MI SUN PARK

I. CONTACT INFORMATION

Name: Mi Sun Park

Address: 1001 Leadership Place

Killeen, TX 76549

Phone: (254) 519-5464

Email: mi.park@tamuct.edu

II. EDUCATION HISTORY

Degree	Year	Institution
Ph.D.	2013	University of Minnesota, Twin cities Major: Education, Curriculum and Instruction Track: Mathematics Education Minor: Educational Psychology Track: Statistics Education *Dissertation: Professional Development and Teacher Change: Teachers' Practices and Beliefs About Using Multiple Representations in Teaching Mathematics*
M.S.	1999	Yonsei University, South Korea Major: Mathematics Specialization: Differential Geometry
B.S.	1997	Soonchunhyang University, South Korea Major: Mathematics Minor: Mathematics Education

III. CERTIFICATION

Texas Educator Certificate – Mathematics: Grades (4-8)

Texas Educator Certificate – Mathematics: Grades (7-12)

Teacher's Certificate for Secondary School in Mathematics in Korea

IV. TEACHING EXPERIENCE

Position and Date	Location and Description
Adjunct Faculty (Jan 2021 ~ Present)	Department of Curriculum and Instruction Texas A&M University – Central Texas EDUC 5322 Teaching Math and Science

Adjunct Faculty (Aug 2016 ~ Present)	Department of Curriculum and Instruction Texas A&M University – San Antonio EDCI 4347: Math Methods for EC & Elementary Teachers EDCI 4357: Math Methods in Middle and Secondary Levels TExES Review Sessions: EC-6 Generalist (Math) & 4-8 Math
Adjunct Faculty (Aug 2015 ~ Present)	Mathematics Department University of the Incarnate Word-San Antonio MATH 2312: Calculus I MATH 1311: Precalculus MATH 1304: College Algebra MATH 0318: Intro to Geometry/ Probability and Statistics
Volunteer math tutor (Sep 2013 ~ June 2014)	International Institute of Minnesota Math tutoring in the College Readiness Program for immigrants
Volunteer instructor (Sep 2012 ~ Dec 2012)	Mathematics Education Department of Curriculum and Instruction, University of Minnesota Co-teaching a mathematics and pedagogy class for elementary teachers with a mathematics education faculty member. MTHE 3102: Mathematics and Pedagogy for Elementary Teachers II
Instructor (Sep 2009 ~ Aug 2010)	STEM Education Center Department of Curriculum and Instruction, University of Minnesota STEM education curriculum and implementation, "Reach For The Sky" (RFTS) afterschool program for Native American students
Graduate Teaching Assistant (Feb 2008 ~ May 2008)	Department of Postsecondary Teaching and Learning, University of Minnesota Providing tutoring service to undergraduate students in intermediate algebra up to pre-calculus and statistic classes
Mathematics Teacher (Oct 2000 ~ Feb 2005)	Daeyon Academy, South Korea Teaching K-12 mathematics

Graduate Teaching Assistant (Sep 1998 ~ Dec 1998)	Department of Mathematics, Yonsei University, South Korea MAT 3103: Introduction to Differential Geometry
Graduate Teaching Assistant (Mar 1998 ~ June 1998)	Department of Mathematics, Yonsei University, South Korea MAT 1001: Calculus and Vector Analysis

V. RESEARCH EXPERIENCE

Position and Date	Location and Description
Post-doctoral Research Associate (Aug 2013~July 2014)	STEM Education Center Department of Curriculum and Instruction, University of Minnesota
Research Assistant (Aug 2009 ~ June 2013)	STEM Education Center Department of Curriculum and Instruction, University of Minnesota Evaluation of math and science modules – The Region 11 Mathematics and Science Teacher Partnership (MSTP) for Science, Technology, Engineering and Mathematics (STEM) and 3-5/6-8 Algebra professional development program focused on K-12 math and science teachers, funded by the Minnesota Department of Education
Research Assistant (June 2012~June 2013)	STEM Education Center Department of Curriculum and Instruction, University of Minnesota Evaluation of mathematics and science professional development modules for grade 3-8 – The Region 7 Mathematics and Science Teacher Partnership (MSTP) project funded by the Minnesota Department of Education
Research Assistant (May 2009 ~ Aug 2012)	STEM Education Center Department of Curriculum and Instruction, University of Minnesota NSF-funded "Model Eliciting, Developing, and Integration Activities (MEDIA) Project for Improving Engineering Students' Learning Strategies Through Models and Modeling"
Research Assistant (Jan 2011~ Jan 2012)	Department of Educational Psychology, University of Minnesota

