han, S.Y., **Capraro, M. M.,** & Capraro, R. M. (2011, April*). An analysis of preservice teachers’ pedagogical content knowledge of fractions.*  Paper presented at the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
95. **Capraro, M. M**., Capraro, R. M., Stearns, L., & Morgan, J. (2011, January). *A teacher observation instrument: Looking at PBL classroom instruction.* Presented at the 9th annual Hawaii International Conference on Education, Honolulu, HI.
96. Maher, C. A., **Capraro, M. M.,** Capraro, R. M., & Landis, J. (2011, January). *Tasks that elicit mathematical reasoning in students.* Presented at the 9th annual Hawaii International Conference on Education, Honolulu, HI.
97. Capraro, R. M., **Capraro, M. M.,** \*Younes, R., & \*Han, S. Y. (2010, November*). A longitudinal look at the equal sign through the lens of textbook authors.* Presented at the annual meeting of the School Science and Mathematics Association, Fort Myers, FL.
98. Capraro, R. M., **Capraro, M. M.,** \*Corlu, S. M., \*Younes, R., \*Han, S. Y., & Morgan, J. (2010, November). *The impact of sustained professional development in STEM project based learning on district outcome measures*. Paper presented at the annual meeting of the School Science and Mathematics Association, Fort Myers, FL.
99. Scheurich, J., **Capraro, M. M.,** Capraro, R. M., Morgan, J. R., Avery, R., & \*Huggins, K. (2010, October). Conversation: *A university STEM center facilitates urban high school academic improvement in math and science.* Paper presented at the annual meeting of the University Council of Educational Administration, New Orleans, LA.
100. **Capraro, M. M.** (2010, June). *Student cognition of relational equivalency: International perspectives.* Presented at the 13th international conference on Mathematics Education in China (ICME), Hangzhou Normal University, Hangzhou, China.
101. Schorr, R., Epstein, Y., Warner, L., Capraro, R. M., **Capraro, M. M.,** & Goldin, G. (2010, May). *Measuring engagement structures in middle grades urban mathematics classrooms.* Presented at the annual meeting of the American Educational Research Association, Denver, CO.
102. Piccolo, D., **Capraro, M. M.,** & Capraro, R. M. (2010, May). *Student teachers, general and specific pedagogical development within a mathematics milieu.* Presented at the annual meeting of the American Educational Research Association, Denver, CO.
103. **Capraro, M. M.,** & Capraro, R. M. (2009, October). *STEM project-based learning: An interactive motivational strategy for bridging content across classes*. Poster presented at the annual meeting of the School Science and Mathematics Association, Reno, NV.
104. **Capraro, M. M.** (2009, November). *Teaching fractions in middle grades mathematics.* In symposium M. Caskey, Spotlight on research presented at the 36th annual conference of the National Middle School Association, Indianapolis, IN.
105. Capraro, R. M., & **Capraro, M. M.** (2009, March). *NTSTEM (North Texas science, technology, engineering, and mathematics center)*. Paper presented at the U.S. Department of Education’s Mathematics and Science Partnerships (MSP) Program, Chicago, IL.
106. \*Piccolo, D., **Capraro, M. M.,** & Capraro, R. M. (2009, April). *Mentoring urban interns: Amalgamation of experiences in the formation of mathematics teachers.* Presented at the annual meeting of the American Educational Research Association, San Diego, CA.
107. **Capraro, M. M.,** \*Yetkiner, E., \*Ozel, S. Capraro, R., Ye, S., & Kim, H. (2009, April). *An international perspective on sixth graders’ interpretation of the equal sign*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
108. **Capraro, M. M**., (2008, October). *Publishing in SSMJ*. Session in *Pathways to publication* Symposium. Presented at the National Middle School Conference,Denver, CO.
109. **Capraro, M. M.,** \*Rangel-Chavez, A. F., & Capraro, R. M. (2008, July). *Effective preparation for teaching of algebra at the primary level*. Paper presented at the 32nd Conference of the International Group for the Psychology *of* Mathematics Education,Monterrey, Mexico. (GS = 6)
110. Zientek, L., **Capraro, M. M**., & Capraro, R. M. (2008, April). *Teacher education: A historical investigation of reporting practices*. In symposium with B. Thompson, T. Onwuegbuzie, J. Slate, E. Fuller, B. Berry, & K. Fries. Presented at the annual meeting of the American Educational Research Association, New York, NY.
111. \*Ding, M., \*Li, X., **Capraro, M. M.,** & Kulm, G. (2008, April). *A case study of teacher responses to doubling error and difficulty in learning equivalent fractions.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
112. Slate, J. Capraro, M. M., & Onwuegbuzie, A. J. (2008, April). *Students’ stories of their best and poorest K-5 teachers: A mixed data analysis****.*** Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
113. \*Capraro, R. M., **Capraro, M. M**., \*Zientek, L. R., \*Carter, T., & \*Taylor, J. (2007, November). *Prospective teachers’ attitudes and understandings of statistical concepts*. Paper presented at the annual meeting of the School Science and Mathematics Association, Indianapolis, IN.
114. \*Matteson, S., Capraro, R. M., **Capraro, M. M.,** & Lincoln, Y. (2007, November). *Developing a framework for middle school students’ problem solving justification schemes.* Paper presented at the annual meeting of the School Science and Mathematics Association, Indianapolis, IN.
115. **Capraro, M. M.,** Capraro, R. M., & Cifarelli, V. (2007, September). *What are students thinking as they solve problems?* Paper presented at the annual meeting of the International Conference for Mathematics Education in a Global Community, Charlotte, NC.
116. **Capraro, M. M**. (2007, April). Do field experiences make a difference in preservice teachers’ perceived level of competence? Session in E. Foster (Chair). *Impact of mentor training on perceptions of competence and pre-service/inservice mentors and administrators.* Symposium at the annual meeting of the American Educational Research Association, Chicago, IL.
117. **Capraro, M. M**. (2007, March). *Comparing ideas of equivalence cross-culturally.* Session in S. Matteson (Chair). *≥ to 30 years of research on the equals sign*. with C. Lubinski. A. Otto (Illinois State University), E. Knuth (University of Wisconsin-Madison), Symposium presented at the research presession of the 85th annual meeting of the National Council of Teachers of Mathematics, Atlanta, GA.
118. \*Ding, M., \*Li, X., **Capraro, M. M.,** & Capraro, R. M. (2007, March). *Do elementary children still interpret the “=” sign as an operator?* Presented at the research presession of the 85th annual meeting of the National Council of Teachers of Mathematics, Atlanta, GA.
119. **Capraro, M. M**., Cifarelli, V., Capraro, R. M., & \*Zientek, L. (2006, October). *What are students really thinking as they solve two types of problems?* Presented at the annual conference of School Science and Mathematics, Missoula, MT.
120. Capraro, R. M., **Capraro, M. M.,** \*Harbaugh, A., \*Carter, T. A., & \*Piccolo, D. (2006, April). *Rich mathematics classroom conversations: What are middle-school teachers and students actually saying*? Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
121. Capraro, R. M., & **Capraro, M. M.** (2006, April). *Underlying structures of mathematical representation: A theoretical perspective*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. (GS = 6)
122. \*Zientek, L., Capraro, R. M., & **Capraro, M. M**. (2006, April). *Research findings and issues for alternative certification routes and influences of recent federal legislation*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
123. Capraro, R. M., **Capraro, M. M.,** \*Harbaugh, A., \*Carter, T. A., & \*Piccolo, D. (2006, April). *Meaningful discourse in middle school: Linking research to practice.* Paper presented at the research presession of the 84th annual meeting of the National Council of Teachers of Mathematics, St. Louis, MO.
124. **Capraro, M. M**., Willson, V., Capraro, R. M., & Kulm, G. (2006). *Professional development by curriculum differences on student achievement*. Paper presented at the research presession of the 84th annual meeting of the National Council of Teachers of Mathematics, St. Louis, MO.
125. Capraro, R. M., Littlefield-Cook, J., \*Carter, T., **Capraro, M. M**., \*Matteson, S., & Lager, C. (2006, February). *Mathematical fluency.* Paper presented at the annual meeting of the Research Council on Mathematics Learning, Las Vegas, NV.
126. \*\*\*Hollums, J., & **Capraro, M. M.** (2006). *Questioning in the mathematics classroom.* Paper presented at the annual meeting of the Research Council on Mathematics Learning, Las Vegas, NV.
127. **Capraro, M. M.,** & Capraro, R. M, (2006, January). *Examining middle school teachers’ knowledge of number and algebra*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Tampa, FL.
128. \***Capraro, M. M.,** Capraro, R. M., & \*Piccolo, D. (2005, November). *What makes Tigger a tiger? (and not a leopard)*. Paper presented at the annual meeting of School Science and Mathematics Association, Fort Worth, TX.
129. Capraro, R. M., **Capraro, M. M**., \*\*Naiser, E. A., \*Carter, T., \*Harbaugh, A., & \*Romero, C. T. (2005, April). *Using middle grades student achievement data to support theoretical teacher quality measures*. Paper presented at the research pre-session of the National Council of Teachers of Mathematics, Anaheim, CA.
130. Kulm, G., **Capraro, M. M.,** \*Carter, T., \*Li, X., \*Sahin, A., \*You, Z., \*Zientek, L., English, S., & Jones, C. (2005, April). *How do students in the middle grades represent data?* Paper presented at the 83rd annual meeting of the National Council of Teachers of Mathematics, Anaheim, CA.
131. Capraro, M. M., Capraro, R. M., & \*Zientek, L. (2005, February). *Longitudinal influences of conceptual mathematics on teacher classroom enactments.* Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Dallas, TX.
132. Capraro, R. M., Willson, V., **Capraro, M. M**., & Wilson, L. (2004, April). *Effects of curriculum variation on structure in middle school mathematics.* Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
133. **Capraro, M. M.,** Capraro, R., DeBoer, G., Kulm, G., Manon, J., Morris, K., Roseman, J. E., Willson, V., & Wilson L. (2004, April). *Research issues in the improvement of mathematics teaching and learning through professional development.* Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA. (GS = 18)
134. Capraro, R. M., Kulm, G., Willson, V., **Capraro, M. M.,** \*Taylor, J., \*\*Sebesta, L., \*Sun, Y., & \*Harbaugh, A.  (2004, April). *Representational models for the teaching and learning of mathematics*. Paper presented at the research presession of the 82nd annual meeting of the National Council of Teachers of Mathematics, Philadelphia, PA.
135. Capraro, R. M., & **Capraro, M. M.** (2004, February). *Looking at representations through the eyes of middle grades students and their teachers*. Paper presented at the annual meeting of the Research Council on Mathematics Learning, Oklahoma City, OK.
136. **Capraro, M. M**., & Capraro, R. M. (2003, April). *Exploring the impact of the new APA 5th edition publication manual on the preferences of journal board members*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
137. Capraro, R. M., & **Capraro, M. M.** (2003, April). *Revising mathematics assessment items for alignment to curriculum standards*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
138. Allen, N., & **Capraro, M. M.** (2003, April). *Come play with us: Native American mathematics games*. Workshop presented at the 81st annual meeting of the National Council of Teachers of Mathematics, San. Antonio, TX.
139. **Capraro, M. M.,** & \*\*\*Maloof, C. (2003, April). *Far, far, away: Ride the measurement carpet across the curriculum*. Workshop presented at the 81st annual meeting of the National Council of Teachers of Mathematics, San. Antonio, TX.
140. **Capraro, M. M.** (2003, March). *Geometry standards: A comparison between the United States and China.* Paper presented at the Research Council on Mathematics Learning, Tempe, AZ.
141. Capraro, R. M., & **Capraro, M. M.** (2003, January). *Alternative certification: Measuring the impact on post-baccalaureate future mathematics teachers.* Paper presented at the annual meeting of the Association of Mathematics Teacher Educator, Atlanta, GA.
142. **Capraro, M. M.** (2003, January). *Electronic teaching portfolios: Technology skills + portfolio development = powerful preservice teachers.* Paper presented at the American Association of College Teacher Educators (AACTE), New Orleans, LA.
143. Capraro, R. M., Kulm, G., \*\*Hammer, M., & **Capraro, M. M**. (2002, October). *The origin and persistence of misconceptions in statistical thinking*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Athens, GA.
144. **Capraro, M. M.,** Kulm, G., & Capraro, R. M. (2002, October). *Middle grades misconceptions in statistical thinking*. Paper presented at the annual meeting of School Science and Mathematics Association, Rochester, NY.
145. Capraro, R. M., Kulm, G., & **Capraro, M. M.** (2002, April). *Investigating the complexity of middle grade students’ understanding of mathematical constructs.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
146. Kulm, G., Capraro, R. M., **Capraro, M. M.,** & \*\*Hastings, E. (2002, April). *Increasing student achievement: Building on ideas and promoting thinking about mathematics.* Paper presented at the research presession of the 80th annual meeting of the National Council of Teachers of Mathematics, Las Vegas, NV.
147. Capraro, R. M., An, S., & **Capraro, M. M.** (2002, April). *Multicultural math fun - learning with magic squares: Incidentally learning number sense, algebra, & analytical reasoning.* Paper presented at the 80th annual meeting of the National Council of Teachers of Mathematics, Las Vegas, NV.
148. Capraro, R. M., **Capraro, M. M**., & Kulm, G. (2002, March). *Measuring one factor for preservice teachers’ propensity toward teaching elementary/middle school mathematics: Pedagogical content knowledge*. Paper presented at the 29th annual meeting of Research Council on Mathematics Learning, Memphis, TN.
149. Capraro, R. M., **Capraro, M. M.,** Parker, D., Kulm, G., & Raulerson, T. (2002, February). *Conventional wisdom is wrong: Anyone cannot teach and teachers are not born.* Paper presented at the American Association for Colleges of Teacher Education, New York, NY. (GS = 6)
150. Kulm, G., Capraro, R. M., **Capraro, M. M.,** Burghardt, R., & Ford, K. (2001, April). *Teaching and learning mathematics with understanding in an era of accountability and high-stakes testing*. Paper presented at the research presession of the 79th annual meeting of the National Council of Teachers of Mathematics, Orlando, FL. (GS = 9)
151. Capraro, R. M., & **Capraro, M. M.** (1998, April*). Caution! 2-d, 3-d geometric construction underway!* Presented at the 76th annual meeting of the National Council of Teachers of Mathematics, Washington, DC.
152. Capraro, R. M., & **Capraro, M. M.** (1995, April), *Elementary algebra, my dear.* Workshop presented at the 73rd annual meeting of the National Council of Teachers of Mathematics, Boston, MA.

