YUJIN (RACHEL) LEE

YL147@iu.edu | UL 1180D, 755 W. Michigan Street, Indianapolis, Indiana 46202

Professional Experience

Post-doctoral Research Fellow

Indiana University-Purdue University Indianapolis

August, 2019-Present

Graduate Assistant

Aggie STEM & TLAC, Texas A&M University

September, 2015-August, 2019

Research Assistant

Korea Institute for Curriculum and Evaluation

September, 2012-July, 2015

Mathematics teacher

Gwang-Mun High School, Seoul, Korea

Sin-Myung Middle School, Seoul, Korea

November, 2010-Febrary, 2011

April-June, 2006

Education

Texas A&M University, College Station, Texas

August 2019

Ph.D, Mathematics Education

Dissertation: "A rigorous exploration of students' affective mathematics engagement across samples and contexts" (Chair: Dr. Robert M. Capraro, Co-Chair: Dr. Mary M. Capraro)

- Distinguished honor graduate (College of Education and Human Development)
- Advanced Research Method Certificate
- College of Education and Human Development Strategic Research Award

Ewha Womans University, Seoul, Korea

2013

MA, Mathematics Education

Thesis: "An Analysis of Students' Mathematical Problem Posing" (Chair: Dr. Jonghee Lee)

Dankook University, Seoul, Korea

2009

BS, Mathematics Education

Teaching Experience

Graduate (Alternative instructor), Texas A&M University

STEM teaching and learning (EDCI 620-700)

Fall, 2017

Undergraduate (Alternative instructor), Texas A&M University

Problem solving in mathematics (MASC 351-503)

Spring, 2018

	Problem solving in mathematics (MASC 351-500)	Fall, 2017
٠	Graduate (Teaching Assistant), Texas A&M University	
	Analysis of teaching behavior (EDCI 673)	Summer, 2017
٠	Undergraduate (Teaching Assistant), Texas A&M University	
	Problem solving in mathematics (MASC 351-501, 502) Mathematics methods in elementary education (TEFB 412-501, 502) Problem solving in mathematics (MASC 351-501) Problem solving in mathematics (MASC 351-501, 502) Mathematics methods in elementary education (TEFB 412-501, 502) Problem solving in mathematics (MASC 351-501)	Spring, 2017 Fall, 2016 Fall, 2016 Spring, 2015 Fall, 2015 Fall, 2015
٠	Undergraduate (Teaching Assistant), Ewha Womans University	
	Number system and coding theory Material development and teaching methods in mathematics Differential equations Problem solving in discrete mathematics	Spring, 2012 Spring, 2012 Fall, 2011 Fall, 2011
٠	K-12 Education	
	Instructor, Aggie STEM Summer Camp, Texas A&M University Subjects: Mathematics with: (1) Microcontroller, (2) Coding, (3) Cryptography	Summer, 2017, 2018
	Instructor, Aggie STEM Girls Camp, Texas A&M University Subjects: Mathematics with Microcontroller	Summer, 2018
	Mathematics teacher, Gwang-Mun High School, Seoul, Korea November, 2010-Febrary, 2013 Subjects: High school mathematics (AP calculus, Statistics, Geometry, Algebra)	
	Mathematics teacher, Sin-Myung Middle School, Seoul, Korea Subjects: Middle school mathematics	April-June, 2006
٠	Professional Development	
	Instructor, Aggie STEM Teacher Boot Camp, Texas A&M University Subjects: STEM PBL (Project-Based Learning)	Summer, 2018
٠	Invited instructor (Hosted by Aggie STEM)	Fall, 2018
	 Project Literacy-Infused Science Using Technology Opportunity (LISTO) Subject: Microcontroller 	
	 Oakwood Intermediate School Subject: STEM PBL 	October, 2016, 2018
	 Brownsville Elementary School Subject: STEM PBL 	Summer, 2018
Texas A&M University, Bahcesehir University, & Istanbul Medeniyet University Subjects Interaction Confiner Page Thomas 20		