	Item Development for K-5: The Computer Based Assessment System for Mathematics (CBAS-M) research project
Research Assistant (Aug 2009 ~ Aug 2010)	STEM Education Center Department of Curriculum and Instruction, University of Minnesota
	NSF-funded "Reach For The Sky" (RFTS) – STEM education curriculum and implementation program for Native American students
Research Assistant (Aug 2008 ~ May 2009)	Department of Curriculum and Instruction, University of Minnesota
	NSF-funded Minnesota Mathematics Achievement Project (MNMAP)
Education Consultant (Jun 2008 ~ Aug 2008)	Seward, Inc., Minneapolis, MN
	Building Model Eliciting Activities (MEAs) in the Middle Grades Project for Supporting Teachers and Enhancing Student Learning through Technology

VI. JOURNAL ARTICLES

Kim, Y. R., & **Park, M. S.** (2020). Mathematical modeling in teacher education: A case study of preservice teachers' experiences. *Journal of Mathematics Teacher Education in Texas*, *10*(2), 8-10.

Park, M. S., Kim, Y. R., & Kwon, E. H. (2019). Geo-Baloo: Teaching geometry through physical activities. *Early Years*, *40*(3)*,* 28-30.

Park, M. S., Kim, Y. R., Moore, T. J., & Wyberg, T. (2018). Professional development framework for secondary mathematics teachers. *International Journal of Learning, Teaching and Educational Research*, *17*(10), 127-151.

Kim, Y. R., & **Park, M. S.** (2018). Creating a virtual world for mathematics. *Journal of Education and Training Studies*, *6*(12), 172-183.

Kim, Y. R., & **Park, M. S.** (2018). The persistent difficulty of early fraction ideas in early secondary school mathematics. *Journal of Education and Practice*, *9*(29), 32-42.

Kim, Y. R., & **Park, M. S.** (2018). Effective teaching for place value understanding: A case study of a literacy-integrated math curriculum module. *Early Years*, *39*(1), 19-23.

Moore, T. J., Guzey, S. S., Roehrig, G. H., Stohlmann, M., **Park, M. S.**, Kim, Y. R., Callender, H. L., & Teo, H. J. (2015). Changes in faculty members' instructional beliefs while implementing model-eliciting activities. *Journal of Engineering Education*, *104*(3), 279-302.

Kim, Y. R., **Park, M. S.**, Moore, T. J., & Varma, S. (2013). Multiple levels of metacognition and their elicitation through complex problem-solving tasks. *Journal of Mathematical Behavior, 32*(3), 377-396.

Roehrig, G. H., Moore, T. J., Wang, H. H., & **Park, M. S.** (2012). Is adding the E enough?: Investigating the impact of K-12 engineering standards on the implementation of STEM integration. *School Science and Mathematics Journal, 112*(1), 31-44.

Park, M. S., Nam, Y., Moore, T. J., & Roehrig, G. H. (2011). The impact of integrating engineering into science learning on student's conceptual understanding of heat transfer. *Journal of the Korean Society of Earth Science Education, 4*(2), 89-101.

Wang, H. H., Moore, T. J., Roehrig, G. H., **Park, M. S.** (2011). STEM integration: The impact of professional development on teacher perception and practice. *Journal of Research in Pre-College Engineering Education. 1*(2), 1-13.

VII. BOOKS

Park, M. S., & Kim, Y. R. (2014). *How Many Invitations Do I Need?* Charleston, SC: CreateSpace. ISBN: 9781497322820.

