Mi Yeon Lee, Ph.D.

Assistant Professor – Mary Lou Fulton Teachers College (MLFTC)

- *Honors Faculty of the Honors College at Arizona State University*
- *Affiliate Faculty of the Center for Advanced Studies in Global Education (CASGE)*
- *Affiliate Faculty of the ASU Sensor Signal and Information Processing (SenSIP) Center*

EDUCATION

Doctor of Philosophy (Ph.D.), 2013
Indiana University – Bloomington, Indiana, U.S. (Major: Mathematics Education / Minor: Inquiry Methodology)

Master of Arts (M.A.), 2007
Seoul National University of Education, Seoul, Korea. (Major: Mathematics Education)

Bachelor of Arts (B. A.), 2004
Seoul National University of Education, Seoul, Korea. (Major: Elementary Education / Emphasis: Mathematics Education)

PROFESSIONAL EXPERIENCE

8/2013 – Current	Assistant Professor of Mathematics Education and Teacher Preparation, Mary Lou Fulton Teachers College, Arizona State University, U.S.
9/2012 – 5/2013	Field Experience Supervisor, *Elementary Pre-service Teacher Early Field Experience in Math and Science*, Indiana University, Bloomington.
1/2011 – 5/2013	Associate Instructor, *Elementary Mathematics Methods Course* (E343) and *Teaching and Learning Elementary School Mathematics Concepts II: Geometry* (N103), Indiana University, Bloomington, Indiana, U.S.
3/2004 – 12/2008	Elementary School Teacher, Seoul, South Korea

PUBLICATIONS

Peer-Reviewed Articles

Lee, M. Y. (accepted). The potential relationship between clinical interview skills and mathematics teaching noticing: an Exploratory Study. *International Journal of Mathematics and Science Education.*

Lee, M. Y., & Lee, J. (2020). Pre-service teachers' selection, interpretation, and sequence of fraction examples. *International Journal of Science and Mathematics Education*. doi: 10.1007/s10763-020-10062-0

Son, J., & **Lee, M. Y.** (2020). Exploring the relationship between preservice teachers' conceptions of problem solving and their problem-solving performance. *International Journal of Science and Mathematics Education.* doi: 10.1007/s10763-019-10045-w

Lee, M. Y. & Lim, W. (2020). Investigating patterns of pre-service teachers' written feedback on procedure-based mathematics assessment items. *International Electric Journal of Mathematics Education 15(1), 1-12.* https://doi.org/10.29333/iejme/5946

Lee, J., & **Lee, M. Y.** (2020). Pre-service teachers' exploration of model breaking points. *International Journal of Science and Mathematics Education*, 18, 549-575. doi: 10.1007/s10763-019-09974-3

Lee, M. Y. (2019). The development of elementary pre-service teachers' professional noticing of students' thinking though adapted lesson study. *Asia-Pacific Journal of Teacher Education 47(4), 383-398.* doi:10.1080/1359866X.2019.1607253

Lee, M. Y., & Robles*, R. (2019). Using project-based Learning method as a way to engage students in STEM Education. *Research in Mathematical Education 22*(2), 83-97.

Lee, M. Y., & Lee, J. (2019). Pre-service teachers' perceptions of the use of representations and suggestions for students' incorrect Use. *Eurasia Journal of Mathematics, Science and Technology Education, 15*(9), 1-21. doi: 10.29333/ejmste/103055

Kurz, T., **Lee, M. Y.,** Leming, S., & Landis, W. (2019). Visualizing Equations using color tiles. *Mathematics Teaching in the Middle School 24*(5), 304-315.

Lee, M. Y. (2019). A case study examining links between fractional knowledge and linear equation writing of seventh-grade students and whether to introduce linear equations in an earlier grade. *International Electronic Journal of Mathematics Education, 14*(1), 109-122. https://doi.org/10.12973/iejme/3980

Lee, M. Y., & Cross Francis, D. (2019). Measuring Penny. *Teaching Children Mathematics 25*(4), 232-241.

Lee, J., & **Lee, M. Y**. (2018). Tinkering with Number Lines. *Research in Mathematical Education, 21*(1), 1-13.

Lee, M. Y., & Cross Francis, D. (2018). Using literature to develop young students' measurement and graphing talents, *OnCore October Issue,* 5-10.

Lee, M. Y., & Cross Francis, D. (2018). Investigating the relationship among elementary teachers' perception about the use of students' thinking, their professional noticing skills and their teaching practice. *Journal of Mathematical Behavior, 51*, 118-128. doi: 10.1016/j.jmathb.2017.11.007

Lee, M. Y. (2018). Further investigation into the quality of teachers' noticing expertise: A proposed framework for evaluating teachers' models of students' mathematical thinking. *EURASIA Journal of Mathematics, Science, and Technology Education, 14(9), 1-15.* https://doi.org/10.29333/ejmste/92019.

