# CURRICULUM VITAE Zhonghe Wu (Ph.D.), Professor

#### **ADDRESS**

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## **EDUCATION**

2004, Ph.D., Curriculum and Instruction - Mathematics Education, Texas A&M University, College Station, TX

1995, MBA, International Business and finance, Texas A&M International University; Laredo, TX

1987, BS, Mechanical Engineering, Wuhan University of Technology; Wuhan, China

#### Ph.D. DISSERTATION

The Study of Middle School Teachers' Understanding and Use of Mathematical Representation in Relationship to *Teachers' Zone of Proximal Development* in Teaching Fractions and Algebraic Functions. Texas A&M University. Advisor: Gerald O. Kulm

#### MAJOR AREAS OF TEACHING AND RESEARCH

#### Courses Taught

- The Diverse Classroom; Educational Psychology; The Foundation of American Education; Mathematics Method for Elementary and Middle School Teachers K-8; Mathematics Method for high School; Science Method for Elementary and Middle School Teachers K-8; Classroom Management; Mathematics Assessment for K-12 Teachers; Program Design: Curriculum theory, design, and assessment; Models of Teaching: theories, applications and practice; Instruction Theory in Curriculum, Instruction, and Technology; Action Research for Mathematics Education
- Supervisor of Student Teaching and Internship Program
- Advisor for Doctoral Dissertation

#### Research Areas

- Teacher education: Pre- and in-service mathematics teachers' knowledge growth and change
- Educational policy analysis: US and Chin education policy comparison and contrast
- Assessment in mathematics education: Assessment methods and its application
- International comparison study of student achievement: Student achievement in relation to standards, curriculum, and instruction

• The use of technology in mathematics education: Educational technology: development and application

#### **PUBLICATIONS**

#### Books

- An, S. & Wu, Z. (In press). *Teaching mathematics with Common Core: Learning from Chinese lessons*. Irvine, CA: Education for All
- Wu, Z. & An, S. (2015). *Teaching elementary and middle school mathematics using MSA approach: Model, Strategy, and Application*, (2<sup>nd</sup> ed.). Irvine, CA: Education for All
- An, S. & Wu, Z. (2010). Teaching elementary and middle school mathematics using MSA approach: Model, Strategy, and Application. Irvine, CA: Education for All

# **Book Chapters**

- An. S, Wu, Z., & An. S. A. (In press). Comparing U.S. and Chinese teachers' multidigit division knowledge. In J. Cai (Ed.) *Teaching and Teacher Education V.* Beijing, China: People's Publisher.
- Wu, Z., An, S., & An, A. S. (2013). Fathers' role in Chinese children's education. In J. Pattnaik (Ed.), *Father Involvement in Young Children's Lives*. Berlin Germany: Springer
- An, S. & Wu, Z. (2008). Approaches to assessing students' thinking from analyzing errors in homework. M. W. Ellis (Ed.), *Mathematics for every student: Responding to diversity*, *NCTM book series (Grade 6-8 volume)*. Reston, VA: NCTM.
- Wu, Z. & An, S. (2008). The professional development of mathematics knowledge for teaching. In Kulm, G. (Ed.), *Teacher knowledge and practice in middle grades mathematics* (pp. 103-121). Rotterdam, The Netherlands: Sense Publishers.
- Wu, Z. & An, S. (2007). Using alternative assessments to assess students' learning: Discussion of traditional and authentic assessments. In N. Idris (Ed.), *Classroom assessment in mathematics education* (pp. 19-32). Selangor, Malaysia: McGraw-Hill Education.
- An, S., Kulm, G., Wu, Z., Ma, F. & Wang, L. (2006). Impact Difference on Middle School Mathematics Teachers' Beliefs in the US and China. In F. K.S. Leung, K. D. Graf, & F. J. Lopez-Real (Eds.), *Mathematics education in different cultural traditions: A comparative study of East Asia and the West, The 13<sup>th</sup> ICMI Study.* New York, NY: Springer.