Regional, State, and Local Presentations

1. \*Rugh, M. S., Capraro, R. M., & **Capraro, M. M.** (2019, February). *Factors that influence deductive reasoning.* Paper presented to the annual meeting of the Southwest Educational Research Association (SERA) regional conference. San Antonio, TX.
2. \*Vela, K. N., \*\*\*Caldwell, C., \*\*\*Lohmann, E., \*\*\*Rodriguez, S., & **Capraro, M. M.** (2019, February). Females’ *p“her”ceptions of STEM disciplines and careers in single-gender and co-educational STEM camps.*Paper presented to the annual meeting of the Southwest Educational Research Association, San Antonio, Texas.
3. \*Calabrese, J. E., & **Capraro, M. M.** (2019, February*).  Posing potential: The impact of problem posing instruction on mathematics achievement.* Paper presented to the annual meeting of the Southwest Educational Research Association, San Antonio, Texas.
4. \*Whitfield, J., \*Banerjee, M., Waxman, H. C., Scott, T. P. & **Capraro, M. M.**(2018, Februar*y).* Reflections from Noyce scholars on their route to STEM teaching. Presented at the annual meeting of the Southwest Educational Research Association, New Orleans, LA.
5. \*Rugh, M. S., & **Capraro, M. M.** (2018, February). *The spin on fidget spinners*. Presented at the annual meeting of the Southwest Educational Research Association, New Orleans, LA.
6. **Capraro, M. M.,** \*Kopparla, M., \*Vela, K., \*\*\*Rice, D., \*Bevan, D., Bicer, A., Capraro, R. M., \*\*\*Caldwell, C., \*Kwon, J., \*Lee, R., & \*Martin, R. (2017, April). *Problem posing & solving.* Brown bag presentation at Texas A&M University, College Station, TX.
7. 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 the Southwestern Educational Research Association Conference, San Antonio, TX.
8. 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 the Southwestern Educational Research Association Conference, San Antonio, TX.
9. \*Hill, K. K., \*Foran, A. L., \*Reeves, L. G., & **Capraro, M. M.** (2016, February). *Effect of gender on student creativity*. Paper presented at the Southwest Educational Research Association Conference, New Orleans, LA.
10. \*Hyunkyung, K., & **Capraro, M. M.** (2016, February). *Does the use of 3D printing and design software increase student performance*. Paper presented at the Southwest Educational Research Association Conference, New Orleans, LA.
11. \*Ortiz, N., & **Capraro, M. M.** (2016, February). *Does it really matter: Exploring cultural relevance within a majority White classroom.* Paper presented at the Southwest Educational Research Association Conference, New Orleans, LA.
12. \*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 annual meeting of Southwest Educational Research Association, New Orleans, LA.
13. \*Oner, A. T., Capraro, R. M., & **Capraro, M. M**. (2016, February). *The effectiveness of the duration of the summer camp: Students’ STEM attitude*. Paper presented at the annual meeting of Southwest Educational Research Association, New Orleans, LA.
14. \*\*\*Martin, A., \*\*\*Monterrosa, T., \*\*\*Steiner, A., Capraro, R. M., Capraro, M. M., Morgan, J., Barroso, L, & Boedeker, P. J. (2015, March). *Fostering unconditional opportunities: Female persistence in STEM education in secondary education response.* Poster presented at the Climate Matters Conference, College Station, TX.
15. \*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.
16. \*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.
17. \*Oner, A. T., Nite, S., **Capraro, M. M.,** & Capraro, R. M. (2015, February). *The effect of 3D design on students’ belief about “A” of STEAM*. Paper presented at the Southwest Educational Research Association 38th annual meeting, San Antonio, TX.
18. \*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.
19. **Capraro, M. M**., Capraro, R., Morgan, J., \*\*\*Campos, I., \*\*\*Martin, A., & \*\*\*Cain, B. (2014, March). *Equity and access in K-12 STEM education for all*. Paper presented at the CEHD Conference: A Dialogue on Climate, Inclusion, and Respect, College Station, TX.
20. \*Navruz, B., \*Erdogan, N., **Capraro, M. M.,** & Capraro, R. M. (2014, February). *Examination of STEM students vs. Non-STEM Students’ mathematics and reading achievement: A longitudinal study.* Paper presented at the annual meeting of Southwest Educational Research Association (SERA), New Orleans, LA.
21. Han, S. Y**.**, Yalvac, B., **Capraro, M. M**., & Capraro, R. M. (2014, February). *In-service teachers’ implementation and understanding of project based learning in science, technology, engineering, and mathematics fields: A mixed Analysis.* Paper presented at the annual meeting of the Southwest Educational Research Association, New Orleans, LA
22. \*Navruz, B., \*Erdogan, N., Sahin, A., Capraro, R. M., & **Capraro, M. M**. (2014, February). *How do students do on math test when their schools turn into STEM?* Paper presented at the annual meeting of Southwest Educational Research Association (SERA), New Orleans, LA.
23. \*Bicer, A. \*Navruz, B., Perihan, C., **Capraro, M. M.,** & Capraro, R. M. (2014, February). *Higher-order confirmatory factor analysis*. Paper presented at the annual meeting of Southwest Educational Research Association (SERA), New Orleans, LA.
24. \*Bicer, A. **Capraro, M. M.,** & Capraro, R. M. (2014, February). *Distribution free vs. non-distribution free factor analysis methods.* Paper presented at the annual meeting of Southwest Educational Research Association (SERA), New Orleans, LA.
25. \*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 the annual meeting of Southwest Educational Research Association (SERA), New Orleans, LA.
26. Sahin, A., Akgun, O. E., \*Erdogan, N., Capraro, R. M., **Capraro, M. M**., & \*Oner, T. (2013). *Effects of a summer camp on students’ motivational factors and learning strategies*. Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.
27. \*Oner, A. T., & **Capraro, M. M.** (2013, February). *Effects of robotics and mega-structures on spatial ability and attitudes towards STEM.* Paper presented the annual meeting of Southwest Educational Research Association (SERA), San Antonio, TX.
28. Sahin, A., **Capraro, M. M.,** & Capraro, R. M. (2012). *The impact of participation in STEM after school clubs and science fair competitions on post-secondary matriculation.*Paper presented at the annual conference of Southwest Educational Research Association (SERA), New Orleans, LA.
29. **Capraro, M. M.** (2012, June). *Exploring number sense through literature*. Presentation at Making Awesome Things Happen, Austin Community College, Austin, TX.
30. Capraro, R. M., & **Capraro, M. M.** (2012, June). MATH: *Putting the “awesome” back in*. Keynote speaker at Making Awesome Things Happen, Austin Community College. Austin, TX.
31. **Capraro, M. M**., Capraro, R. M., Morgan, J., & Stearns, L. M., (2012, January). *The Aggie STEM center.* Presented at the STEM Educational Conference, Galveston, TX.
32. \*Rosli, R., \*Han, S., **Capraro, M. M.,** & Capraro, R. M. (2011, February). *Pre teachers' knowledge for teaching fractions.* Presented at annual meeting of the Southwest Educational Research Association, San Antonio, TX.
33. Capraro, R. M., **Capraro, M. M.,** \*Younes, R., & \*Han, S. Y.(2011, February).*Propensity score matching reveals differences in sustained professional development***.** Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.
34. Capraro, R. M., **Capraro, M. M**., \*Younes, R., \*Han, S. Y., & \*\*\*Garner, K. (2010, February). *A meta-analysis of equivalence in K-12 textbooks.* Paper presented at the 33rd annual meeting of the Southwest Educational Research Association, New Orleans, LA.
35. Scheurich, J., Capraro, R. M., Morgan, J., &**Capraro, M. M.**(2009, October). *Aggie STEM – A suite of services for educators implementing STEM activities.* Paper presented at the annual meeting of the Texas Association of School Administrators and Texas Association of School Boards, Houston, TX.
36. Scheurich, J., Capraro, R. M., Morgan, J., & **Capraro, M. M.** (2009, October*).  The STEM center at Texas A&M university: What can we do for you?* Paper presented at the annual meeting of the Texas Association of School Administrators and Texas Association of School Boards, Houston, TX.
37. \*Ma, T., \*Rangel, A. F., & **Capraro, M. M.** (2009, March). *Exploration of pre-service teachers’ beliefs and performances in solving open-ended problems.* Paper presented at the Texas A&M Student Research Week, College Station, TX.
38. **Capraro, M. M**. (2009, February). *Tensions influencing opportunity to learn about mathematical equivalence.* Paper presented at the 32nd annual meeting of the Southwest Educational Research Association, San Antonio, TX.
39. \*An, S., \*Ma, T., & **Capraro, M. M**. (2009, February). *Music activity’s effects on preservice math teachers’ attitude and belief. P*aper presented at the 32nd annual meeting of the Southwest Educational Research Association, San Antonio, TX.
40. \*Ma, T., \*Rangel, A. F., & **Capraro, M. M.**(2009, February). *How to encourage pre-service teachers to obtain multiple solutions.* Paper presented at the 32nd annual meeting of the Southwest Educational Research Association, San Antonio, TX.
41. Capraro, R. M., **Yetkiner, E. Z.,** Ozel, S., \*Corlu, S. M., **Capraro, M. M**., & Kim, H. G*.* (2009, February). *International comparison of the equal sign.* Paper presented at the 32nd annual meeting of the Southwest Educational Research Association, San Antonio, TX.
42. \*Zientek, L., \*Yetkiner, Z. E., **Capraro, M. M.,** & Capraro, R. (2008, February). *Reporting practice in teacher education: The importance of structure coefficients*. Paper presented at the 31st annual meeting of the Southwest Educational Research Association, New Orleans, LA.