December, 2017

Spring, 2017

Subject: Intro to Coding

Subject: Problem Solving and Problem Posing in grade 2-5

Snook ISD

Research Assistant, Aggie STEM

September, 2015-August, 2019

1. Grant Projects

 Supporting Mathematics in STEM Education (SMSE). R. M. Capraro (Co-Pi) with S. B. Nite PI, Allen, G. D., Barroso, L. R. & Capraro, M. M. Texas Higher Education Coordinating Board, Awarded \$283,327. 2/01/2016-4/30/2017.

o Research Team Leader

- Mathematical affect in STEM PBL
- Gender, ethnicity, language/culture in STEM education
- STEM career aspiration
- Spatial visualization in STEM education
- Developing coding and microcontroller instructions

Research Team member

- Developing the stem academic culture
- Self-regulation and motivation in STEM
- Creativity and problem solving skills through 3D printing learning
- The effects of microcontrollers on students' interest in computer and electrical engineering
- Underrepresented students' stem preparation in inclusive stem high schools
- Literacy-Infused Science Using Technology Innovation Opportunity (LISTO), a 5-Year Longitudinal Validation Project. Co-PI with Lara, R., Irby, B., Capraro, M.M., Tong, F., and Jones, R. Institute of Education Sciences, 8/2017-7/2021 \$12,000,000
 - In-service teachers' professional development and pre-service teachers' professional preparation with literacy-infused science using stem
- Snook ISD Follow-up Study and Intervention, Co-PI with L. Burlbaw, M.M. Capraro et al. Catapult Grant. Internal. Submitted \$37,931.
 - Students' and teachers' problem posing

2. Research Team Leader

- Schools implementing engineering based curriculum ('Project Lead the Way') based on 2016
 State of Texas Assessments of Academic Readiness (STAAR)
 - Comparing mathematics and science achievement of students by gender and ethnicity
- Trends in International Mathematics and Science Study (TIMSS)
 - International comparison about students' mathematical affect and motivation
 - o Contributions of context variables on mathematics teachers' job satisfaction

3. Advising undergraduate research team

- The impacts of students' motivation and interest on their mathematical achievement

4. Other projects

Cognitive Behavioral Therapy and mathematics anxiety

- Students' self-regulation and motivation
- Research Assistant, Korea Institute for Curriculum and Evaluation

September, 2012-July, 2015

1. Projects

- The development of cyber learning content corresponding to the revised 2009 Korean National Curriculum.
- Developing Diagnostic Tests and Remedial Mathematics Basic Ability Program for low-performing vocational high school students. http://www.hijump.or.kr
- Development of teaching-learning methods for underachieving Mathematics students for Korean elementary and middle schools. (Open course ware. http://www.basics.re.kr)
- Translation of USA and UK curriculum in TIMSS 2011 Encyclopedia: Education Policy and
 Curriculum in Mathematics and Science.
 November, 2015
- Content review of the mathematics basic ability program for low-performing vocational high school students.
 July, 2016
- Intern
 - 1. International Conference of Mathematics Education (ICME)

July, 2012

Publication

- Published/In Press
 - Lee, Y., Capraro, R. M., & Bicer, A. (2019). Gender difference on spatial visualization by college students' major types as STEM and non-STEM: A meta-analysis. *International Journal of Mathematical Education in Science and Technology*. https://doi.org/10.1080/0020739X.2019.1640398 (.38 Impact factor – SCOPUS)
 - Lee, Y., Capraro, R. M., & Bicer, A. (2019). Affective mathematics engagement: A comparison of STEM PBL versus Non-STEM PBL instruction. *Canadian Journal of Science, Mathematics and Technology Education*. 1-20. Doi: https://doi.org/10.1007/s42330-019-00050-0 (0.35 Impact factor – SCOPUS)
 - 3. Lee, Y., Capraro, R. M., Bicer, A., & Kwon, H. (2019). Pre-service teachers' preparedness for problem posing: Pedagogical content knowledge and subject matter knowledge. *Electronic International Journal of Education, Arts, and Science, 5*(10), 13-30.
 - 4. Bicer, A., Lee, Y. (2019). Informal STEM learning: Effect of STEM summer camp on student interest in STEM careers. *Journal of Mathematics Education Special Issue: STEM for All Students, 12*(1), 57-73.
 - 5. **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), 74-86. (.33 Impact factor SCOPUS)
 - 6. **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.