#### Articles

- Wu, Z. & An, S. (2016 In press). Addressing Challenges in Urban Teaching and Learning Math Using Model Strategy-Application with Reasoning Approach in Linguistically and Culturally Diverse Classrooms. *Journal of Urban Learning, Teaching, and Research*.
- An, S. & Wu, Z. (2015). Making International Experiences Accessible to In-Service Teachers through East Meets West Program. *Journal of Urban Learning, Teaching, and Research.* 11. 99-116.
- An, S. & Wu, Z. (2015). Using the Model-Strategy-Application Approach in Developing Pre-Service Teachers' Pedagogical Content Knowledge and Assessing Their Progress. *Academic Perspectives*. 11. 17-31.
- Wu, Z. (2014). Teacher narratives: Constructing Webquest to integrate instruction, technology, and assessment. *National Social Science Technology Journal*.

- Wu, Z. & An, S. (2014). Listening to Students' Voices: A Case Study of Assessing Perspective Teachers' Thinking in Culturally and Linguistically Diverse Classrooms. *Academic Perspectives*. 10. 58-70.
- Wu, Z. (2013). Influence of the Reformed Mathematics Textbooks on Student Achievement in China. *International Journal of Humanities and Social Science*. 2(3).310-323 http://www.springerlink.com/content/v83465j6p823g053/
- An, S. & Wu, Z. (2012). Enhancing mathematics teachers' knowledge of students' thinking from assessing and analyzing misconceptions in homework. *International Journal of Science and Mathematics Education*. 10, 717-753. http://www.springerlink.com/content/v83465j6p823g053/
- Xu, L., Lin, Y., & Wu, Z. (2010). The constructive proof and corollary of three well-known series theorem in number theory. *College Mathematics (Chinese version)*. 26(6), 123-128.
- Sun, Y., An, S., Wu, Z., & Li, X. (2010). An international perspective on sixth grade mathematics final exams between Beijing and New York. *New Waves—Educational Research & Development*. 13(1) 3-11
- An, S., & Wu, Z. (2009). A balance Chinese mathematics instruction and its cultural influences. Preceding of the 33rd Conference of the International Group for the Psychology of Mathematics Education, Thessaloniki, Greece, Vol. 1, 112.
- Wu, Z., Ma, F., & An, S. (2009). Beyond traditional curriculum: Effectiveness of new mathematics curriculum achievement in China. *Preceding of the 33rd Conference of the International Group for the Psychology of Mathematics Education*, Thessaloniki, Greece, Vol. 5, 504.
- Wu, Z., An. S., King, J., Ramirez, M., & Evans, S. (2009). Second grade "professor": Using graphic organizers and the mathematician's chair enhances second graders' proficiency in solving word problems. *Teaching Children Mathematics*. 15(1), 34-42.
- Wu, Z. (2009). Comparison study of teachers' knowledge and confidence in integrating technology in teaching mathematics in elementary school in the U.S. and China. *The Journal of Research in Innovative Teaching*. 2(1), 126-135.
- Wu, Z. (2008). Using the MSA model to assess Chinese sixth graders' mathematics proficiency. *Journal of Mathematics Education*. *1*(1), 70-90.
- Hu, J., Tang, Z, Xu, L., & Wu, Z. (2008). Briefing on MM education: A new way of mathematics teaching. *Journal of Mathematics Education*. 1(1), 109-113.
- Wu, Z. (2008). A bridge for ELL student learning mathematics: Multiple representations. *National Association for Bilingual Education News*, July October, 7-12.
- Wu, Z., & An, S. (2008). Shaping teaching ability in K-8 math classrooms. *Proceeding of the joint meeting of PME 32 and PME-NA XXX*, Morelia, Mexico, Vol. 1, 325.
- Wu, Z. (2007). Number sense in mathematics teaching and learning. *People's Education*. 550, 38-41.
- Wu, Z. (2007). Cooperative learning and mathematics problem solving in elementary classroom. *People's Education*. *550*, 38-41.
- Wu, Z. (2007). Teaching mathematics effectively in diverse classroom. *People's Education*. *550*, 38-41.
- An, S. & Wu, Z. (2007). What do we mean about effective mathematics lesson? *People's Education*. 549, 44-47.