43. Parker, D., Donahue, M., Stillisano, J., **Capraro, M. M**., Goldsby, D., \*Yetkiner, Z. E., & Capraro, R. M. (2007, November). *Communication and representations.* Paper presented at the National Council of Teachers of Mathematics regional conference, Houston, TX.
44. Stillisano, J., **Capraro, M. M.,** Goldsby, D., Parker, D., \*Yetkiner, Z. E., & Capraro, R. M. (2007, October). *Math TEKS connections.* Paper presented at the Charles A. Dana Center's annual mathematics and science higher education conference, Austin, TX.
45. **Capraro, M. M.** (chair), \*Matteson, S., Capraro, R. M., \*Ding, M., & \*Li, X. (2007, February). *Representational implications for middle grades equivalence.* Symposium presented at the 30th annual meeting of the Southwest Educational Research Association, San Antonio, TX.
46. **Capraro, M. M.,** \*Piccolo, D., Ross, A., \*Sahin, A., \*\*Louder, H., & Capraro, R. M. (2006, February). *Using middle grades student achievement data to support theoretical teacher quality measures*. Paper presented at the 29th annual meeting of the Southwest Educational Research Association, Austin, TX.
47. Capraro, R. M., Willson, V., & **Capraro, M. M.** (2005, February). *Effects of curriculum variation on structure in middle school mathematics.* Paper presented at the Texas A&M College of Education Research Symposium, College Station, TX.
48. **Capraro, M. M.,** & Capraro, R. M. (2005, February). *Persistence of conceptual mathematics teaching.* Paper presented at the 28th annual meeting of the Southwest Educational Research Association, New Orleans, LA.
49. **Capraro, M. M**. (2004, February). *Professional teaching portfolios and teaching artifacts: Do they provide insightful information about preservice teachers?* Paper presented at the 27th annual meeting of the Southwest Educational Research Association, Dallas, TX.
50. **Capraro, M. M**. (2003, February). *Using confirmatory factor analysis (CFA) to support the constructs of middle school algebra.* Paper presented at the 26th annual meeting of the Southwest Educational Research Association, San Antonio, TX.
51. **Capraro, M. M.,** Capraro, R. M., & Pederson, S. (2003, February). *Symposium demonstrating multivariate applications using teacher education data*.   
    Symposium presented at the 26th annual meeting of the Southwest Educational Research Association, San Antonio, TX.
52. **Capraro, M. M**. (2002, February). *An introduction to confidence intervals for both statistical estimates and effect sizes.* Paper presented at the 25th annual meeting of the Southwest Educational Research Association, Austin, TX.
53. Capraro, R. M., & **Capraro, M. M.** (February, 2002). *In light of the TAAS middle school geometry misconceptions.* Workshop presented at Sam Houston University, Huntsville, TX.
54. Capraro, R. M., **Capraro, M. M**., & Lamb, C. E. (2001, November). *Digital video: Watch me do what I say!* Paper presented at Fall Teacher Education Conference of the Consortium of State Organizations for Texas Teacher Education, Corpus Christi, TX. (ERIC Document Reproduction Service No. ED459697) (GS = 7)
55. Henson, R., Capraro, R. M., & **Capraro, M. M**. (2001, November). *Reporting practice and use of exploratory factor analysis in educational research journals*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Little Rock, AK.
56. **Capraro, M. M**. (2001, November)*. Construct validation and a more parsimonious mathematics beliefs scales*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Little Rock, AK. (GS = 6)
57. Capraro, R. M., & **Capraro, M. M.** (2001, February). *Displaying data for visual analysis*. Workshop presented at Sam Houston University, Huntsville, TX.
58. Scott, J., Martin, N., **Capraro, M. M.,** & Capraro, R. M. (2001, February). *When the dissertation is finished . . . getting a job in higher education.* Panel discussion atthe annual meeting of the Southwest Educational Research Association, New Orleans, LA.
59. **Capraro, M. M**., Capraro, R. M., & Henson, R. (2001, February). *Measurement error of scores on the mathematics anxiety rating scale across studies.* Paper presented at the annual meeting Southwest Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED452207)
60. **Capraro, M. M**. (2000, November). *Bigger is not better: Seeking parsimony in canonical correlation analysis via variable deletion strategies*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Mobile, AL. (ERIC Document Reproduction Service No. ED449225)
61. **Capraro, M. M**. (2000, February). *Defining constructivism: How teacher beliefs influence the problem solving skills of their students.* Paper presented at the annual meeting Southwest Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED452204)
62. **Capraro, M. M.** (2000, January). *Comparing the effects of gender, socio-economic status, race and grades on standardized test scores.* Paper presented at the annual meeting of the Southwest Educational Research Association. New Orleans, LA. (ERIC Document Reproduction Service No. ED444867)
63. Capraro, R. M., & **Capraro, M. M.** (1999, December), *Thematic dinosaur unit using technology.* Workshop presented at the Mississippi Reading Association, Biloxi, MS.
64. Capraro, R. M., & **Capraro, M. M**. (1999, July*). Creating a theme: Dinosaurs across reading, mathematics, and science.* Workshop presented at the 60th annual USM Reading Conference, Hattiesburg, MS.
65. Capraro, R. M., & **Capraro, M. M.** (1999, July), *Using* t*echnology to teach reading and make connections to science, social studies, and mathematics for elementary students*. Workshop presented at the 59th annual USM Reading Conference, Hattiesburg, MS.
66. Capraro, R. M., & **Capraro, M. M.** (1998, July*). Meaningfully integrating reading and algebra concepts.* Workshop presented at the 58th annual USM Reading Conference, Hattiesburg, MS.
67. Capraro, R. M., & **Capraro, M. M.** (1998, January). *Preparing teachers to teach the sunshine state standards in geometry*. Workshop presented at the Sheridan Vocational School. Broward County Public Schools, Fort Lauderdale, FL.
68. **Capraro, M. M**. (1998, January). *Fishy fish facts*. Workshop presented at the Dade County Mathematics & Science Conference, Miami, FL.
69. Capraro, R. M., & **Capraro, M. M.** (1998, October). *Technologically teaching algebra to elementary students.* Workshop presented at the annual meeting of the Florida Council of Teachers of Mathematics, Orlando, FL.
70. Capraro, R. M., & **Capraro, M. M.** (1997, October*). 2-d, 3-d and all that’s geometry.* Workshop presented at the annual meeting of the Florida Council of Teachers of Mathematics, Ft. Lauderdale, FL.
71. Capraro, R. M., & **Capraro, M. M.** (1996, October). *Algebra concepts for teachers*. Workshop presented at the annual meeting of the Florida Council of Teachers of Mathematics annual meeting, Ft. Myers, FL.
72. Capraro, R. M., & **Capraro, M. M.** (1995, January*). Geometry concepts for teachers.*  Workshop presented at the Dade County Mathematics Conference, Miami, FL.
73. Capraro, R. M., & **Capraro, M. M.** (October, 1995). A*lgebra my dear.* Workshop presented at the annual meeting of the Florida Council of Teachers of Mathematics, Palm Beach Gardens, FL.
74. Capraro, R. M., & **Capraro, M. M.** (1994, January*). Standards based instruction and the competency based curriculum.* Workshop presented at the Dade County Mathematics Conference, Miami, FL.
75. Capraro, R. M., & **Capraro, M. M.** (1989, June). *The model school.* SlidePresentation – Newark, NJ. Miami–Dade County Public Schools, Miami, FL.

Invited Presentations

**National/International**

1. **Capraro, M. M.,** Capraro, R. M., Bevan, D., & Rugh, M. (2019, February). *STEM Leadership* *Mentorship and Coaching.* Presented at the STEM4Innovatiton Conference, College Station, TX.
2. **Capraro, M. M.,** & Capraro, R. M. (2017, October). *Outreach – facilitating a research, teaching, and service agenda.*Invited address. University of Swansea: Swansea, Wales.
3. **Capraro, M. M,** Capraro, R. M., Bevan, D., & Vela, K. N. (2018, April).*Supporting students in a summer bridge program*. Workshop for Schreiner University, Kerrville, TX.
4. Capraro, R. M., & **Capraro, M. M**. (2016, December). *The nexus of ethics and STEM*. Invited address STEM Ethics Summit, Doha, Qatar.
5. **Capraro, M. M.** (2016, May). *Fireside chat with grad students: Becoming a teacher educator*. International Conference on Education in Mathematics, Science and Technology (ICEMST), Bodrum, Turkey.
6. **Capraro, M. M.** (2016, May). *Teaching for STEM learning*. Commencement speech Bahçeşehir Üniversitesi, Istanbul, Turkey.
7. Capraro, R. M. Corlu, M. S**., Capraro, M. M.,** Adiguzel, T., & Lavicza, Z. (2016, May). Panel Discussion: *Exploring STEM initiatives and the evolving condition*. International Conference on Education in Mathematics, Science and Technology (ICEMST), Bodrum, Turkey.
8. **Capraro, M. M.,** & Capraro, R. M. (2013, April). *Lessons learned from the development and trials with STEM PBL*. Rutgers State University of NJ, New Brunswick, NJ.
9. **Capraro, M. M.** (2009, November). *Pathways to publication*. Invited as part of a symposium presented at the 37th annual conference of the National Middle School Association, Indianapolis, IN.
10. **Capraro, M. M**., Capraro, R. M., Harbaugh, A., Cifarelli, V., Pugalee, D., & Lamm, M. (2009, August). *Developing proportional reasoning across ideas of equality.* Invited address International Symposia Elementary Maths Teaching, Charles University, Prague, CZ.