- 7. **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), 89-104. (.15 Impact factor SCOPUS)
- 8. Bicer, A., Perihan, C., & Lee, Y. (2018). The impact of writing practices on students' mathematical attainment. *International Electronic Journal of Mathematics Education*, *13*(3), 305-313. (.20 Impact factor SCOPUS)
- 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 types on elementary students' problem-solving. *Educational Studies, DOI:10.1080/03055698.2018.1509785* (.39 Impact factor SCOPUS, Indexed in SSCI)
- 10. Park, J., & Lee, Y. (2016). Commonality analysis of context variables for math Teachers' confidence. *Journal of Educational Research in Mathematics*, 26, 755-768.

In Review

- 1. **Lee. Y.**, Capraro, R. M., Capraro, M. M., & Bicer. A. (2019, In review). School and student factors and their influence on affective mathematics engagement. Paper submitted to *Mathematics Education Research Journal*.
- 2. **Lee. Y.**, Capraro, R. M., Capraro, M. M., & Bicer. A. (2019, In review). Cultural affordance and affective mathematics engagement in Korea and U.S. Paper submitted to *International Journal of Science and Mathematics Education*.
- 3. Bicer, A., Capraro, R. M., Capraro, M. M., & Lee, Y. (2019, In review). Mathematical creative self-efficacy: Problem-posing as a measure of mathematical creativity. Paper submitted to the special issue of "Affect in mathematical problem posing" by Educational Studies in Mathematics.
- 4. Bicer, A, & Lee, Y. (2019, In review). Institutional factors underrepresented students' STEM preparation in ISHSs. Paper submitted in *Research Papers in Education*.
- 5. Bicer, A., Perihan, C., & Lee, Y. (2019, In review). A meta-analysis: The effect of cognitive behavioral therapy on students' mathematics anxiety. Paper submitted to *Investigations in Mathematics Learning*.
- 6. Bicer, A., & Lee, Y. (2018, In review). Coding in mathematics classroom and students' Affective Engagement. *School Science and Mathematics*.
- 7. Younes, R. G., Capraro, R. M., Capraro, M. M., Rosli, R., **Lee, Y.**, Bicer, A., Vela, K., & Caldwell, C. (2018, In review). Increasing retention and performance for high school women in mathematics and sciences: STEM project based learning. Submitted to *Journal of Advanced Manufacturing Technology*.

Proceedings

- 1. **Lee, Y.,** Bicer, A., Kwon, H., Rugh, M., Capraro, R. M., Capraro, M. M., & Barroso, L. R. (2019, In press). *Post-Secondary Ready: Does the STEM Curriculum Matter?* Paper accepted to Proceedings of the 49th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Piscataway, NJ.
- 2. Bicer, A., Lee, Y., Capraro, R. M., Capraro, M. M., & Barroso, L. R. (2019, In press). Examining the Effects of STEM PBL on Students' Divergent Thinking Attitudes Related to Creative Problem Solving. Paper accepted to Proceedings of the 49th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Piscataway, NJ.
- 3. Rugh, M. S., Williams, A., Lee, Y., & Capraro, R. M. (2019, In press). *Comparing STEM Schools on Algebra Performance*. Paper accepted to Proceedings of the 49th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Piscataway, NJ.
- 4. **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 accepted to the 11th International Conference on Mathematical Creativity and Giftedness. Hamburg, Germany.
- 5. 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*. Paper accepted to the 11th International Conference on Mathematical Creativity and Giftedness, Hamburg, Germany.
- 6. 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 accepted to the 11th International Conference on Mathematical Creativity and Giftedness. Hamburg, Germany.
- 7. **Lee, Y.**, Bicer, A., Capraro, R. M., Capraro, M. M., Barroso, L. R., Kwon, H., & Rugh, M. (2018, October). *Comparing Mathematics and Science Achievement of Students from Schools with PLTW versus Schools without PLTW*. Proceedings of the 48th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Piscataway, NJ. (.22 Impact factor SCOPUS)
- 8. Bicer, A., Lee, Y., Capraro, R. M., Capraro, M. M., Barroso, L. R., Bevan, D., & Vela, K. N. (2018, October). *Cracking the Code: The Effects of Using Microcontrollers to Code on Students' Interest in Computer and Electrical Engineering*. Proceedings of the 48th Annual IEEE Frontiers in Education Conference (FIE). IEEE, Piscataway, NJ. (.22 Impact factor SCOPUS)
- 9. Bicer, A., Nite, S. B., Capraro, R. M., Barroso, L. R., Capraro, M. M., & Lee, Y. (2017, October). Moving from STEM to STEAM: The effects of informal STEM learning on students' creativity and problem solving skills with 3D printing. In Frontiers in Education Conference (FIE) (pp. 1-6). IEEE. (.22 Impact factor SCOPUS)