Kurz, T., & **Lee, M. Y.** (2018). Using tools to make sense of right triangles. *Mathematics Teaching in the Middle School, 23(4), 226-230.*

Lee, M. Y. & Kurz, T. (2017). Lights, Shadow, Action. *Teaching Children Mathematics, 24* (2), 136-138.

Lee, M. Y. (2017). Generating linear equations and numerical examples. *Mathematics Teaching in the Middle School, 23*(2), 112-116.

Lee, M. Y. (2017). Pre-service teachers' flexibility with referent units in solving a fraction division problem. *Educational Studies in Mathematics*, *96*(3), 327-348. DOI: 10.1007/s10649-017-9771-6

Merritt, J. D., **Lee, M. Y.**, Rillero, P., & Kinach, B. (2017). Problem-based learning in K-8 mathematics and science education: A literature review. *Interdisciplinary Journal of Problem-Based Learning, 11(2).* Available at https:// dx.doi.org/10.7771/1541-5015.1674

Lee, M. Y., & Cross Francis, D. (2016). 5 Ways to improve children's understanding of length measurement. *Teaching Children Mathemat*ics, 23(4), 218-224.

Kurz, T., Yanik, B., & **Lee, M. Y.** (2016). Dog Mathematics: Exploring Base-4. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, DOI: 10.1080/00098655.2016.1199240*

Hackenberg, A. J., & **Lee, M. Y.** (2016). Students' distributive reasoning with fractions and unknowns. *Educational Studies in Mathematics*, 93(2), 245-263. 10.1007/s10649-016-9704-9

Lee, M. Y. (2015). The relationship between pre-service teachers' geometric reasoning and their van Hiele levels in a Geometer's Sketchpad environment. *Journal of KSME Series D: Research in Mathematics Education,* 19(4), 229-245.

Lee, M. Y. (2015). Designing a children's recreation room. *Teaching Children Mathematics*, *22*(2), 110-114.

Hackenberg, A. J., & **Lee, M. Y.** (2015). Relationships between students' fractional knowledge and equation writing. *Journal for Research in Mathematics Education*, 46(2), 196-243.

Kurz, T., Yanik, B., & **Lee, M. Y.** (2015). The geometry of scoliosis. *Teaching Children Mathematics*, 21(6), 372-375.

Lee, M. Y. (2014). Using weather to teach graphing. *Teaching Children Mathematics*, *21*(4), 249-253.

Cross, D., Hudson, R., **Lee, M. Y.**, Rapacki, L., & Vesperman, C. (2014). Motivating play using statistical reasoning. *Teaching Children Mathematics*, *21*(4), 229-237.

Lee, M. Y., & Hackenberg, A. J. (2014). Relationships between Fractional Knowledge and Algebraic Reasoning: The case of Willa. *International Journal of Science and Mathematics Education,* 12(4), 975-1000. DOI: 10.1007/s10763-013-9442-8.

Lee, M. Y. (2014). Tinkering with Buoyancy. *Teaching Children Mathematics, 20*(9), 574-578.

Cross, D., Hudson, R., Adefope, O., **Lee, M. Y.**, Rapacki, L., & Perez, A. (2012). Success made probable: Creating equitable mathematical experiences through project-based learning, *Journal of Urban Mathematics Education, 5*(2), 55-86.

Cross, D., Adefope, O., **Lee, M. Y.**, & Perez, A. (2012). Hungry for early spatial and algebraic reasoning. *Teaching Children Mathematics*, *19*(1), 42-49.

Hudson, R, Cross, D., **Lee, M. Y.**, & Rapacki, L. (2012). Learning to Tinker. *Teaching Children Mathematics*, *18*(8), 508-513.

Lee, M. Y., & Oh, Y. Y. (2007). The Influence of Mathematical Task Types on Mathematical Communication. *Korean Journal of Educational Research in Mathematics*, *17*(4), 395-418.

Books

Online App Book

Kurz, T., **Lee, M. Y.**, Harris, P., & Leith*, K. (2017). 100 Practice Questions to Prepare for the NES Middle School Mathematics Exam (Kindle Edition). https://www.amazon.com/dp/B076HJ5LJ6/ref=sr_1_1?s=books&ie=UTF8&qid=1508255489&sr=1-1&keywords=nes+mathematics+middle+school

Peer-Reviewed Chapter

Lee, M. Y., & Choi, B. (2017). Mathematical teacher noticing: The key to learning from Lesson Study. In E.O. Schack, Wilhelm, J., & Fisher, M. H. (Eds.) *Teacher Noticing: Bridging*

and Bridging Perspective, Contexts, and Frameworks (pp. 121-140). New York, Philadelphia: Springer.