**State**

1. Schreiner University (2018, April)
2. Capraro, M. M., & Capraro, R. M., (2015, May). Inspiring others to be leaders, creating and reaching YOUR goals. Presentation to LeadCon, Palestine, TX.
3. Nite, S. B., **Capraro, M. M.,** Capraro, R. M., \*Bicer, A., \*Navruz, B., & \*Metoyer, S. (2014, October). *Effective STEM teaching and learning: A meta synthesis and meta analysis.*Presented at the NSTEM Collaborative Colloquium, Austin, TX.
4. Capraro, R. M., **Capraro, M. M**., Peterson, C. A., & Nite, S. (2013, August). *Building teaching competence in STEM teaching and learning.* Professional development delivered at Harmony School of Innovation, Waco, TX.
5. Nite, S., Peterson, C. A., **Capraro, M. M.,** Capraro, R. M., (2013, August). *Building teaching competence in STEM teaching and learning.* Professional development delivered at Rapoport Academy, Waco, TX.
6. **Capraro, M. M.,** Capraro, R. M., & Morgan, J. (2012, April). *Examining educational effectiveness and teacher preparation to teach STEM*. Invited presentation at Texas State University: College and Career Readiness Initiative, Round Rock, TX.
7. **Capraro, M. M.,** & Capraro, R. M. (2011, October). *Aligning mathematics content with CATE coursework.* Presented at A. J. Moore Academy for the Texas High School Project Academies. Dallas, TX. Waco, TX.
8. Capraro, R. M., **Capraro, M. M.,** & Maxwell, J. (2011, June). *Beginning STEM PBL: An Introductory hands-on workshop with N-spire*. Harmony Public School, Houston, TX.
9. **Capraro, M. M.,** & Capraro, R. M. (2011, October). *Developing a STEM program using PBL*. Invited address at Energize for STEM, Houston, TX.
10. Capraro, R. M., **Capraro, M. M.,** & Morgan, J. (2010, September). *Texas A&M center for mathematics & science education: Opportunities and resources.* Invited presentation at the College and Career Readiness Initiative Faculty Collaborative, San Antonio, TX.
11. **Capraro, M. M**., Jensen, D., & Morgan, J. (2009, January). *Water resources engineering.* Invited address presented at the Texas Association of School Administrators Mid-Winter Conference, Austin, TX.
12. Capraro, R. M., & **Capraro, M. M.** (2009, January). *Engineering PBL in the secondary classroom: Pollution, dilution, and acceptability.* Invited presentation at the T-STEM Best Practice Conference, South Padre Island, TX.
13. Morgan, J., Capraro, R. M., & **Capraro, M. M.** (2008, June). *Stage storage PBL.* Invited workshop presented at the STEM Summer Institute, Dallas, TX.
14. Capraro, R. M., Maxwell, G., & **Capraro, M. M**. (2008, January). *The mission of the NTSTEM center.* Invited workshop presented at the STEM Leaders Centers Meeting, El Paso, TX.
15. Capraro, R. M., & **Capraro, M. M.** (2005, February*). Roll, flip, and slide into geometry.* Invited address at the annual meeting of the Texas Mathematical Association of Two-Year Colleges, Austin, TX.

**Local**

1. Nite, S. B., **Capraro, M. M.,** Barroso, L. R., & Hammond, T. (2016, January). *Overcoming the STEM divide: Transitioning women to post secondary STEM programs*. Workshop presented at 2016 Teacher Summit and PK-12 Leadership Forum: Women in STEM, College Station, TX.
2. **Capraro, M. M.,** & Capraro, R. M., (2015, Oct.). Patterning for STEM Night – Fallbrook Academy – Houston, TX.
3. **Capraro, M. M.** (2015, May). Postsecondary opportunities in STEM education. Navarro Elementary School, Bryan, TX.
4. **Capraro, M. M.,** & Capraro, R. M. (2013, May). Graduation address. Navarro Elementary, Bryan, Texas.
5. Capraro, R. M., & **Capraro, M. M.** (2011, October). *Estimating validity during the instrument design phase.* Presented at the seminar series of The State of Texas Education Research Center, College Station, TX.
6. \***Capraro, M. M.,** Capraro, R. M., & \*Corlu, M. S. (2009, November). *STEM project-based learning in urban classrooms.* Invited presentation during Science Education Seminar Series, Texas A&M University, College Station, TX.
7. **Capraro, M. M**., & Capraro, R. M. (2008, September). *Recommended reporting practices in teacher education.* Invited presentation at the Educational Research Center Seminar, College Station, TX**.**
8. **Capraro, M. M.** (2008, June). *Sheltered instruction observation protocol (SIOP).* Invited workshop presented at the Trainers of Trainers, College Station, TX.
9. **Capraro, M. M.,** & Capraro, R. M. (2008, July). *Mathematics teaching and teacher education (Panel Discussion #4)*. Invited presentation at the Seminar on Mathematics Education, Center for Distance Learning, College Station, TX**.**
10. **Capraro, M. M.** (2008, January). *What works in classrooms*. Session in T. Scott (Chair) Best practices: From our classrooms to yours. Invited presentation at the STEM Teacher Summit, College Station, TX.
11. \***Capraro, M. M.,** Goldsby, D., \*Yetkiner, Z. E., \*Piccolo, D., \*Ozel, S., \*\*Wright, K., \*Indiogne, E., & Capraro, R. M. (2007, May). *Overview of the K-4 modules.* Invited presentation at the Texas A&M Mathematics TEKS connection conference, College Station, TX.
12. Capraro, R. M., & **Capraro, M. M.** (2007, September). *Research + teaching: What makes an effective mathematics classroom*. Invited address at the monthly meeting of Phi Delta Kappa, College Station, TX.

***(Presented with Doctoral\*, Masters\*\*, and \*\*\*Undergraduate students)***

Awards Received

* AERA Shark Tank – Division C Equity and Inclusion and Graduate Student Invitation to Present in the Annual Meeting Competition – Aamir Fidai 2019
* Outstanding EdD graduate TLAC 2018– Bart Taylor (CoChair)
* Bart Taylor (CoChair)-  2018 National ACTE Award Winner
* *INSIGHT Into Diversity* Inspiring Programs in STEM Award - 2018
* Student – Rachel Lee – Strategic Reward - 2018
* Nominated AFS – Outstanding Student Relations Award from CEHD - 2018
* Outstanding TLAC PhD graduate – Fall 2017 – Jenn Whitfield (CoChair)
* Outstanding TLAC EdD graduate – Fall 2017 – Joni Bailey (CoChair)
* EdD student – Kitty Rutherford (2017) received Rankin Award from North Carolina State Mathematics Association
* EdD student – Kitty Rutherford (2017) received The Order of the Long Leaf Pine”, an award from Governor Roy Cooper - most prestigious awards conferred by the Governor of North Carolina
* First Faculty member in TLAC to have a course recognized as Quality Matters (2017)
* Student – Song An - 2017 UT System Regents' Outstanding Teaching Awards
* Nominated by the Dean’s Council for the University AFS Teaching Award (2016)
* Outstanding Commitment to Excellence and Innovation in Distance Learning by an Organization – Aggie STEM (4-Year Higher Education) (2016)
* Nominated by the Dean’s Council for the University AFS Research Award (1 of 3) 2015
* Scholar Student: Ayse Tugba Oner – Honor Graduate TLAC 2015
* Student: Ali Bicer received the CEHD Strategic Scholarship (2014-15) $34,000
* Student: Ali Bicer received Lechner Scholarship
* Student: Tugba Oner – Departmental first author award
* Student: Jenn Whitfield– Departmental grant recipient award
* Reta B Haynes Fellowship. *Teacher’s Pedagogical Content Knowledge* (2013 – 2016)
* Lifetime service award from the Southwest Education Research Association (2014)

Awarded outstanding paper (5 awarded – perfect score) at the International Conference on Engineering Education Turku, Finland (ICEE-2012)

College nominee for the Outreach AFS Award (2010)

Finalist for University-wide SLATE Undergraduate Teaching Award (Fall 2009)

Montague-CTE Scholar: Teaching Award for College of Education (one of eight university-wide) (2008)

Outstanding Reviewer-American Education Research Association, *Educational Researcher* (2006)

Appointed to the Regent’s Initiative for Excellence in Education’s Academy for Educator Development: Regent’s Fellow (2002)

Assistant Principal of the Year. Region 1, Miami Dade County (1998)

Math Administrator of the Year, Miami Dade County (1996)

Teacher of the Year, Sylvania Heights Elementary, Miami (1986)

Who’s Who in American Colleges and Universities (1972)

National Funding in Pi/coPi role Total = $ 65,343; my part = $22,338

* Lite*racy-Infused Science Using Technology Innovation Opportunity (LISTO), a 5-Year Longitudinal Validation Project*. Co-PI with Lara, R., A., Irby, B., Capraro, R. M., Tong, F., & Jones, R. **Funded for $12,000,000** (i3- US Department of Ed), 8/17-7/21.
* 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.
* *State Farm Aggie STEM Summer Camp. State Farm.* Bloomington, IL. Co-PI with J. Morgan, R.M. Capraro, A. Bicer, S. Nite, & L. Barroso. State Farm. **Funded for $40,000**; my part $6,666, 9/15 – 9/16.
* *Number Sense Gaining Progression of Diverse Young Learners (3-5 years old) and Facilitating Strategies*. Role: PI with H. Hao, K. Lee, C. Bratlien, K. Van defiler, C. Krauss, & J. Myers – Teachers at the Becky Gates Children’s Center. National Council of Teachers of Mathematics. **Funded for $6000,** 2/15 – 2/16.
* *Item Analysis and Revision Protocol Development: A Case Study*. Role: CoPI with R. M. Capraro. American Association for the Advancement of Science. **Funded for $19,343;** my part = $9,672,2/01 - 02.