Book

- 1. Kaminaga, M. (2015). 수학 사고력을 키우는 20 가지 이야기[20 stories for developing mathematical thinking ability](Cho, Y., & **Lee, Y.**, Trans.). Seoul, Korea.
- Choe, S., Kwon, J., Lee, B., & Lee, Y. (2013). A study on developing a diagnostic test and remedial
 mathematics basic ability program for low-performing vocational high school students. CRI 201318.

Book Chapter

1. Capraro, R. M., Bicer, A., **Lee, Y.**, & Vela, K. (2018, In press). Putting the quantitative pieces together to maximize the possibilities for a successful project. In K. Leatham (Ed.), *Designing, Conducting, and Publishing Research in Mathematics Education*. Springer Nature.

Presentation

- International/National
 - 1. **Lee, Y.**, Capraro, R. M., Capraro, M. M., & Bicer, A. (2019, submitted). A hierarchical linear modeling approach to investigating factors impacting students' affective mathematics engagement. Paper submitted to *the Annual Meeting of the American Educational Research Association*, San Francisco, CA.
 - 2. **Lee, Y.**, Capraro, R. M., Capraro, M. M., & Bicer, A. (2019, submitted). Effects of motivation on students' affective mathematics engagement. Paper submitted to *the Annual Meeting of the American Educational Research Association*, San Francisco, CA.
 - 3. Bicer, A., **Lee, Y**., & Perihan, C. (2019, submitted). Discipline-specific & general instructional and perdagogical practices forstering the mathematical creativity of students. Paper submitted to *the Annual Meeting of the American Educational Research Association*, San Francisco, CA.
 - 4. Kwon, H., **Lee, Y**., Williams, A., & Capraro, R. M. (2019, submitted). The effect of STEM PBL on students' self-regulation and motivation. Paper submitted to *the Annual Meeting of the American Educational Research Association*, San Francisco, CA.
 - 5. **Lee, Y.**, Bicer, A., Kwon, H., Rugh, M., Capraro, R. M., Capraro, M. M., & Barroso, L. R. (2019, October). Post-Secondary Ready: Does the STEM Curriculum Matter? Proposal accepted at the Frontiers in Education Conference (FIE). Cincinnati, Ohio.
 - 6. Bicer, A., Lee, Y., Capraro, R. M., Capraro, M. M., & Barroso, L. R. (2019, October). Examining the Effects of STEM PBL on Students' Divergent Thinking Attitudes Related to Creative Problem Solving. Proposal accepted at the Frontiers in Education Conference (FIE). Cincinnati, Ohio.
 - 7. Rugh, M. S., Williams, A., **Lee, Y.**, & Capraro, R. M. (2019, October). Comparing STEM Schools on Algebra Performance. Proposal accepted at the Frontiers in Education Conference (FIE). Cincinnati, Ohio.
 - 8. **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*. Proposal accepted to the 11th International Conference on Mathematical Creativity and Giftedness. Hamburg, Germany.
 - 9. 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. Proposal accepted to the 11th International Conference on Mathematical Creativity and Giftedness, Hamburg, Germany.
 - 10. 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? Proposal accepted to the 11th International Conference on Mathematical Creativity and Giftedness. Hamburg, Germany.