- Wu, Z. (Spring 2006). The impact of teachers' beliefs on their changes in learning and using mathematical representations in classroom through professional development. *Holistic Education Newsletter. Spring 2006*.
- Wu, Z. (2006). Learning Mathematics with Understand: Discussion of Mathematics Proficiency. *Journal of Mathematics Education*. 15(2), 41-45.
- Wu, Z. (2005). Middle school teachers' learning to use mathematical representation in relationship to Teachers' Zone of Proximal Development. *Heuristic Teaching of Mathematics of International Collection of Scientific Works.* p. 298-299.
- Wu, Z. (2005). Reflection on reform of mathematics education doctoral program. *Journal of Mathematics Education*. 14(1), 77-79.
- An, S., Kulm, G., & Wu, Z. (2004). The pedagogical content knowledge of middle school mathematics teachers in China and the U.S., *Journal of Mathematics Teacher Education*, 7(2), 145-172.
- Wu, Z. (2002). Effect of teachers' knowledge and beliefs on mathematically gifted student's achievement. *Journal of Mathematics Education*. 11(4), 45-49.
- An, S., & Wu, Z. (2002). Comparative study of the development of the mathematics curriculum in the United States and China. *Curriculum History*. March 2002, pp.1-6, 10.

## **Preceding**

- Wu, Z., An, S., Sha, J., Wei, J., & Li, L. (2014). Comparative study on understanding and proficiency between U.S. and Chinese 4<sup>th</sup> graders. The proceeding of ICME-12 (International Commission on Mathematics Instruction), *Berlin Germany: Springer*
- Wu, Z., An, S., Mccoy, L., & Serrano, B. (2014). Empirical study teacher change through inservice education: Use evidence based MSA approach to assess student mathematics thinking. The proceeding of ICME-12 (International Commission on Mathematics Instruction), Berlin Germany: Springer
- Wu, Z., An, S., Wei, J., Mccoy, L., & Serrano, B. (2014). Making international experience accessible to in-service teachers through East meets West program. The proceeding of ICME-12 (International Commission on Mathematics Instruction), Berlin Germany: Springer
- An, S., & Wu, Z. (2009). A balance Chinese mathematics instruction and its cultural influences. Preceding of the 33rd Conference of the International Group for the Psychology of Mathematics Education, Thessaloniki, Greece, Vol. 1, 112.
- Wu, Z., Ma, F., & An, S. (2009). Beyond traditional curriculum: Effectiveness of new mathematics curriculum achievement in China. *Preceding of the 33rd Conference of the International Group for the Psychology of Mathematics Education*, Thessaloniki, Greece, Vol. 5, 504.

#### **Presentations**

- Wu, Z. (2015, September). Pre-service Teachers' Mathematical Teaching Knowledge Improvement via Problem of Week in Teaching (POWT). *Power point presented at National University 2015 Fall Assembly*. San Diego, CA
- Wu, Z. & An, S. (2015, April) Addressing Challenges in Urban Teaching and Learning Math Using the Model-Strategy-Application With Reasoning Approach in Linguistically and Culturally Diverse Classrooms. *Paper presented at AERA annual conference*. Chicago, Illinois.