State Funding in PI/CoPI Role- Total = $ 6,990,855; my part = $2,138,747

* *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. **Funded for $14,000*.*** *–not in total*
* *Governor’s Summer Merit Program*: Aggie STEM and Engage Summer Camp. PI with S. Garcia, Submitted to Texas Workforce Commission 5/17-9/17. **Funded for $100,000** ($42,000- MMC; 58,000 – S. Garcia-Engineering).
* *Aggie Academy for STEM Champions (A2SC).* Role: PI. The Texas Workforce Commission (Dept. of Labor). **Funded for $100,000**, 4/16 - 8/16**.**
* *Supporting Mathematics in STEM Education (SMSE)*. S. B. Nite PI, with CoPIs Allen, G. D., Capraro, R. M., Barroso, L. R. & Capraro, M. M. Texas Higher Education Coordinating Board. **Funded for $780, 095.** 2/01/2016-2/28/2018.
* *Brooks Academy Professional Development*. R. M. Capraro, PI, with Co-PIs Barroso, L. R., Capraro, M. M., & Nite, S. B. ISD Contract. **Funded for $30,000**. 9/15-8/16.
* Math and Science Partnership (TQ). PI S, Nite. CoPI with R. M. Capraro., & Barroso, L. B., State Contract. **Funded $253,000**. 5/15-4/16.
* Fallbrook ISD Professional Development. PI M. M. Capraro with Co-PIs, Capraro R. M. Barroso, L. & B., Woodard, L.ISD Contract. **Funded $30,000.** 9/15-8/16.
* *Aggie Academy for STEM Champions (A2SC).* Role: PI. The Texas Workforce Commission (Dept. of Labor). **Funded for $97,752**, 2/15 - 8/15**.**
* Math and Science Partnership. *Aggie- Science, Technology, Engineering and Mathematics* *Center*. Nite, S., PI, Co-PI with Drs. R. M. Capraro, and Morgan, **Funded for $576,985,** 7/14-8/15.
* *Investigations in Secondary Mathematics and Science - Continuation*, Role: CoPI with S. Nite, G. D. Allen, & R. M. Capraro. Texas Higher Education Coordinating Board. **Funded for Total: $308,000;** my part = $77,000, 2/15 - 4/16**.** (Additional $25,000 added 3/15)
* *Investigations in Secondary Mathematics and Science*. Role: CoPI with S. Nite, R. M. Capraro, L. Burlbaw, C. Peterson, L. Walters, M. Green, & D. Allen. Texas Higher Education Coordinating Board. **Funded for $256,000;** my part = $32,000, 2/14 - 4/15.
* *STEM Collaborative for Teacher Professional Learning*. Role: CoPI with J. Morgan, R. Capraro, J. Stillisano, H. Waxman, & T. Scott. Texas Higher Education Coordinating Board**. Funded for $769,422;** my part = $128,237, 6/13 - 8/15.
* *Math and Science Partnership.* *Aggie-Science, Technology, Engineering and Mathematics* *Center*. Role: CoPI with R. M. Capraro & J. Morgan. Texas Education Agency. **Funded for $ 621,191;** my part = $207,064, 9/13 - 8/14.
* *THECB-Developmental Education*. Role: CoPI with R. M. Capraro & N. Chaudhuri. Texas Higher Education Coordinating Board. **Funded for $49,996;** my part = $16,665, 1/13-3/15.
* *STEM Training at Akins HS*. Role: PI with J. Morgan & R. M Capraro. Austin ISD. **Funded for $10,000;** my part = $3,333, 1/13-12/13**.**
* *Akins High School Professional Development.* Role: PI with J. Morgan & R. M. Capraro. Austin ISD. **Funded for $3,201;** my part = $1,067, 5/13 – 5/13.
* *Developmental Education Demonstration Program***.** Role: CoPI with J. Dyer & R. M. Capraro. Texas Higher Education Coordinating Board**. Funded for $949,998;** my part = $316,666, 11/12 – 3/15.
* *Snook ISD - STEM Training*. Role: CoPI with R. M. Capraro, Snook ISD. **Funded for $12,000;** my part = $6,000, 3/13 – 8/13.
* *Aggie STEM Summer Camp*. Role: CoPI with R. M. Capraro & J. Morgan. Energized for STEM Academy. **Funded for $110,000;** my part = $36,667, 6/12 – 7/12.
* *Comprehensive Review of P-16 College Readiness and Success Initiatives.* Role: CoPI with J. Dyer & R. M. Capraro. Texas Higher Education Coordinating Board. **Funded for** **$199,193;** my part = $66,398, 9/11- 8/12.
* *Aggie STEM Summer Camp*. Role: CoPI with R. M. Capraro, J. Morgan & J. Scheurich. Energized for STEM Academy. **Funded for $135,000;** my part = $ 33,750, 6/11- 7/11.
* *Math and Science Partnership.* *Aggie- Science, Technology, Engineering and Mathematics* *Center*. Role: CoPI with R. M. Capraro & J. R. Morgan. Texas Education Agency. **Funded for $800,000;** my part = $266,667, 9/11- 8/13.
* *Akins High School One-Day STEM Experience on A&M Campus.* Role: CoPI with J. Morgan & R. Capraro. Austin ISD. **Funded for $3,201;** my part = $1, 067, 1/12 – 5/12.
* *Developmental Education Demonstration Project Evaluation.* Role: CoPI with J. Dyer & R. M. Capraro. Texas Higher Education Coordinating Board. **Funded for $399,998;** my part = $133,333, 6/11-10/12.
* *Fostering TAMU Pre‐Service Teachers’ Awareness of STEM College and Career Readiness Standards*. Role: PI. Texas Higher Education Coordinating Board. **Funded for $10,000,** 5/10 – 8/11.
* *Math and Science Partnership.* *Aggie- Science, Technology, Engineering and Mathematics* *Center.* Role:CoPI with J. Morgan & R. M. Capraro**.** Texas Education Agency. **Funded for $500,000;** my part = $166,667, 9/10 – 8/11.
* *M-STAR- Curriculum Focal Points*. Role: CoPI with R. M. Capraro & J. Schielack.Texas Education Agency. **Funded for $900,000;** my part = $300,000, 01/09 - 12/09.
* *Professional Developments to Waco High School, University High School, and A.J. Moore Academy*. Role: CoPI with R. Capraro & J. Morgan; PI-J. Scheurich. Waco Independent School District. **Funded for $93,999;** my part = $23,500, 8/09 – 7/10.
* *Professional Development Services to Hearne High School and Hearne Junior High School*. Role: CoPI with R. Capraro & J. Morgan. PI-J. Scheurich. Hearne Independent School District. **Funded for $21,000;** my part = $5,250, 8/09 – 7/10.
* *North Texas- Science, Technology, Engineering, and Mathematics.* CoPI with R. Capraro & J. Morgan. PI-J. Scheurich. Texas Education Agency. **Funded for $400,000;** my part = $100,000, 9/09-8/10.
* *North Texas- Science, Technology, Engineering, and Mathematics.* CoPI with R. Capraro & J. Morgan. PI-J. Scheurich. Texas Education Agency. **Funded for $438,657;** my part = $109,664, 9/08-8/09.

Local: Internal Grants

- Funded in PI/CoPI role: Internal

Total = $346,000

* *Creating an Online Doctorate in STEM-Focused Educational Leadership*. Limited Submission Grant proposal to TAMU. CoPIs with R. M. Capraro & R. Viruru. Submitted 7/11/19.
* *Enfranchising under-represented students and parents in Family STEM Nights.* M.M. Capraro(PI), Luciana Barroso (CoPI), Robert M. Capraro (CoPI), & Christine Stanley (CoPI). Funded by CEHD, $10,000 (10/18-5/20)
* *Up, Up, and Away: Expanding and Enriching CEHD Global Education Experiences.* PI:   Robert Jay Woodward (Clinical Assoc. Professor, EPSY); Co-I’s:  Mary Margaret Capraro (TLAC), Robert Capraro (TLAC), Edie Cassell (TLAC), Carly Gilson (EPSY), Helen Muyia (EAHR), Dawn Parker (TLAC), Krystal Simmons (EPSY), and Julie Singleton (TLAC) **Funded for $30,000.** 1/18- 5/19.
* *Mentoring Pathways to Higher Education in STEM (MPHES).* Role PI, CoPIs: L. Barroso, R. Capraro, & T. Hubert.**Funded for $30,000**. 9/16 – 9/17.
* *Preparing Elementary Mathematics Specialists (PEMS) Through an Online Graduate Program*. Role: PI.Internal College of Education & Human Development, TAMU. **Funded for $5000,** 5/08.
* *Longitudinal Influences of Conceptual Mathematics on Teacher Classroom Enactments*. Role: PI. Internal TAMU Grant (Regent’s Initiative Fellowship). **Funded for $18,600**, 3/04**.**
* *Professional Teaching Portfolios and Teaching Artifacts: Do They Provide Insightful Information About Preservice Teachers?* Internal TAMU Grant (Regent’s Initiative Fellowship). Role: PI. **Funded for $10,000,** 4/03.
* *Electronic Teaching Portfolios: Technology Skills + Portfolio Development = Powerful Preservice Teachers*. Internal TAMU Grant (Regent’s Initiative Fellowship). Role: PI. **Funded for $10,000,** 4/02.
* *Systematic Integration of Technology in the Preservice Teacher Education Program*. Internal TAMU. Role CoPI with N. Allen & R. M. Capraro. Internal TAMU Grant (Regent’s Initiative Fellowship).. **Funded for $10,000**,4/02.
* *Elementary Geometry Standards: A Comparison between the United States and China*. Role: PI**.** Internal TAMU (Research Enhancement Grant). **Funded for $500,** 9/01.
* *Elementary Geometry Pedagogy: A Comparison Between the United States and China.* Role: PI. Internal TAMU COE-IPECC (International Travel Grant). **Funded for** **$500,** 3/01.
* *Continuing Research with UNT Professor on the MARS*. Role: PI. Texas A&M University (Travel Grant). **Funded for $700,** 11/01.
* *Women’s History Month Grant*. Role: PI. The University of Southern Mississippi. **Funded for $700,** 3/00.
* *Comprehensive School Reform Demonstration Grant North Twin Lakes Elementary.* Role: CoPI**.** Miami Dade County Schools. **Funded for $150,000,** 6/99.
* *M3 Making Math Meaningful for North Twin Lakes Elementary,* Research Grant, Title VI. Role: PI. Miami, Florida. **Funded for $10,000,** 7/97.
* Technology Grant, North Twin Lakes Elementary, Hialeah, Florida. Role: CoPI. Miami Dade County Public Schools. **Funded for $90,000,** 7/95**.**
* GRANTS - Funded: in non-PI/CoPI Roles
* *Exploration of Snook ISD as a CEHD Lab School*. Co-Pi with L.M. Burlbaw, R. M. Capraro, and 16 others. Funded by the College Catapult Grant Competition. $11,911. 12/15-3/16.
* *Follow up Snook ISD as a CEHD Lab School Project Mission*. Co-Pi with L. M. Burlbaw, R. M. Capraro, and 16 others. Funded by the College Catapult Grant Competition. $37,931. 4/16 – 4/17.
* *Improving Mathematics Teacher Practice and Student Learning thru Professional Development* Middle School Mathematics Project, IERI NSF Grant with University of Delaware & AAAS. Role: Project Coordinator/ Faculty Researcher. **Funded for $1.6 million (TAMU part),** 9/01- 8/06.
* *Mathematics TEKS Connection.* Role: Module Developer,Texas Education Agency: Texas Math Initiative. **Funded for $4,694,552,** 8/05-6/07.
* *Evaluation of the Accelerate Texas, the Adult Basic Education Innovation Grant Program.* Role: Subject Matter Experts. Texas Higher Education Coordinating Board. **Funded for $125,000**, 9/13 – 3/14.