- 11. Capraro, M. M., Capraro, R. M., & Lee, Y. (2019, June). A cross-cultural difference in motivation and affective mathematics engagement. Paper presented to the British Society for Research into Learning Mathematics Conference. Birmingham, U.K.
- 12. **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 to the NCTM Research Conference, San Diego, CA.
- 13. Bicer, A., & Lee, Y. (2019, April). The Effects of Informal Learning on Student Interest in STEM Fields. Paper presented to the NCTM Research Conference, San Diego, CA.
- 14. **Lee, Y.**, Capraro, R. M., Bicer, A., Capraro, M. M. (2019, April). *The impact of STEM PBL students' affective mathematics engagement*. Paper presented to the annual meeting of the American Educational Research Association, Toronto, ON, Canada.
- 15. Lee, Y., Capraro, R. M., Bicer, A., Capraro, M. M. (2019, April). Spatial Visualization of Undergraduate Students: The Gap Between Men and Women. Paper presented to the annual meeting of the American Educational Research Association, Toronto, ON, Canada.
- 16. Bicer, A., Kitchen, R., **Lee, Y.**, Aydin, H., & Capraro, R. M. (2019, April). *Institutional characteristics influencing underrepresented students' STEM preparation in inclusive STEM High Schools*. Paper presented to the annual meeting of the American Educational Research Association, Toronto, ON, Canada.
- 17. 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 accepted to the annual meeting of the American Educational Research Association, Toronto, ON, Canada.
- 18. Capraro, M. M., Capraro, R. M. Bicer, A., **Lee, Y.**, & Kopparla, M. (2018, November). *Problem posing in elementary classrooms*. Paper presented at the International Conference on Urban Education, Nassau, Bahamas.
- 19. 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. Paper presented at the Frontiers in Education Conference (FIE). San Jose, CA.
- 20. Bicer, A., Lee, Y., Capraro, R. M., Capraro, M. M., Barroso, L. R., Vela, K., & Bevan, D. (October, 2018). Cracking the Code: The Effects of Using Microcontrollers to Code on Students' Interest in Computer and Electrical Engineering. Paper presented at the Frontiers in Education Conference (FIE). San Jose, CA.
- 21. **Lee, Y.**, Kwon, H., Bicer, A., Capraro, M. M., & Capraro, R.M. (2018, April). *Pre-service teachers' content and pedagogical knowledge in problem posing*. Paper presented at the NCTM Research Conference, Washington, D.C.
- 22. Bicer, A., Capraro, R. M., Capraro, M. M., & Lee, Y. (2018, April). *A-meta analysis: Writing in mathematics classroom*. Paper presented at the NCTM Research Conference, Washington, D.C.
- 23. Foran, A., Goldsby, D., & Lee, Y. (2017, April). *Using oldies and new hits to introduce statistics*. Paper presented at the NCTM Annual Meeting and Exposition, Washington, D.C.

- 24. 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.
- 25. Bicer, A., Nite, S. B., Capraro, R. M., Barroso, L. R., Capraro, M. M., & Lee, 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 Frontiers in Education Conference (FIE). Indianapolis, IN.
- 26. Park, J., & Lee, Y. (2017, April). *Variance contributions to math teachers' confidence in Korea and the United States*. Paper presented at the annual meeting of the American Educational Research Association, Washington D.C.

Regional

- 1. Lee, Y., & Bicer, A. (2019, October). *Affective mathematics engagement: A comparison of the United States and Korea*. Paper accepted for the 2019 SSMA Convention, Salt Lake City. UT.
- Bicer, A., & Lee, Y. (2019, October). Discipline-Specific & General Instructional and Pedagogical Practices Fostering the Mathematical Creativity of Students. Paper accepted for the 2019 SSMA Convention, Salt Lake City. UT.
- 3. **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 accepted for the 2018 School Science and Mathematics Association Convention, Little Rock, AR.
- Bicer, A., Lee, Y., Capraro, R. M., & Capraro, M. M., & Perihan, C (2018, October). Informal STEM Learning & Student Interest in STEM Fields. Paper accepted for the 2018 School Science and Mathematics Association Convention, Little Rock, AR.
- 5. Bicer, A., Perihan, C., Nite, S. B., Capraro, R. M., Currens, K. A., Suarez, M., & Lee, Y. (2017, February). *The effects of cognitive behavior therapy on students' mathematics anxiety*. Paper presented at the Southwestern Educational Research Association Conference, San Antonio, TX.
- 6. Nite, S. B., Bicer, A., Salazar, K., **Lee, Y.**, Barroso, L. R., & Capraro, R. M. (2017, February). *The effect of STEM project-based learning on mathematics teacher instruction*. Paper presented at the Southwestern Educational Research Association Conference, San Antonio, TX.
- 7. Nite, S. B., Bicer, A., Currens, K. A., **Lee, Y.**, Bevan, D., & Barroso, L. R. (2017, February). *Summer precalculus bridge program: Use of electronic resources*. Paper presented at the Southwestern Educational Research Association Conference, San Antonio, TX.
- 8. Goldsby, D., Hill, K., & Lee, Y. (2016, October A). *Bear, snake, cat: What animal do you see?* Paper presented at the Annual Conference for Middle Level Education, Austin, TX.
- Goldsby, D., Hill, K., & Lee, Y. (2016, October B). Bear, snake, cat: What animal do you see? Paper presented at the Annual Conference for Middle Level Education, Austin, TX.