Park, M. S., & Kim, Y. R. (2014). *Who Lost a Necklace?* Charleston, SC: CreateSpace. ISBN: 9781494883874.

Kim, Y. R., & **Park, M. S.** (2013). *Ten Jellies in a Long Box and One Hundred Jellies in a Flat Box*. Charleston, SC: CreateSpace. ISBN: 9781494251055.

Park, M. S., & Kim, Y. R. (2013). *Who am I? Half of Someone or Myself?* Charleston, SC: CreateSpace. ISBN: 9781492972464.

VIII. SCIENTIFIC PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS
(*denotes work with students)

Kim, Y. R., **Park, M. S.**, Fields, A.*, & Gonzalez, A.* (2018, November). *Developing proportional reasoning through coding and robotics*. Proceedings of the 11th annual International Conference of Education, Research and Innovation (ICERI) Conference, Seville, Spain, November 12-14, 2018.

Kim, Y. R., & **Park, M. S.** (2018, March). *Preservice teachers' experiences of group work*. Proceedings of the 12th annual International Technology, Education and Development (INTED) Conference, Valencia, Spain, March 5-7, 2018.

Kim, Y. R., & **Park, M. S.** (2017, July). *Preservice teachers' perspectives on modeling activities*. Accepted to present at the 9th annual International Conference on Education and New Learning Technologies (EDULEARN), Barcelona, Spain, July 3-5, 2017.

Kim, Y. R., & **Park, M. S.** (2017, July). *Using manipulatives to teach middle grades math*. Accepted to present at the 9th annual International Conference on Education and New Learning Technologies (EDULEARN), Barcelona, Spain, July 3-5, 2017.

Nam, Y., **Park, M. S.**, Kim, Y. R., Roehrig, G. H., & Moore, T. J. (2012, October). *A Problem-Based Culturally Relevant STEM Curriculum*. Accepted for presentation at the Asia Regional Conference of International History, Philosophy, and Science Teaching Group, Seoul, South Korea.

Park, M. S., Kim, Y. R., Moore, T. J., & Roehrig, G. H. (2012, July). *Teachers' knowledge and math teaching in a reform curriculum.* Proceedings of the 12th International Congress on Mathematical Education (ICME-12), Seoul, Korea, July 8–15, 2012.

Kim, Y. R., Breit-Goodwin, M., **Park, M. S.**, Moore, T. J., & Roehrig, G. H. (2012, July). *A continuing challenge: Developing initial fraction ideas.* Proceedings of the 12th International Congress on Mathematical Education (ICME-12), Seoul, Korea, July 8–15, 2012.

Stolmann, M., Moore, T. J., Kim, Y. R., **Park, M. S.**, & Roehring, G. H. (2011). *The development of an instructional and assessment tool from student work on a Model-Eliciting Activity.* Proceedings of the 2011 American Society for Engineering Education (ASEE) National Conference, Vancouver, BC, 13 pages.

Wang, H., Moore, T. J., Roegrig, G., & **Park, M. S.** (2011). *The impact of professional development on teachers'integration engineering into science and mathematics classroom.* Proceedings of the 2011 American Society for Engineering Education (ASEE) National Conference, Vancouver, BC, 16 pages.

IX. PRESENTATION IN CONFERENCE (*denotes work with students)

Kim, Y. R., **Park, M. S.**, & Tjoe, H. (2020, February). *Preservice Teachers' Experiences with Mathematical Modeling Activities.* Accepted to present at the 24th Annual Conference of the Association of Mathematics Teacher Educators (AMTE), Phoenix, AZ, February 6-8, 2020.

Kim, Y. R., **Park, M. S.**, & Tjoe, H. (2019, November). *Mathematical modeling and multiple solution strategies: The case of Sphero SPRK+.* The 2019 School Science and Mathematics Association (SSMA) Convention, Salt Lake City, UT, November 7-9, 2019.