GRANTS-– UNFUNDED

* Building stability in rural Latino communities through unique place-based architectural engineering projects using robotic technology and teacher, student and familial involvement; John Nichols, PI. NSF for $3,000,000 Submitted on Nov. 19, 2019.
* **Proposal:**Engaging Children and Families Working on Oceanic Challenges in Informal Learning Spaces for Advancing STEM: Project OLAS  
  **Proposal#:**2001034  
  **Sponsor:**National Science Foundation  
  **Sponsor Due Date:**06-NOV-19 - Submitted  
  **PI:**Rafael Lara-Alecio
* **TWC Aggie STEM Camps.** CoPI – MMCapraro. Submitted 1/31/19 to Texas Workforce Commission for $33K.

|  |
| --- |
|  |
| * Project CRISP: Computer Science and Computational Thinking Realized via Informal STEM Programs in High Needs Schools. CoPI – MMCapraro. PI Rafael Lara-Alecio. Submitted May, 2019 to National Science Foundation for $2,446,465. |
|  |

* *Governor’s Science and Technology STEM Champions.*PI: Capraro, M. M.; CoPIs: Capraro, R. M., & Barroso, L. The Texas Workforce Commission (Dept. of Labor). Submitted for $100,000, 3/20 - 8/20**.**
* The Urban Mathematics Teacher Leadership Conference (UMTLE). Submitted to NSF 17-541 Robert Noyce Teacher Conference on 8/27/19. PI, Robert M. Capraro, Co PIs with Young, Young, Lewis. Total Amount: $300,000; Jan 2020-August 2021.
* **O**ptimizing **R**ural **C**oastal High-Need Students’ **A**chievement Via Project ORCA In-Class/ After-School Marine Problem-Solving, Robotics Engineering Competition (*Project ORCA*). Submitted to US Department of Education, EIR Program 3/19 to IES; CoPI with Irby, Lara, Tong, Capraro. Total Amount: $3,999,491.00 (Federal); October 1st 2019 – September 30th 2024.
* *Translating University STEM Initiatives for K-12 Classroom Implementation: Tyler ISD Educational Consultants*. PI with Drs. Barroso, MM, Capraro, and Grad student Yujin Lee. Submitted to Tyler ISD, Tyler, TX, 8/19-721, $200,000
* *Encouraging High School Students’ Interest in STEM through the Creation of Instructional Modules for Teachers through Collaboration among University Faculty and High School Teacher;*PI Nichols, J.; Co-PIs: Capraro, M. M.; Bryant, J.; Murphrey, T.; Watson, K.; Submitted to National Science Foundation; 9/01/2019 – 8/31/2023; $2,999,945
* *BUILDteam-STEM: Building Technologies to Enhance the Awareness and Motivation of STEM Occupations and Careers*, Co-Investigator with Dixit, M. (PI), for $300,000, Proposal Number: 1850519. Submitted in 2018 to National Science Foundation.
* *Building Out Opportunities in STEM for Teachers: Impacting Instructional Capacity for Diverse Learners in High-Needs Schools*. Co-Investigator, Submitted to Department of Education -3/2018, 8/19-9/24, 17,978,494.00.
* *Generation Study Abroad Access Grant.* CoPIs – Caldwell, C. & Capraro, M. M. Submitted 4/18 to Council on International Educational Exchange (CIEE) from 1/19-12/19 for $20,000.
* *Advancing Girls in STEM.*PI Capraro, M. M., Co-PIs: Capraro, R. M, Barroso, L., &Vela, K. Submitted to High Tech High Heels, 5/18-8/18, $28,000
* REU SITE: *Aggie Undergraduate STEM Education Research* (AUSER). Submitted on August, 2017 to National Science Foundation (NSF) (2017). Co-PI with Robert M. Capraro, Ali Bicer, & Luciana Barroso from 5/18-6/21 for $332,733.
* E*ngaging Pre-service Teachers with STEM PBL in Education Courses*. Submitted to National Science Foundation (NSF) on Nov. 14, 2017. Co-PI with Robert M. Capraro, Ali Bicer, & Luciana Barroso, from 7/18 – 5/20 for $385,135.
* *Portable Recycling Lab: Learning STEM Concepts with Sustainable Plastics. Weiling, H. (PI), CoPI with Alkeman, E., Hong, L., & Creasy, T.* Submitted November 5, 2017 to AISL -NSF for $299,766 for 2018-2020
* *Aggie STEM Research Action in Mathematics and Science (ARMS) Conference*. Nite, S. B, PI, with Co-PIs Capraro, R. M., Capraro, M. M., Barroso, L. R., & Bicer, A. Submitted to Spencer Foundation, 4/17-1/18, $50,000.
* *Exploring Marine Robotics: Mar-Robotics. Internal Evaluator* with Capraro, R. M., and PIs Irby, B., Song, D., Tong, F., & Lara, R. Submitted to the National Science Foundation 5/17-6/19. $300,000.
* *Collaborative Research: Community Based STEM Pathways to Higher Education. Co-Pi with Barroso, L., Nite, S., Capraro, R.M., & Bicer, A.  Submitted to National Science Foundation, 9/17-8/21. $2,258,684.00*
* *Aggie Academy for Governor’s Science and Technology STEM Champions.*PI: Capraro, M. M. CoPIs: Capraro, R. M., Barroso, L., Nite, S. B., & Bicer, A. The Texas Workforce Commission (Dept. of Labor). Submitted for $100,000, 3/17 - 8/17**.**
* *Pre-service mathematics education with byte*. S. B. Nite, PI with CoPis Capraro, R. M., Bicer, A., & Barroso, L. R., (2016). Google, $299, 751. 1/1/2017-12/31/2018.
* Nite, S. B., Barros, L. R., Capraro, R. M., & Capraro, M. M. (2016). *STEM After School for Under Represented Teens (STEM ASURT).* Grant proposal submitted to U.S. Department of Education Investment in Innovation (i3). 1/1/2017 - 12/31/2021, $2,493,031.
* *Developing Math Literate Citizens with 21st Century Skills (DMLC2S).* PI with R. M. Capraro. Submitted to Texas Workforce Commission. $500,000, 7/16-12/17.
* *Translational Application of STEM Research for Transformational Secondary Teaching (TASR).* PI R. M. Capraro with CoPIs P. K. Imbrie, S. Nite, T. Hammond, & W. Rupley. Submitted to the National Science Foundation. 2,867,152.00 12/15
* *Utilizing Teaching Lab Video Clips in Teacher Professional Development for STEM Project-Based Learning*. S. B. Nite, PI, with CoPIs L. Barroso, R. M. Capraro, & M. M. Capraro. Submitted to National Science Foundation, $422,511. 9/1/2016 – 8/31/2019.
* *Supporting Mathematics in STEM Education (SMSE)*. Submitted to Texas Higher Education Coordinating Board. PI Nite, S. B. with Co-PIs Allen, G. D., Capraro, R. M., Barroso, L., & Capraro, M. M., $747,482. Funding period 2/01/2016-4/30/2017.
* *Pioneering Research for Informal STEM Models (PRISM)*. M. M. Capraro PI, with CoPIs L. Barroso, R. M. Capraro, & S. B. Nite. Submitted to National Science Foundation, $143,974. 4/1/2016-3/31/2017.
* *The National Informal STEM Learning Resource Center @ Aggie STEM (NISLRC@Aggie STEM).* R. M. Capraro PI, with CoPis L. Barroso, E. McTigue, S. Nite, M. M. Capraro, Z. Eslami, & L. Q. Dixon. Submitted to National Science Foundation. $5,000,000. 3/16 – 2/21.
* *STEM After School for Under Represented Teens (STEM ASURT)*. Submitted to U. S. Department of Education. PI Sandra Nite with Co-PIs Barroso, L., & Capraro, R. M., $2,573,489. Funding period 1/01/2016-12/31/2020.
* *Examining Secondary Mathematical Achievement and Cognitive Engagement Structures*. Submitted to National Science Foundation. Co-PI with Capraro, R. M. (PI), Nite, S., Barroso, L., & Capraro, M. M., $500,000. Submitted to NSF for Funding period 4/01/2016-3/31/2019.
* *iSucceed*. Submitted as subaward for Grand Prairie ISD grant submitted to U. S. Department of Education. PI Nite, S. B. with Co-PI's Barroso, L., Capraro, R. M., & Capraro, M. M., $707,392. Funding period 1/01/2016-12/31/2018.
* *University Consortium for Promoting and Re-Invigorating STEM Education (UC-PRiSE).* PI: R.M Capraro, Role: CoPI with L. Barroso, S. Nite, F. Bernat, & F. Nave. Submitted to the National Science Foundation for $2,873, 504, 10/16-8/21.
* *Building PreCollege Research Capacity for Academic Success: Replicating the Aggie STEM Model*. Role: CoPI with J. Morgan, R. M. Capraro, S. Nite, & C. A. Peterson. Submitted to MAWHIBA: Saudi Arabia for $1,884,126 on 3/14.
* *High Quality STEM Education Through Problem Solving: Drinkable, Fishable, and Swimmable Water*. CoPI with (alphabetical order) L. Barroso, R. M. Capraro, K. K. Hill, J. Morgan, S. B. Nite.  Submitted to Texas A&M University System Area 41 Institute for $25,000 on 1/23/15**.**
* *Investigating the Video Mosaic Online Model for Teacher Professional Development*. Role: CoPI with C. Maher, M. Palius, & R. M. Capraro. Submitted to the National Science Foundation for $964,808, 9/15 – 9/20.
* *University Consortium for Promoting and Re-Invigorating STEM Education (UC-PRiSE).* Role: CoPI with J. Morgan, R. M Capraro, & S. Nite. Submitted to the National Science Foundation for $2,906,209, 10/15-8/20.
* *Early College High School and T-STEM Technical Assistance and Coaching*. Role: CoPI with R. M. Capraro, J. Morgan, & S. B. Nite. Submitted to Texas Education Agency for $1,977,000 on 9/14.
* *STEM Teaching and Learning Center: Secondary and Post-Secondary Implementation of Integrated STEM Strategies.* Role: CoPI with L. Barroso, J. Morgan, & R. M. Capraro. Submitted to CAPSES (internal TAMU –exploratory) for $50,000 on 1/14.
* *Integrating Computing with STEM for the 21st Century.*Role: CoPI with S. Nite, J. Morgan, & R. M. Capraro.Submitted to National Science Foundation for $5,287,204 on 3/14.
* *Texas A&M University STEM Synthesis Project.* Role: CoPI with R. Lara, B. Irby, F. Tong & R. M. Capraro. Submitted to National Science Foundation for $100,000 on 12/13.
* *VMC- Professional Development*. CoPI with R.M. Capraro. Submitted to National Science Foundation for $956,293 on 12/13.
* *Disentangling the Role of Reading in Solving Math Word Problems Using Project LISTEN.* Role*:* CoPI with R.M. Capraro, & W. Rupley. Submitted to Institute of Educational Sciences (IES) for $1,599,546 on 8/13.
* *Transforming Teaching and Learning Mathematics Using New Resources, Models and Tools for Teacher Education*. Role: CoPi with R. M. Capraro & D. Parker. Subcontract Maher, C. Rutgers University. Submitted to National Science Foundation for $3,000,000 on 1/12.
* *ZOOiPPORTUNITIES (Zoo-OPS) -- a ZOO iPad Project: Overarching Representational Technologies Utilizing Nature in Teaching Informal Education in STEM.* Role*:* CoPIs with R. M. Capraro, J. McLaughlin, J. Morgan, & A. Sahin. Submitted to National Science Foundation for $1,200,000 on 8/1/12.
* *Evaluation of the Harmony Charter School Model for Student STEM Success (HCSMS3)*. CoPI, with R. M. Capraro, T. Davis, R. Goddard, C. Loving, J. Morgan, & J. Scheurich. Submitted to National Science Foundation $1,922,141 on 3/11/11.
* *Using Selected Reading Processes to Solve Mathematics Word Problems.* Role: CoPI with B. Rupley, R. M. Capraro, & J. Liew. Submitted to Institute for Educational Sciences on 6/11.
* *Using Selected Reading Processes to Solve Mathematics Word Problems.* Role: CoPI with R. M. Capraro, W. Rupley, & J. Liew. Submitted to Institute for Educational Sciences for $1,200,000 on 6/23/11
* *The Development of Research Instrumentation to Explore Motivation and Engagement* (Submitted to NSF in conjunction with Rutgers University)
* *Basic Education - An Evaluation Project of Community Colleges. 2011-2012*: Role: CoPI with J. Dyer & R. M. Capraro. Submitted to Texas Higher Education Coordinating Board for $100,000 on 6/10/11.