Online Product

Lee, M. Y. (2018, December). Tinkering with buoyance. In S. McMillen, E., Friedland, & P. del Prado Hill. (Eds.) *Integrating Math across the K-6 Curriculum.* Reston, VA: NCTM. Available at https://www.nctm.org/Store/Products/Integrating-Math-Across-the-K-6-Curriculum/.

Lee, M. Y. (2018, December). Designing a children's recreation room. In S. McMillen, E., Friedland, & P. del Prado Hill. (Eds.) *Integrating Math across the K-6 Curriculum.* Reston, VA: NCTM. Available at https://www.nctm.org/Store/Products/Integrating-Math-Across-the-K-6-Curriculum/.

Kurz, T., Yanik, B., & **Lee, M. Y.** (2018, December). The geometry of scoliosis. In S. McMillen, E., Friedland, & P. del Prado Hill. (Eds.) *Integrating Math across the K-6 Curriculum.* Reston, VA: NCTM. Available at https://www.nctm.org/Store/Products/Integrating-Math-Across-the-K-6-Curriculum/.

Cross Francis, D., Adefope, O., **Lee, M. Y.**, & Perez, A. (2017, February). Hungry for early spatial and algebraic reasoning: Teacher Notes and Activities. In D. Thiessen (Ed.) *Exploring Mathematics through Literature: Articles and Lessons for Prekindergarten through Grade 8.* Reston, VA: NCTM. Available at https://www.nctm.org/Store/Products/Exploring-Math-through-Literature-Pre-K-8/

PENDING GRANTS

National Science Foundation, DRK-12 11/15/2019
Using Physics as a Catalyst for Algebraic Learning submitted
Role: Co-PI (PI: Terri Kurz, Co-PIs: David Meltzer; Pamela Harris) – 25%
REC credit
Fund: $450,000
Period: 3 years (9/1/2020-8/31/2023)

AWARDED GRANTS

1/1/2020-12/31/2022 Co-investigator *RET Site: Sensor, Signal and Information Processing Algorithms and Software.* PI: Andreas Spanias ($577,967)

6/2019 – 5/2022 Co-PI, *The Physics of Elementary Mathematics* (#1855891). PI: Terri Kurz. Funding Agency: National Foundation Fund ($300K)

3/2019	Principle investigator, *Investigating pre-service teachers' distributive reasoning.* Funding Agency: Internal Mini-Research Grant from Mary Lou Fulton Teachers College at ASU ($500)
7/2018	Travel Grant from Sichuan University in China ($6000)
10/2016 – 8/2017	Principle investigator, *Improving preservice teachers' noticing expertise and beliefs through content courses incorporated technology.* Arizona State University. Funding Agency: Mary Lou Fulton Teachers College Internal Grant ($11,600)
7/2016 – 7/2017	Co-PI, *The impact of "ways that ST math technology is used" on students' mathematics concept development*. PI: Barbara Kinach, Arizona State University. Funding Agency: Arizona Public Service Foundation (APS) and MIND Research Institute ($50K).
7/2016	Research Grant from Universität Duisburg-Essen in Germany (2000 Euros)
9/2014-8/2016	Lesson Sketch Inquiry Group member for ThEMaT III project. PI: Dan Chazan Fellow: Woong Lim, University of New Mexico. Grant from National Science Foundation (University of Michigan).
2006-2007	Co-Investigator, *Developing and using a planner to improve elementary students' self-directed learning*. Funding Agency: Seoul Metropolitan Office of Education, Principal Investigator: M. Huh. ($5000)
2005-2006	Co-Investigator, *Developing materials to teach elementary students Info-Communications Ethics*. Funding Agency: Seoul Metropolitan Office of Education, Co-Investigators: H. S. Kang, D. W. Kang, T. S. Oh, & H. J. Lim. ($5000)

PRESENTATIONS

Selected International Conference Presentation

Lee, M. Y. & Lee, J. (2020, July). *Elementary preservice teachers' expected challenges in teaching pattern generalization.* Brief report paper presented at the 14th International Congress on Mathematical Education (ICME-14). Shanghai, China.

Lee, J. & **Lee, M. Y.** (2020, July). *An analysis of preservice teachers' noticing of student pattern generalization strategies.* Research report paper presented at the 14th International Congress on Mathematical Education (ICME-14). Shanghai, China.

Lee, M. Y. (2019, March). Improving preservice teachers' noticing expertise through technology-integrated mathematics content courses. *Paper presented at the 31st International Conference on Technology in Collegiate Mathematics,* Scottsdale, AZ, USA.

Lee, M. Y., & J. Lee (2018). Investigating pre-service teachers' selection, interpretation, and making sequencing of fraction examples and non-examples. Paper presented at 2018 International Conference of the Korean Society of Mathematical Education, Seoul, South Korea.