Local (University)

- 1. Kwon, H., Lee, Y., Williams, A. (2019, March). The effect of STEM PBL on students' self-regulation. Paper presented at the Texas A&M University's Student Research Week 2019, College Station, TX.
- 2. Nguyen, C., & Lee, Y. (2019, March). Commonality analysis of context variables for students' mathematical interest. Paper presented at the Texas A&M University's Student Research Week 2019, College Station, TX.

- 3. Capraro, M. M., Kopparla, M., Vela, K., Rice, D., Bevan, D., Bicer, A., Capraro, R. M., Caldwell, C., Kwon, J., **Lee, Y.**, & Martin, R. (2017, April). *Problem posing & solving*. Brown bag presentation at Texas A&M University, College Station, TX.
- 4. **Lee, Y.**, Suarez, M. I., Caldwell, C., & Rice, D. (2017, March). *Affective engagement in STEM PBL*. Paper presented at the Texas A&M University's Student Research Week 2017, College Station, TX.

Certification

- Advanced Research Method Certificate, Texas A&M University, USA
- Secondary School Teacher of Mathematics, Ministry of Education, Korea
- Japanese-Language Proficiency Test (JLPT) N1-Level, Japan Educational Exchanges and Services, Japan

Grant

 2019 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

Awards/Scholarships

Differential Tuition Rch TLAC (Total \$5,000)

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

/ war as/seriolarships		
 Distinguished Honor Graduate College of Education and Human Development, Texas A&M University 	Summer, 2019	
 College of Education and Human Development Strategic Research Award (Total \$34,000) 2018-2019 College of Education and Human Development, Texas A&M University 		
 Graduate Program Enhancement Education (\$600) Department of Teaching, Learning, and Culture, Texas A&M University 	Spring, 2019	
 CEHD Graduate Travel Award Grant (\$500) College of Education and Human Development, Texas A&M University 	Spring, 2019	
 Lechner Graduate Program Scholarship (Total \$4,000) Fall, 2015, Spring, 2016, Fall 2017, Spring, 2018 Department of Teaching, Learning, and Culture, Texas A&M University 		
 Graduate Strategic Scholarship (Total \$1,000) Texas A&M University 	Fall, 2016, 2018	
 CEHD Research Scholars Award (\$500) College of Education and Human Development, Texas A&M University 	Fall, 2016	
 IEFS Graduate ISS Scholarship (\$2,000) Scholarship & Financial Aid, Texas A&M University 	Summer, 2016	
 Graduate Program Enhancement Education (Total \$600) Department of Teaching, Learning, and Culture, Texas A&M University 	Spring, 2016, 2017	
 College & IDP Top Off Scholarship (Total \$5,626) Department of Teaching, Learning, and Culture, Texas A&M University 	Fall, 2015, Spring, 2016	

Fall, 2015, Spring, 2016

Academic Service

Book Review Editor, International Electronical Journal of Mathematics Education

2018-Present

Professional Affiliations

- American Educational Research Association (AERA)
- National Council of Teachers of Mathematics (NCTM)
- School Science and Mathematics Association (SSMA)
- Southwest Educational Research Association (SERA)
- Association for Middle Level Education (AMLE)
- American Society for Engineering Education (ASEE)
- Korea Society of Educational Studies in Mathematics (KSESM)
- International Honor Society in Education (Kappa Delta Pi)