Kim, Y. R., & **Park, M. S.** (2019, February). *Preservice Teachers' Experiences with Math Activities using Coding and Robotics.* The 23rd Annual Association of Mathematics Teacher Educators (AMTE) Conference, Orlando, FL, February 7-9, 2019.

Kim, Y. R., & **Park, M. S.** (2017, April). *Teaching and learning mathematics through modeling activities.* International Conference on Education and Social Development (ICESD), Houston, TX, April 7-8, 2017.

Kim, Y. R., **Park, M. S.**, & Moore, T. J. (2013, April). *Mathematical reasoning and proof: Letting students write their own story.* NCTM Annual Meeting & Exposition, Denver, CO, April 17-20, 2013.

Park, M. S., Pratt, K., Schirvar, W., & Christ, T. (2011, October*). CBAS-Math: Developing computer-based matheamtics assessment items based on Common Core State Standards for K-5.* Minnesota Council of Teachers of Mathematics Fall Conference, Maple Grove, MN, October 21, 2011.

Wang, H. H., **Park, M. S.**, Guzey, S., Stevenson, C., Moore, T. J., Roehrig, G. H., & Wyberg, T. (2011, August). *Criteria and assessment: What is the best practice of STEM professional development for K-12 in-service teachers?* Colloquium on P-12 STEM Education

Research, A forum for professionals researching & teaching P-12 STEM Education, St. Paul, MN. August 15-16, 2011.

Stohlmann, M., Guzey, S., Kim, Y. R., **Park, M. S.**, Moore, T. J. (2011, August). *Implementing STEM integration through Model-Eliciting Activities*. Colloquium on P-12 STEM Education Research, A forum for professionals researching & teaching P-12 STEM Education, St. Paul, MN. August 15-16, 2011.

Pratt, K., **Park, M. S.**, Schirvar, W., Clarkson L. C., & Christ, T. (2011, August). *CBAS-Math: Computer-based mathematics assessment to enhance effective learning environments.* Colloquium on P-12 STEM Education Research, A forum for professionals researching & teaching P-12 STEM Education, St. Paul, MN. August 15-16, 2011.

Nam, Y., **Park, M. S.**, Kim, Y. R., Roehrig, G. H., & Moore, T. J. (2011, March) *Shelter design: Problem solving lesson using a culturally relevant STEM topic.* National Association for Research in Science Teaching (NARST) Annual International Conference, Orlando, FL.

Moore, T. J., Roegrig, G. H., Wang, H. H., & **Park, M. S.** (2011, March). *Not your typical "Chair-ity" case: STEM integration as a means for engineering design.* National Association for Research in Science Teaching (NARST) Annual International Conference, Orlando, FL.

Wang, H. H., Moore, T. J., Roegrig, G. H., & **Park, M. S.** (2011, January). *Engineering in Science Education: The impact of professional development program on different subject areas of science teachers in adding engineering concepts in their teaching.* Association for Science Teacher Education (ASTE), Minneapolis, MN.

Wang, H. H, Moore, T. J., Roegrig, G. H., & **Park, M. S.** (2010). *STEM integration: The impact of professional development on teacher perception and practice.* Paper presented at the conference of the P-12 Engineering and Design Education Research Summit, Seaside, OR.

Moore, T. J., **Park, M. S.**, & Kim, Y. R. (2010, May). *Blur the lines: STEM contexts for meaningful mathemtics*. Minnesota Council of Teachers of Mathematics Spring Conference, Duluth, MN, April 30 – May 1, 2010.

X. GRANTS

Kim, Y. R., & **Park, M. S.** (2019). Hola STEM middle school girls project. *HOLT CAT*. Funding awarded: $25,000.