Lee, M. Y., & Lim, W. (2017). *Impact of a multimedia platform based learning module on preservice teachers' written feedback items.* Research report paper presented at the 41th Conference of the International Group for the Psychology of Mathematics Education (PME). Singapore.

Mizzi, A., Choy, B. H., & **Lee, M. Y.** (2017). *Textbook signatures: Exploration and analysis of mathematics textbooks worldwide.* Working group session presented at the 41th Conference of the International Group for the Psychology of Mathematics Education (PME). Singapore.

Lee, M. Y. (2016). *A framework for evaluating teachers' models of students' thinking*. Paper presented at the International Conference on Mathematics Education on Curriculum and Evaluation, Seoul, South Korea.

Choy, B. H., **Lee, M. Y.**, & Mizzi, A. (2016). Textbook Signatures: Exploring Possibilities. Hosted Discussion Group. Presented at *40th Conference of the International Group for the Psychology of Mathematics Education*. Szeged, Hungary.

Son, J., & **Lee, M. Y.** (2016). Preservice teachers' conception and metaphor of problem-posing and their problem posing performance. Presented at *the 40th Conference of the International Group for the Psychology of Mathematics Education,* Szeged, Hungary.

Lee, M. Y., Adefope, O., Zeybek, Z., & Eker, A. (2016). Impact of a professional development program on mathematical quality of elementary teachers' instruction. In Beswick, K., Muir, T., & Wells, J. (Eds.), *Proceedings of the 40th Conference of the International Group for the Psychology of Mathematics Education*. Szeged, Hungary.

Choy, B. H., Dindyal, J., **Lee, M. Y.,** & Schack, E. O. (2016). *Mathematics teacher noticing: expanding the terrains of this hidden skill of teaching.* Presented at the 13th International Congress on Mathematical Education (ICME-13). Hamburg, Germany.

Lee, M. Y., & Cross Francis, D. (2016). *Investigating the relationship between elementary teachers' perception about the use of students' thinking and their professional noticing skills*. Presented at the 13th International Congress on Mathematical Education (ICME-13). Hamburg, Germany.

Lee, M. Y., Choy, B. H., & Mizzi, A. (2016). *Textbook signatures: An exploratory study of the notion of fractions in Germany, Singapore, and South Korea*. I Presented at the 13th International Congress on Mathematical Education (ICME-13). Hamburg, Germany.

Merritt, J. D., **Lee, M. Y.**, Rillero, P., & Kinach, B. (2016). Problem-based learning in K-8 Mathematics and Science Education: A literature review. Paper presented at the Problem-Based Learning Conference, Zurich, Switzerland: Zurich University of Teacher Education.

Lee, M. Y. (2015). *The relationship between pre-service teachers' geometric reasoning and their van Hiele levels in a Geometer's Sketchpad environment.* Paper presented at the International Conference on Mathematics Education on Curriculum and Evaluation, Seoul, South Korea.

Lee, M. Y., Eker, A., Zeybek, Z., Adefope, O., & Francis Cross, D. (2015). *Exploring the impact of a professional development program on the mathematical quality of elementary teachers' instruction: Opportunities and challenges.* Paper presented at the International Conference on Mathematics Education on Curriculum and Evaluation, Seoul, South Korea.

Choy, B. H., **Lee, M. Y.,** & Mizzi, A. (2015). *Textbook signatures: an exploratory study of the notion of gradient in Germany, Singapore and South Korea.* Paper presented at the 39th International Group for the Psychology of Mathematics Education (PME), Hobart, Tasmania, Australia.

Lee, M. Y. (2015). *Lesson Study as a vehicle for improving preservice teachers' skills in critiquing math lessons.* Paper presented at the 39th International Group for the Psychology of Mathematics Education (PME), Hobart, Tasmania, Australia.

Lee, M. Y. (2014). *Pre-service teachers' abilities to attend to students' mathematical thinking in the moment of teaching in early field experience.* Paper presented at the 38th International Group for the Psychology of Mathematics Education (PME), Vancouver, Canada.

Lee, M. Y. (2014). *Pre-service teachers' understanding of formal proof in a geometry content course.* Poster presented at the 38th International Group for the Psychology of Mathematics Education (PME), Vancouver, Canada.

Selected National Conference Presentation

Kurz, T., Yanik, H. B., Kokic I.B., **Lee, M.Y.**, & Bloom, P. (2020, April). Evaluating preservice STEM teachers' interconnected perceptions of mathematics, science and STEM. Paper presented at the Annual Conference of American Educational Research Association (AERA), San Francisco, USA.