Service Activities

**National**

***Associate Editor***

*Middle Grades Research Journal* (2011-2015)

*Journal for Mathematics Education* (2010- present)

*School Science and Mathematics Journal* (2006-13)

*Journal for Urban Mathematics Education* (2019)

***Special Edition Editor***

*Middle Grades Research Journal* (2011)

*Journal of Developmental Education* (2014)

*Journal for Mathematics Education* (2019)

***Journal Reviewer***

* *Teaching Children Mathematics*, NCTM Journal (1999-2011)

*Journal for Research in Mathematics Education* (2004 – present)

*American Education Research Journal*: TLHD (2004-2006; 2012)

*Educational Researcher (*2004-2006)

*Journal for Research in Childhood Education* (2013-present)

*Journal of Mathematical Behavior* (2012-present)

*Cogent Education (2015 - present)*

*Teacher Educator Journal (2015-present)*

*Reviewer for ZDM Journal (2016 – present)*

*Reviewer for EURASIA Journal of Mathematics, Science and Technology Education (2016-present)*

***Proposal and External Reviewer***

Outside Reviewer for faculty member – University of South Carolina - Dr. Jan Yow (2019)

Outside review of faculty member – Oklahoma State University – Dr. Cribbs (2018)

NSF Panel Reviewer for STEM Includes Grant Submissions (4/2016)

External promotion for Dr. Cindy Jong – UK (2015)

Grant Proposals - Standard Research Grants Program of the Social Sciences and Humanities Research Council of Canada (SSHRC), (2010)

* External promotion for Dr. Sarah Selmer, UWV (2014)
* *State Instructional Materials* - Florida Department of Education (2012)

AACTE (2001)

SERA (2002-14)

AERA, 2006-2009; 2014

* Mathematics in Education AERA SIG (2012, 14, 15)
* NCTM Special Interest Group for Research presession (2012)

*Middle School Mathematics,* Scott Foresman-Addison Wesley: Course 1 and Course 3, (1998)

*Teaching Mathematics in Elementary and Middle Schools: A Universal Design for Learning* – Chapters 3,4, 5, & 6, (2001)

*Elementary Math Methods*, Prentice Hall (2002)

***Activities***

* Host the TEAMS competition (2018; 2019, 2020)
* Editorial Staff for *Encyclopedia of Special Education* (4th Ed.) Wiley (2014)

Membership Committee – School Science & Mathematics (2009-2013)

NCES Algebra 9th Grade Study NSF Evaluation Panel – Washington, DC (2010-11)

Judge for i-SWEEEP: 4-day international science fair, Houston, TX (2007-13)

**Regional/State**

* Graduate Student Discussant – SERA Conference Grad Student Division (2019)
* Aggie STEM @ the Museum – Girls STEM day – Mayborn Museum, Waco, TX (2018)
* F1 in Schools Judge, Austin, TX (2016)
* Judge for Texas State Science and Engineering Fair, San Antonio (2015, 2016)
* Trinket Maven and Poster Chair for SERA (2012- present)
* Board of Directors, SERA, (2004-2008)
* President Elect, President, Past President - Southwest Educational Research Association (2008-11- 3-year commitment)
* Editor’s Roundtable Meeting – Sam Houston State University (2010)

CCRIFC (Texas Mathematics College and Career Readiness Faculty Collaborative) Mathematics Collaborative Advisory Board (2008-10)

*T*exas Teacher’s Educator’s Forum Reviewer (2001-05)

**University**

* Engineering Education Faculty Research Task Force (2019)
* Engineering Education Outreach Task Force (2019)
* Science and Engineering Fair through College of Engineering – Table Set up (2019).
* Judge for 3-minute thesis competition (October, 2017;2019)
* STEM4Innovation Conference Organizer from the College of Education (March, 2017; January 2018; February, 2019)
* CIRTL Working Group (2017; 2018; 2019)
* College-wide Doctoral Advising Load Committee (2016)
* Alternate member of the Institutional Review Board (IRB) (2012-2017)
* Hosted “Hour of Code” for the University Community (Dec. 2015; Dec 2016; Dec 2017)
* Table host for OGS Community of Scholars Dialog (2014, 2015, 2017, 2019)
* Host for International Student Services: “Dinner in a US Home” (2014-15; 2016-17)
* *Mi Casa es Su Casa* Dinner and Evening Host (2015;2016-17; 2017-18; 2018-19)
* Who’s Who in American Colleges and Universities Selection Committee (2011; 2012; 2013; 2014; 2015;2016; 2017)

Will Ferrell Scholarship Committee Chair – goal Rudder Scholarship $50,000, reached over the goal - $52,000 – endowed scholarship.

Student Research Week Out-of-Field Judge (2001, 02, 03, 05, 10)

**College**

* Global Experiences Committee (2017; 2018; 2019)
* College wide mentor for STAR mentoring program (2017;2018;2019)
* Committee for Faculty Development Leave (2016; 2017)
* Committee for Evaluation of Advising, Technology, and Communications College Programs (2016)
* 50th Anniversary Committee for CEHD (2016- present)
* Chair of the AFS College Award Committee (2015)
* Reviewer of Catapult Grants (2015; 2016; 2017; 2019)
* Facilitator of Group Discussion for CEHD Dean’s Retreat – Hilton Hotel (2015, Nov.)
* Reviewer of Primary Care Professional Travel Grants (2015)
* Representative to the Council of Principal Investigator [CPI] (2012-2014; 2014-2017)
* Texas Center for the Advancement of Literacy and Learning Evaluation committee (2014)
* TLAC Representative to FAC (College Committee) (2014-16; 2016-2018 -19)
* Technology Committee - set up the CEHD Tech conference (2010-11)

Capraro, Capraro, Gonzalez, & Thompson CEHD Research Conference (2009 – 2014)

Search Committee - Research Development Officer (Fall, 2010)

* National Teacher Education Preparation Blue Ribbon Committee (2002)

Montague Award Selection Committee (2010)

Faculty Search Committee – Department of Educational Psychology (2009)

Educational Research Exchange Outstanding Paper Committee (2002- 03)

**Departmental**

* Search committee member for the Instructional Designer (2019)
* Search Committee member for EdD Clinical position (2019)
* Applied for Certification to be an EiE trainer (Summer 2019)
* Search committee for Editor, Aggie STEM (2019)
* Committee – input for Certification Exam (2019)
* Coach/Mentor for Michelle Kwok, Quenton Dixon, Sara Raven (2018-19), & Karen Rambo Hernandez (2019-20)
* New Faculty Orientation (2018)
* TLAC STEM Program Leader (2017-18; 2018-19)
* Doctoral Strategic Committee (2018-19)
* TLAC graduate student award committee (2016; 2017; 2018;2019)
* Hosted Progressive Dinner at my Home for Climate Committee (2014)
* EdD Steering Committee (2011; 2012; 2013; 2014, 2016, 2017, 2018)
* EdD Applicant Screening Committee (2014, 2016, 2017, 2018)
* Cognate Area Coordinator for Mathematics Education (2014-16)

Technology Team for Elementary Advisory Council Member (2001)

Departmental Faculty Search Committee Mathematics Education (2002)

Field-Based School (Bryan & College Station) Involvement (2000-2005)

**Selected PD Service to Public Schools**

* *Testing things that fly: Accuracy and distance*. Henderson Elementary STEM Day, Bryan ISD: Bryan, TX.
* *Integrating the language of STEM into elementary classroom practice*. Cannon Elementary, Grapevine ISD: Grapevine, TX.
* *Aerospace: Mission in design and construction*. Roland Reynolds Elementary STEM Night, Franklin ISD: Franklin, TX.
* Outreach STEM Fair at Oakwood Intermediate – STEM Night (October, 2019)
* Bryan ISD Showcase (2019; 2020)
* Aggie STEM Teacher Boot Camp - 2 weeks residential (Elementary (18) and Secondary (24) (June 2019)
* Aggie STEM -STEM Family Night – Oakwood Intermediate School (October, 2018)
* Aggie STEM- STEM Family Night – Franklin Elementary (November, 2018)
* Aggie STEM night Provided two week-long STEM Teacher Boot Camps for teachers across the state (46 in attendance)(June & July 2018)
* Provided professional development to Aldine ISD – STEAM Academies (Oct. 2018)
* Provided professional development to Aldine ISD for elementary school mathematics in measurement and algebra (Oct and Dec, 2017).
* Provided professional development through the Teacher Quality Grant both summer face-to-face and online (spring and fall) for 25 participants in the Algebra strand (2016, 2017).
* Aggie STEM Teacher Boot Camp - for a one week-summer PD for 12 teachers from Texas and Turkey - focused on 3-D printing and project-based learning (2016).
* Developed online elementary mathematics content course modules in early algebra, fractions, measurement, and problem solving (2016).
* Working with the turnaround project with Grades 3-5 mathematics teachers in Aldine Schools (2016, 2017).
* Root Cause Analysis with Snook ISD (2016)
* STEM Night – Fallbrook Academy – Houston, TX (2015)
* K-12 education and postsecondary opportunities in STEM education – Career Day. Navarro Elementary School, Bryan, TX (2015)
* I-SWEEeP judge (2015)
* STEM night at Greens Prairie Elementary, College Station, TX - presentation of mathematics activities for students and parents (2014)
* Graduation address - Navarro Elementary, Bryan, TX (2011; 2013)

Reading Night – Navarro Elementary, Bryan, TX (2013)

Science Fair Judge – Harmony School, Bryan, TX (November, 2009, 2010, 2011, 2012)

Professional Development STEM PBL Workshops for Science and Mathematics Teachers in Waco, TX ISD – 10 days (2007-08, 2008-09, 2009-10)

Professional Development STEM PBL Workshops for Science Teachers in Hearne, TX ISD – 8 days (2009-10)

Professional Development Workshops STEM PBL for Science and Mathematics Teachers in Dallas, TX ISD – 10 days (2007-08, 2008-09, 2009-10)

* Teaching to the Education Standards: Math TEKS Connection. (2007, May) 175 elementary, middle, and secondary teacher educators from 40 different universities participated in a three-day workshop to examine electronic resources developed by the MTC team.
* Teacher Summit. 312 secondary teachers attended two-day workshop to learn to apply research to classroom teaching and learning (2008, January)
* Summer Teacher Institute. 106 middle and secondary teachers participated in “best practice” teaching lessons with a focus on PBL using engineering design (2008, June)
* Training of Trainers. 15 middle and secondary teachers developed expertise and presentation skills on Project Based Learning, SmartBoards, Navigator, Vernier Probes (2008, June)
* Organization, Equipment, and Supplies for Artifact Displays Campus Tour – Mitchell Elementary (2000-01)

Summer STEM Camp over 100 students for 2 weeks (June 2012; June 2013; June & July 2014)

Field-Based School (Bryan & College Station) Involvement (2000-2005)

**Local Service Activities**

* Aggie STEM Night Out for Parents and Children (November, 2018)
* STEM Night at Snook Elementary (March, 2017)
* Chili Fest Volunteer (April, 2017)
* Board Member – Institute of Interfaith Dialog Raindrop Center, Bryan, TX (2010-11; 2013-15)

Hosting Committee of Islamic Dialog & Friendship Dinner, Bryan, TX (2010; 2012)

Lector/ Greeter – Santa Teresa Catholic Church, Bryan, TX (2013-present)

Aggieland Pets with a Purpose – Choco Therapy Dog – over 120 hours of service to community Bryan, College Station, TX (2012-present)

March of Dimes Supporter, College Station, TX (2005-2008)

American Heart Association Brazos Supporter (2001-2002)

Friend of St. Joseph’s Hospital – Brazos Bash Committee (2001-2002)