XI. SERVICE TO COLLEGE

Dates	Membership and Role(s)
2016 ~ Present	Conducting a **TExES review** for College pre-service teachers at Texas A&M University – San Antonio

XII. SERVICE TO COMMUNITY

Dates	Membership and Role(s)
Oct. 21 ~ Nov. 15, 2019	Hola STEM (extending Hola STEM to offer after-school programs): • Supervising undergraduate teaching assistants • Developing integrated STEM activities by using robotics and coding • Supporting curriculum implementations to assist Terrell Wells Middle School, Harlandale ISD, Texas
July 22 ~ July 25, 2019	Hola STEM (hosting a STEM summer school program "Hola STEM" at the campus of Texas A&M University-San Antonio for middle school girls from Harlandale ISD, Texas) • Supervising undergraduate teaching and research assistants • Developing integrated STEM activities by using robotics and coding • Supporting curriculum implementations
March 25 ~ April 17, 2019	Hola STEM (extending Hola STEM to offer after-school programs): • Supervising undergraduate teaching assistants • Developing integrated STEM activities by using robotics and coding • Supporting curriculum implementations to assist Terrell Wells Middle School, Harlandale ISD, Texas
November 3, 2018	A volunteer for the 9th Annual CORE4 STEM Family Day at the campus of Texas A&M University-San Antonio in partnership with the San Antonio Hispanic Chamber of Commerce • Developed integrated STEM hands-on activities by using robotics and coding • Organized and implemented the activities with preservice teachers for students and parents
July 23 ~ August 2, 2018	A volunteer for Hola STEM: a STEM summer school program at the campus of Texas A&M University-San Antonio for elementary students from Harlandale ISD, Texas • Supervising undergraduate teaching assistants • Developing integrated STEM activities by using robotics and coding • Supporting curriculum implementations

April 9 ~ May 2, 2018	A volunteer for launching an after-school STEM robotics project • Developed and implemented integrated STEM activities by using robotics and coding to assist Columbia Heights Elementary, Harlandale ISD, Texas
April 16~20, 2018	A volunteer for the Week of the Young Child project • Collaboration with Early Child Program in the Department of Educator and Leadership Preparation at Texas A&M University-San Antonio: Developed and implemented STEAM activities for young children on April 19, 2018
October 24, 2016	A volunteer to run a STEM night at Wilson Elementary Edgewood ISD, Texas • Developed and prepared several math games/activities to help the Wilson Elementary Edgewood ISD run a STEM night • Organized the games/activities with preservice teachers for the Wilson Elementary students • Stayed the full hours and provided the elementary students with a fun filled night
Jan 2014 ~ May 2014	A volunteer math tutor at the International Institute of Minnesota • Taught math in the college readiness program for immigrants

XIII. PROFESSIONAL DEVELOPMENT WORKSHOPS

Date	Workshop and Location
Sep 2020	Online Training: How can I Help Online Students Develop Autonomy and Take More Responsibility for their Learning University of the Incarnate Word, TX
Sep 2012	Professional development for grade 3-5 – Expanding children's mathematical reasoning using rational numbers, Northeast Metro District 916, Little Canada, MN
Sep 2011, Nov 2011, Jan 2012, & March 2012	Professional development for grade 6-8 – 6-8 Algebra connected to rational numbers, Northeast Metro District 916, Little Canada, MN
May 2010	Professional development for secondary STEM – Role of representation, discussion and alternative conceptions, Continuing

	Education Conference Center, University of Minnesota, St. Paul Campus, MN
Feb 2010	Professional development for grade 3-5 – 3-5 algebra connected to numbers (Number and Operations), Northeast Metro District 916, Little Canada, MN
Oct 2009	Professional development for grade 3-5 – Overview of the importance of algebraic thinking, how students learn mathematics, and fundamental concept of the equal sign as a relation, Minneapolis Convention Center, Minneapolis, MN

XIV. PROFESSIONAL AFFILIATIONS

Date	Description
2010 ~ Present	Member of the National Council of Teachers of Mathematics (NCTM)
2017~ Present	Association of Mathematics Teacher Educators (AMTE)

XV. AWARDS AND HONORS

Date	Description
2012, April	Graduate Student Seminar, American Educational Research Association (AERA), Division K (Teaching and Teacher Education)
1994 ~ 1996	Scholarships for Outstanding Academic Achievement, Department of Mathematics, Soonchunhyang University, South Korea