Kurz, T., & **Lee, M. Y.** (2020). Reasoning through linear, geometric and quadratic patterns through the use of color tiles. *Brief research report presented at the 24th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Phoenix, AZ, USA.*

Lee, M. Y. & Lee, J. (2020). Putting a spotlight on area models: Pre-service teachers' capacity to link fractions and geometric measurement*. Brief research report presented at the 24th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Phoenix, AZ, USA.*

Joshua*, S., & **Lee, M. Y.** (2018). Incoherent calculations in proportional tasks. ***Research report*** *presented* at *the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Greenville, SC: University of South Carolina.

Lee, M. Y., & Lee, J. (2018). Pre-service teachers' perceptions of the use of representations and suggestions for students' incorrect use. ***Brief research report*** *presented* at *the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Greenville, SC: University of South Carolina.

Browning, C., Cox, D., Bartell, T., Boston, M., Elliott, R., Fernandes, A., Steele, M., White, D., Ozgun-Koca, A., Bos, B., Lovett, J., Wheeler, A., Harrington, R., Driskell, S., Powers R., **Lee, M.Y.**, Benken, B., Lischka, A., & Edson, A. (2018). Transitioning an Idea into an AMTE Publication: Getting Feedback. Session presented at the 20th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Houston, TX, USA.

Driskell, S., Rhine, S., Wheeler, A., Ives, S. Harrington, R., **Lee, M.Y.**, Earnest, D., & Smith, R. (2018). Teacher preparation Response to the Surge of Web-based Mathematics Curricula Resources. Paper presented at the 20th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Houston, TX, USA.

Son, J., & **Lee, M. Y.** (2017). *How pre-service teachers' conception of problem posing relate to their abilities to pose problem involving fraction operations*. Research report presented at the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA), Indianapolis. IN: Indiana University.

Cross Francis, D., Hudson, R., & **Lee, M. Y**. (2017). *Examining the role of problem solving in changing elementary teacher beliefs about mathematics.* Paper presented at the Annual Conference of American Educational Research Association (AERA), San Antonio, Texas, USA.

Son, J., & **Lee, M. Y**. (2017). How preservice teachers' conception and metaphor of problem-posing is related to their problem posing performance. Paper Presented at the Roundtable

Session at *Annual Conference of American Educational Research Association* (AERA), San Antonio, Texas, USA.

Swartz. B, Rhine, S., Wieman, R., **Lee, M. Y.**, Wheeler, A., & Powell, A. (2017). *Preparing Teachers of Mathematics for the Realities of Technology in the Classroom.* Workshop presented at the 21th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Orlando, Florida, USA.

Son, J., & **Lee, M. Y.** (2016**).** *How preservice teachers' conception of effective problem-solving instruction is related to the conception of problem solving and problem-solving performance.* Presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tuscan. AZ: University of Arizona.

Kinach, B., **Lee, M. Y.,** & Chronister, E. (2016). *Mathematics concept and second language development visually.* Poster presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tuscan. AZ: University of Arizona.

Lee, M. Y., & Son, J. (2016). *Investigating preservice teachers' conceptions of and metaphors for problem-posing and their relationship to problem-posing performance.* Poster presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tuscan. AZ: University of Arizona.

Lee, M. Y., Adefope, O., Zeybek, Z., & Eker, A. (2016). *How does a professional development program affect mathematical quality of elementary teachers' instruction?* Poster presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tuscan. AZ: University of Arizona.

Lee, M. Y. (2016). *How preservice teachers plan mathematics lessons for English Language Learners using technology?* Paper presented at the Annual Conference of School Science and Mathematics Association (SSMA), Phoenix, Arizona, USA.

Hackenberg, A., Creager, M., **Lee, M. Y., &** Eker, A. (2016). *Understanding Features of Differentiating Instruction for Middle School Students.* Paper presented at Annual Conference of National Council of Teachers of Mathematics (NCTM), San Francisco, California, USA.

Son, J. W., & **Lee, M. Y.** (2016). *How Preservice teachers' conception of effective problem-solving instruction is related to the conception of problem solving and problem-solving performance.* Paper presented at the Annual Conference of American Educational Research Association (AERA), Washington DC, USA.

Lim, W., Chauvot, J., Lee, J., Son, J., & **Lee, M. Y**. (2016). *Visualizing inclusive discursive practice in methods courses.* Paper presented at the 20th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Irving, California, USA.

Ozgun-Koca, A., Bos, B., Edwards, M., Keen, G., **Lee, M. Y**, Mikusa, M, Rhine, S., & Swartz, B. (2016). *Supporting mathematics teaching and learning with mathematical and pedagogical apps.* Workshop presented at the 20th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Irving, California, USA.

Eker, A., **Lee, M. Y.**, Zeybek, Z., Adefope, O, & Francis, C.D. (2015). *Drawing connections between students' misconceptions and teachers' instructional practices.* Paper presented at the 37rd Annual Conference of PME-NA, East Lansing, Michigan, USA.