Teaching

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Term** | **Course #** | **Title** | **# of Sts.** | **Evaluation Average** |
| 04A | MEFB460 | Math Methods in Middle Grades | 12 | 4.75 |
| 04B | TEED 649 | Post Bac Secondary Mathematics Methods | 2 | 5.00 |
| 04C | ECFB 440 | Math Methods in Early Childhood Education | 22 | 4.54 |
| 04C | ECFB 420 | Science Methods in Early Childhood Education | 22 | 4.62 |
| 05A | ECFB 440 | Math Methods in Early Childhood Education | 29 | 4.74 |
| 05B | ECFB 420 | Science Methods in Early Childhood Education | 29 | 4.73 |
| 05B | EDCI 684 | Professional Internship | 4 |  |
| 05B | TEED 649 | Post Bac Secondary Mathematics Methods | 4 | 5.00 |
| 05C | ECFB 440 | Math Methods in Early Childhood Education | 36 | 4.80 |
| 05C | ECFB 420 | Science Methods in Early Childhood Education | 36 | 4.70 |
| 05C | MASC 351\* | Problem Solving in Mathematics | 29 | 4.30 |
| 06A | ECFB 440 | Math Methods in Early Childhood Education | 36 | 4.90 |
| 06A | ECFB 420 | Science Methods in Early Childhood Education | 36 | 4.90 |
| 06A | MASC 351\* | Problem Solving in Mathematics | 13 | 4.40 |
| 06B | MEFB 351^ | Introduction to Middle Grades: Adolescent Development, Philosophy, and Organization (online) | 14 | 3.82 |
| 06C | ECFB 440 | Math Methods in Early Childhood Education | 40 | 4.75 |
| 06C | MASC 351\* | Problem Solving in Mathematics | 25 | 4.48 |
| 06C | MASC351\* | Problem Solving in Mathematics | 23 | 4.18 |
| 07A | ECFB 440 | Math Methods in Early Childhood Education | 41 | 4.40 |
| 07A | ECFB 440 | Math Methods in Early Childhood Education | 39 | 4.36 |
| 07A | MASC 351 | Problem Solving in Mathematics | 15 | 4.71 |
| 07B | EDCI 673^ | Analysis of Teaching Behavior (online) | 27 | 4.43 |
| 07C | ECFB 440 | Math Methods in Early Childhood Education | 43 | 4.54 |
| 07C | EDCI 623 | Teaching and Learning Pattern and Change Concepts | 13 | 4.91 |
| 08A | EDCI 624 | Assessing Cognitive, Conceptual, and Fluency Structures Related to Learning and Teaching Mathematics | 11 | 4.62 |
| 08B | EDCI 673^ | Analysis of Teaching Behavior (online) | 21 | 4.20 |
| 08C | MASC 351\* | Problem Solving in Mathematics | 63 | 4.41  4.51 |
| 09B | EDCI673 ^ | Analysis of Teaching Behavior (online) | 23 | 3.66 |
| 09C | MASC 351\* | Problem Solving in Mathematics | 57 | 4.31(2) |
| 10C | EDCI 619\* | Teaching and Learning Number and Quantity Concepts | 10 | 4.82 |
| 10C | EDCI 689^ | STEM Teaching & Learning | 9 | 4.65 |
| 11B | MASC 351 | Problem Solving in Mathematics | 6 | Study Abroad |
| 11C | EDCI 617\* | Early Childhood Mathematics and Science | 19 | 4.89 |
| 12A | EDCI 689^ | STEM Teaching & Learning | 18 | 4.76 |
| 12C | MASC 450 | Integrated Mathematics | 30 | 4.32 |
| 13C | EDCI 628^ | Analyzing and Reporting Field Based Research for EdD | 22 | 4.02 & 4.05 |
| 14A | EDCI 619 | Teaching and Learning Number and Quantity Concepts | 6 | 4.77 |
| 14A | EDCI 680^ | Pro Seminar for EdD | 4 | 4.95 |
| 14B | EDCI 680^ | Pro Seminar for EdD | 4 | 4.64 |
| 14C | EDCI 680^ | Pro Seminar for EdD | 4 | 4.45 |
| 14C | EDCI 620\* | STEM Teaching & Learning | 12 | 4.3 |
| 15A | EDCI 623 | Teaching and Learning Pattern and Change Concepts | 10 | 3.97 |
| 15C | EDCI 609^ | Identifying Researchable Topics for an EdD Record of Study | 24 | 4.49 |
| 16A | EDCI 619 | Teaching and Learning Number and Quantity Concepts | 10 | 4.33 |
| 16A | EDCI 680^ | Pro Seminar for EdD | 4 | 4.52 |
| 16B | EDCI 620^ | STEM Teaching and Learning | 24 | 4.65 |
| 16B | EDCI 680 | Pro Seminar for EdD | 4 | 5.0 |
| 16C | EDCI 609 | Identifying Researchable Topics for an EdD Record of Study | 20 | 4.69 |
| 17A | EDCI 620^ | STEM Teaching and Learning | 20 | 4.91 &4.43 = 4.67 |
| 17B | EDCI 620^ | STEM Teaching and Learning | 20 | 4.55 |
| 17C | EDCI 690 ^ | Research in Curriculum and Instruction | 13 | 4.62 |
| 18A | EDCI 623 | Teaching and Learning Pattern and Change Concepts | 8/10 | 4.76 |
| 18B | EDCI 620 | STEM Teaching and Learning | 23/26 | 4.81 |
| 18C | EDCI 690 | Research in Curriculum and Instruction | 17/18 | 4.42 |
| 19A | EDCI 619 | Teaching and Learning Number and Quantity Concepts | 10 | 4.74 |
| 19B | EDCI 620 | STEM Teaching and Learning | 10 | 4.82 |
| 19C | EDCI 690 | Research in Curriculum and Instruction | 17 | 4.8 |

Average for undergraduate courses: 4.58

Average for graduate courses: 4.53

Average for “I believe the instructor was an effective teacher”: 4.37(G) & 4.48 (U)

Average for “I received timely informative feedback on the course assessments”: 4.51 (G) & 4.72 (U)

Average for “I developed deeper insights and understanding about course material”: 4.21 (G) & 4.54 (U)

Graduate Committees – Students graduated

## PhD – Graduated – Chair/Co-Chair

Mahati Kopparla (2019) - UNESCO MGIEP at New Delhi, India

Jonathan David (2019)

Heidi May (2019)

Yujin Lee (2019) – honor grad

Joshua Tabor (2018)

Michelle Hurst (2018)

Bart Taylor (2018) – honor graduate

Rosalinda Garcia (2018)

Sandra Higaredo (2018)

Tina Hill (2017)

Jenn Whitfield (2017 – honor grad PhD)- Assistant DH, Mathematics, TAMU

Joni Bailey (2017 – honor graduate EdD) – AP Bryan

Kitty Rutherford (2017) – Germany – DOD school Curriculum Coordinator

Ali Bicer (2016) – University of Wyoming

Daisy Dailey (2016)

Steve McKissick (2015)

Bianca Coker (2015)

Dwight McHazlett (2015)

Ayse Tugba Oner (2015- honor grad)- İstanbul Medeniye

Amber Godwin (2015) – Sam Houston State University

Antonio Carranza (2015) – Laredo Community College – Dept Head

Kristen DiMatteo (2014)

Jon Maxwell (2014)

Anna Pat Alpert (2013)

Rosalinda Rosali (2013) – University of Malaysia

Murray Cox (2010) – Colorado State

Adam Harbaugh (2005) – University of Missouri

**PhD – Graduated - Member**

Aysenur Bicer (Physics) (2018)

Reza Norouzian (2018)

Christela Garcia (2017)

Melissa Ross (2017)

Dena Crook (2017)

Bilgin Navruz (EPSY) 2016

Baki Cavlazoglu (2016)

Mary Springs (2015)

Meredith Jones (EPSY) 2015

Namik Top (EPSY) 2015

Sherow, Ernestine (2015)

Tarcia Jones (2013)

Niyazi Erdogan (2013)

SunYoung Han (2013)

Latoya Anderson (2013)

Christopher Romero (2012)

Sandra Nite (2012)

Song An (2012)

Michael Muzheve (2008)

Diana Piccolo (2008)

Alpaslan Sahin (2007)

Shirley Matteson (2007)

Meixia Ding (2007)

Judy Taylor (2006)

Linda R. Zientek (2006)

Tau Gamba Kadhi (2005)

Sun Ye (2005)

## MS-Thesis option - Chair

Cristal Gallegos (MS) (2015)

Katherine Vela (2011)

Nikeitha Brown (2011)

Linda Stearns (2010)

Krystal Meredith (2008)

## MS-Thesis option - Member

Cynthia Galvan (MS - Math) 2016

JinHee Lee (2012)

Elizabeth Matthiesen (2006)

April Gilbert (2006)

Heather Louder (2005)

Emilie Naiser (2004)

## Med – Non-thesis option - Chair

Zhang, Qiuge (Susi) (2019)

Jana Arena (2019)

Julia Calabrese (2019)

Sandra L Bertsch (2019)

Jennifer Obrian (2019)

Kerri Beavers (2019)

Tiffani Cortez (2018)

Glenda Moore (2018)

Juan Aparicio (2018)

John Fischer (2018)

Ramiro Lopez (2016)

Allison Sharawi (2015)

## Junhua Lu (2014)

## Sevket Cetin (2012)

Jennifer Easterling (2012)

Irem Akcakaya (2012)

Tamala Willis (2010)

Molly Elizabeth McCarty (2010)

April Moon (2009)

Kristina Anthony (2009)

Rebecca Rowntree (2009)

Kelly Kilgore (2009)

Kimberly Murawski (2009)

Danielle Kotara (2008)

Stephanie Fisseler (2008)

Nicole Bowden (2008)

Karla Mendoza (2008)

Charles Phillips (2008

Joshua McDonald (2008)

Wendy Wright (2004)

Heather Muller (2004)

Amber Senter (2004)

Allison Decker (2002)

Kelly Kelly (2002)

## MEd – Non-thesis option - Member

Cameron Tynes (Architecture) (2019)

Chris Bolognese (Math)(2018)

Lauren Taylor (?)

Antonia Ketsetzi (MS) (2015)

Ariane Failla (MEd) (2015)

Kevin Kolker (MS-Math 2015)

## Jennifer Mascheck (2014)

## Jorge Villa (2013)

Bilgin Navruz (2012)

Ali Bicer (2012)

Cheryl Augustine (2009)

Wendee Jones (2008)

Andrea Pearson (2007)

Rachel Hemsley (2005)

Laura Sebesta (2004)

Robyn Bassett (2003)

Current Graduate Students

## PhD/EdD –Chair/Co-Chair

Bobby Leshikar

Aamir Fidai

Chad Huckaby

Suzanna Ammenheuser

Amy Boatman

Jessica Lee ?

Catherine Hill

Javelo Jones

Jessica Hyunkyung Kwon

Danielle Bevan

Ebony Lai Hing

Allison Burney

**PhD – Member**

Katherine Vela

Yuanyuan Zhou (EPSY)

Michael Rugh

## Med /MS – Non-thesis option – Chair

Lauren Nolte

Jennifer Schero

Robert Hoyuela

Danielle Valentine

Claudia Ovalles

Samantha Flecker

Jennifer Schero

Brooke Stowd

Heather Williams

Jessica Wolfred

Julie Landry

Carl Schwab

Courtney Frost

Regan Ray

Melissa Butterfield

Kerrie Beavers

## MEd/MS - Member

Kate Dodgen (Math)

Maram H. Al Aqra