Lee, M. Y., Son, J., & Arabeyyat, T. (2015). *Pre-service teachers' fractional concepts in solving advanced fraction problems.* Paper presented at the 37rd Annual Conference of PME-NA, East Lansing, Michigan, USA.

Cross, D. F., **Lee, M. Y.**, Zeybek. Z., & Adefope, O. (2015). *Delving into the pieces: Drawing connections between different domains of teacher knowledge.* Paper presented at the Annual Conference of American Educational Research Association (AERA), Chicago, Illinois, USA.

Lee, M. Y., & Aydeniz, F. (2015). *Investigating a student's distributive partitioning scheme: The case of Gabriel.* Paper presented at the Annual Conference of American Educational Research Association (AERA), Chicago, Illinois, USA.

Son, J. W., **Lee, M. Y.**, & Arabeyyat, T. (2015). *Preservice teachers' conception and metaphor of problem solving and their problem solving performance: Challenges and strategies.* Paper presented at the Annual Conference of American Educational Research Association (AERA), Chicago, Illinois, USA.

Hudson, R., Francis, D., Rapacki, L., & **Lee, M. Y.** (2015). *Teachers' beliefs as portrayed in NCTM's principles to actions.* Paper presented at Annual Conference of NCTM, Boston, Massachusetts, USA.

Ozgun-Koca, A., Bos, B., Edwards, M., **Lee, M. Y**, & Mikusa, M. (2015). *Providing mathematics educators technological tools to scaffold teacher education.* Workshop presented at the 19th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Orlando, Florida, USA.

Park Rogers, M., Hawkins, S., McCormack, S., Zoretic-Goodwin, M., Avsar Erumit, B., Melki, C., Wiebke, H., & **Lee, M. Y.** (2014) *Identifying preservice elementary teachers' abilities to attend to students' scientific thinking.* Paper presented at the Annual Conference of

National Association for Research in Science Teaching (NARST), Pittsburgh, Pennsylvania, USA.

Lee, M. Y. (2014). *How do pre-service teachers pursue students' mathematical thinking in formative assessment interviews?* Paper presented at the 18th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Irvine, California, USA.

Park Rogers, M., Hawkins, S., McCormack, S., Zoretic-Goodwin, M., Avsar Erumit, B., Melki, C., Wiebke, H., & **Lee, M.** (2014). *Identifying pre-service elementary teachers' abilities to attend to students' scientific thinking*. Paper presented at the Annual Conference of Association for Science Teacher Education (ASTE), San Antonio, TX, USA.

Lee, M. Y. (2013). *Pre-service teachers' ability to pursue children's mathematical thinking through formative assessment interviews*. Paper presented at the 35th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA), Chicago, Illinois, USA.

Galindo, E., Amador, J. M., Norton, A., **Lee, M. Y**., Tsegai, S. K., & Yang, K. (2013). *Reflecting ability and noticing students, thinking: What does it take?* Paper presented at the Annual Conference of National Council of Teachers of Mathematics (NCTM), Denver, Colorado, USA.

Lee, M. Y., & Galindo, E. (2013). *Elementary pre-service teachers' models of children's thinking in an early field experience.* Paper presented at the 17th Annual Conference of Association of Mathematics Teacher Educators (AMTE), Orlando, Florida, USA.

Selected State or Local Conference Presentation

* denotes co-authored graduate or undergraduate students.

Lee, M. Y. (2017). *Improving pre-service teachers' noticing expertise and beliefs through a content course incorporated technology.* Poster to be presented at the Mary Lou Fulton Teachers College (MLFTC) Internal Grant Poster Session.

Kurz, T., **Lee, M. Y.**, Leming*, S., & Landis*, W. (2017). Colorful Algebra for Grades 9-12. Workshop to be presented at MEAD down in Tucson.

Lee, M. Y. (2014). Pre-service teachers' proofs in geometric problems related to congruent triangles. Workshop to be presented at the Regional Conference of NCTM, Indianapolis, Indiana, USA.

Galindo, E., **Lee, M. Y.**, & Amador, J. (2014). *Effective strategies for teacher development: Reflection and noticing students thinking*. Workshop to be presented at the Regional Conference of NCTM, Indianapolis, Indiana, USA.

Lee, M. Y. (2014). *Teaching expressions and equations through pictorial representations of quantitative relationships*. Workshop to be presented at Arizona Association of Teachers of Mathematics (AATM), Tempe, Arizona, USA.

Park-Rogers, M., Erumit, B., Hawkins, S., **Lee, M. Y.,** McCormack, S., Melki, C. Wiebke, H., & Zoretic-Goodwin, M. (2013). *Examining preservice elementary teachers' abilities to attend to students' scientific thinking.* Paper presented at the Curriculum and Instruction Research and Creative Activity Symposium (CIRCAS), Indiana University, Bloomington, Indiana, USA.

Professional Development Provided

Lee, M. Y. (2019, June). Designing our community facilities. Workshop presented at STEM camp at the Sheraton Grand in Downtown Phoenix, Arizona, USA.

Francis, D., Hudson, R., Rapacki, L., **Lee, M. Y.**, Zeybek, Z, Eker, A., & Dilworth, Lori. (2014, June). *Improving teachers' quality (ITQ)*. Workshop presented at Indiana University at Northwest, Gary, Indiana, USA.

Cross, D., Hudson, R., Rapacki, L., Adefope O., **Lee, M. Y.**, Vesperman, C., Zeybek, Z, Aydeniz, F, & Dilworth, Lori. (2013, June). *Improving teachers' quality (ITQ)*. Workshop presented in Indiana University at Northwest, Gary, Indiana, USA.

Cross, D., Adefope, O., Perez, A., **Lee, M. Y.**, & Rapacki, L. (2010, September – 2011 May). *Implementing student-centered mathematics instruction through collaborative teacher development.* Workshop presented in McCullough elementary school and Watson elementary school, Gary, Indiana, USA.

Lee, M. Y., & Jung, H. (2010, July). *TinkerPlots and Fathom.* Workshop for Indiana University Mathematics Education Training Program for Korean Secondary Level School Teachers, Bloomington, Indiana, USA.

Galindo, E. & **Lee, M. Y.** (2010, July). *A look at American textbooks, manipulative materials and web resources for mathematics learning.* Workshop for Indiana University Mathematics Education Training Program for Korean Secondary Level School Teachers, Bloomington, Indiana, USA.

Galindo, E. & **Lee, M. Y.** (2010, July). *Fostering geometric thinking.* Workshop for Indiana University Mathematics Education Training Program for Korean Secondary Level School Teachers, Bloomington, Indiana, USA.

TEACHING EXPERIENCE

University Level

1/2020-5/2020 2020 Spring Semester
Mathematics Methods and Assessment (EED 537), Graduate Course
Arizona State University, Tempe & Downtown Phoenix.

8/2019-12/2019 2019 Fall Semester
Investigating Change: Patterns, Functions and Modeling (MTE 301),
Arizona State University, Tempe, Arizona, U.S

8/2019-12/2019 2019 Fall Semester
Dissertation Research (DCI 799), Graduate Course
Arizona State University, Tempe, Arizona, U.S.

5/2019-6/2019 2019 Summer Semester
Investigating Quantities: Number and Operations (MTE 280)
Arizona State University, Tempe, Arizona, U.S.

5/2019-7/2019 2019 Summer Semester
Converting in-person MTE 485 course (*Teaching Standards-based middle and high school mathematics*) to online course

1/2019-5/2019 2019 Spring Semester
Mathematics Methods and Assessment (EED 537), Graduate Course
Arizona State University, Downtown Phoenix, West, & Longview Elementary School, Arizona, U.S.

1/2019-5/2019 2019 Spring Semester
Dissertation Research (DCI 799), Graduate Course
Arizona State University, Tempe, Arizona, U.S.

8/2018-12/2018 2018 Fall Semester
Mathematics Methods and Assessment (EED 537), Graduate Course
Arizona State University, Downtown Phoenix, Arizona, U.S.

1/2018-5/2018 2018 Spring Semester
Individual Research (DCI 792), Graduate Course
Arizona State University, Tempe, Arizona, U.S.

1/2018-5/2018 2018 Spring Semester
Mathematics Methods and Assessment (EED 537), Graduate Course
Arizona State University, Downtown Phoenix, Arizona, U.S.

1/2017-5/2017 2017 Spring Semester

Individual Research (DCI 792), Graduate Course
Arizona State University, Tempe, Arizona, U.S.

1/2015-12/2017 2015 Spring, 2015 Fall, 2016 Spring, 2016 Fall, and 2017 Spring, 2017 Fall Semester. *Investigating Change: Patterns, Functions and Modeling* (MTE 301), Arizona State University, Tempe, Arizona, U.S.

8/2014-12/2014 2014 Fall Semester
Investigating Change: Patterns, Functions and Modeling (MTE 301), Arizona State University, West, Arizona, U.S.

8/2013- 5/2014 2013 Fall and 2014 Spring Semester
Investigating Space: Geometry, Measurement, and Visualization (MTE 281), Arizona State University, Tempe, Arizona, U.S.

1/2013- 5/2013 2013 Spring Semester
Elementary Mathematics Methods Course (E343), Indiana University, Bloomington, Indiana, U.S.

1/2011 - 12/2012 2011 Spring, 2011 Fall, 2012 Spring, and 2012 Fall semester
Teaching and Learning Elementary School Mathematics Concepts II: Geometry (N103), Indiana University, Bloomington, Indiana, U.S.

K-12 Level

5/2015 Instructor, Mathematics and Science Summer Camp for K-2 grades, Funded by Educational department of Indiana, Hammond, IN, U.S.

7/2012 –8/2012 Teaching Assistant, *Great Discoveries in Mathematics for 5^{th} and 6^{th} grade students*, Johns Hopkins Center for Talented Youth Summer Programs, Stanford University, Palo Alto, CA, U.S.

5/2010 Instructor, Mathematics and Science Summer Camp for 5^{th}- 6th grades, Summer program funded by Educational department of Indiana, Gary, IN, U.S.

3/2004-12/2008 Elementary School Teacher, Chang-dong Elementary School, Seoul, Korea. Taught every subject including mathematics to grades 3-6 students.

HONORS & AWARDS

2/8/2020 Award for outstanding service as 2020 AMTE Local Arrangements Co-Chair
6/15/2019 Nominated for the 2020 AMTE Early Career Award
3/22/2019 Five-year Service Award (by Mary Lou Fulton Teacher College at ASU)

3-5/3019	Invited as a reviewer of Elementary and Middle School Mathematics: Teaching Developmentally (10th ed) by Van de Walle, Karp, & Bay-Williams for providing feedback on the types of changes needed to ensure the next edition.
7/8-21 /2018	Invited as a summer instructor for 2018 University Immersion Program, Sichuan University, Chengdu, China
3/2018	2018 National Academy of Education (NAEd)/Spencer Postdoctoral Fellowship semifinalist
7/26-28 /2017	Invited as a speaker to the NIMS & KSME International Summer Workshop on Mathematics Education at NIMS, Daejeon, South Korea
2/2017	Invited as a roundtable guest speaker to AMTE Mentoring Committee Session
7/2016	Invited as a guest speaker to one of the lecture series hosted by Universität Duisburg-Essen in Germany
2014-2015	Fellow of the STaR early career math fellowship program (NSF-funded)
11/2012	Daisy Jones Fellowship Doctoral Dissertation Award
04/2010	Daisy Jones Fellowship Travel Award
07/2006	Awarded the Third Prize in Seoul Portal System Blog Contest (Mathematics) by Seoul Education Research & Information Institute
12/2006	Awarded the Second Prize in the 3th Instruction Case Presentation Contest (Mathematics) by Seoul Education Research & Information Institute

SERVICE

National Selection Committee

6/17 – 7/30/ 2019	Appointed as a Review Panelist for "Presidential Awards for Excellence in Mathematics and Science Teaching"

Editorship

2/2020 – 2/2022	Journal Editorial Review board for *Contemporary Issues in Technology and Teacher Education* (CITE) journal
9/2018 - Current	Managing editor for *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematics Education*
2/2017 – 2/2018	Journal Editorial Review board for *Contemporary Issues in Technology and Teacher Education* (CITE) journal
10/2016 – 10/2018	Editor in chief for *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematical Education*

Committee Work

5/2019 – 2/2020	Co-chair of Local Arrangement Committee for AMTE conference held in Phoenix, AZ
9/2017– 5/15/2019	Have served on the University Senate at ASU
9/2014 – 5/2017	University Undergraduate Standards Committee at ASU
2/2014 - 2/2017	Served a term on the Association of Mathematics Teacher Educators (AMTE) Technology Committee
6/2016-10/2017	Served as a team member in PME-NA 2017 conference organizing committee for Program Development

Journal Reviewer

3/2019 – current	Journal Reviewer, Mathematics Teacher: Learning and Teaching Pre-K-12 by NCTM
10/2018 - current	Journal Reviewer, International Journal of Education in Mathematics, Science and Technology (IJEMST)
6/2018 - current	Journal Reviewer, Journal of Mathematics Teacher Education (JMTE)
11/2017 – current	Journal Reviewer, EURASIA Journal of Mathematics, Science and Technology Education (EJMSTE)
12/2016 – present	Journal Reviewer, Journal of Mathematical Behavior (JMB)
8/2016 – present	Journal Reviewer, Contemporary Issues in Technology and Teacher Education (CITE) by Society for Information Technology and Teacher Education (SITE)
12/2015-present	Journal Reviewer, Journal for Research in Mathematics Education (JRME) by NCTM
11/2014- present	Journal Reviewer, Journal of Elementary Mathematics Education in Korea
5/2012- present	Journal Reviewer, a journal of the Indiana Council of Teachers of Mathematics (ICTM)
1/2012- 5/2019	Journal Reviewer, Mathematics Teaching in the Middle School (MTMS)
12/2010- 5/2019	Journal Reviewer, Teaching Children Mathematics (TCM)