- Wu, Z. (2014, August). Teacher narratives: Constructing Webquest to integrate instruction, technology, and assessment. *Paper presented at National Social Science Association Summer Seminar*. San Diego, CA.
- Wu, Z. (2014, March). Using authentic video lesson to support K-6 pre-service teacher learning about math/science instruction. *Paper presented at National University 2014 Spring Symposium*. San Diego, CA.
- Wu, Z. (2014, March). Teachers' knowledge and efficacy in math/science methods online course for CA credential program. *Paper presented at National University 2013 Spring Symposium*. San Diego, CA.
- Wu, Z. (2013, November). Using Chinese math video lessons to address the CCSSM. *Paper presented at School Science and Mathematics Association Annual Convention*. San Antonia, TX.
- Wu, Z. & An, S. (2013, November). Mathematical model and modeling in K-8 classrooms. *Paper presented at CMC-S.* Palm Springs, CA.
- Wu, Z., An, A.S., & An, S. (2013, April). Father's role in Chinese children education. *Paper presented at 21<sup>st</sup> Annual International Conference of CAERDA*. San Francisco, CA.
- Wu, Z. & An, S. (2012, November). Camtasia Relay technology improves online teaching and learning mathematics: introduction and demonstration. *Paper presented at School Science and Mathematics Association Annual Convention*. Birmingham, AL.
- Wu, Z. & An, S. (2012, November). "Open class": Professional development model in China. *Paper presented at CMC-S.* Palm Springs, CA.
- Wu, Z. (2012, March). Use Power Point to promote teaching and learning. *Paper presented at National University 2012 Spring Symposium*. San Diego, CA.
- Wu, Z., Sha, J., Wei, J., Li, L., & An, S. (2012, July). Assessing Chinese fourth graders' mathematics proficiency. *Paper presented at 12<sup>th</sup> International Congress on Mathematical Education (ICME 12)*. Seoul, South Korea.
- Wu, Z., An, S., McCoy, L., & Serrano, B. (2012, July). Making international experiences accessible to in-service teachers through East Meets West program. *Paper presented at 12<sup>th</sup> International Congress on Mathematical Education (ICME 12)*. Seoul, South Korea.
- Wu, Z., An, S., McCoy, L., & Serrano, B. (2012, July). Empirical study on teacher change through in-service education: Using evidence-based MSA approach to assessing student mathematics thinking. *Paper presented at 12<sup>th</sup> International Congress on Mathematical Education (ICME 12)*. Seoul, South Korea.
- Wu, Z., & An, S. (December. 2011). Using concepts and items from PISA to promote STEM education in the Classroom. *Paper presented at CMC-N*. Asilomar, CA.
- Wu, Z. (2011, Nov.). STEM education: Opportunities and challenges. *Paper presented at School Science and Mathematics Association Annual Convention*. Colorado Spring, CO.
- Wu, Z. & McCoy, L. (2011, June). *Mathematical Modeling in Connecting Concepts to Real World Applications*. Paper presented at the 3<sup>rd</sup> Classroom Teaching Research for All Students (CTRAS) Annual Conference. Changshu, China.
- An, S., Golez, F. V., & Wu, Z. (2011, April). East meets west: Teaching math lessons in a dual language immersion setting. *Paper presented at 2011 National Association for Asian and Pacific American Education Conference*. Long Beach, CA.
- An, S., Masunaga, H., Wu, Z., An. A. S., Golez, F. V., & Symcox, L. (2011, April). Teachers' knowledge of teaching multidigit division in the United States and China. *Paper presented at AERA annual conference*. New Orleans, LA.

- Wu, Z. & An. S. (2011, April). Effects of structured approach for enhancing ability of word problem for all students in primary grade classroom. *Paper presented at AERA annual conference*. New Orleans, LA.
- Wu, Z. (2011, Jan.). The Effects of Structured Approach for Enhancing Ability of Word Problems for all Students in Primary Grade Classroom. *Paper presented at* Ninth Annual Hawaii International Conference on Education. Honolulu, Hawaii.
- Wu, Z. (2010, Dec.). Differentiating Instruction: A way to Close the Learning Gap. *Paper presented at CMC-N*. Asilomar, CA
- Wu, Z. (2010, Nov.). Application Based Learning: Evidence Provided From Math Methods Course. *Paper presented at School Science and Mathematics Association Annual Convention*. Ft. Myers, FL.
- Wu, Z., & An, S. (2010, Oct.). History of mathematics: The way to promote teaching and learning. *Paper presented at International Study Group on History and Pedagogy of Mathematics Americas Section*. Pasadena, CA: California Institute of Technology.
- Wu, Z. (2010, June). Secondary mathematics teaching and learning: past, today, and future. *Lectured at Hanzhou Normal University*. Hangzgou, China.
- Wu, Z. (2010, July). Overview of Journal of Mathematics Education. *Materials presented at the Chinese National Mathematics Teacher Education Conference*. Hnahzhou, China.
- Wu, Z. (2010, July). Mathematics teacher readiness in diverse classroom: New approach of California Teacher Performance Assessment. *Paper presented at Zhejiang Normal University*. Jinghua, China.
- Wu, Z. (2010, July). Linking research to practice: Classroom teaching research framework (CTRF) Discussion. *Paper presented at East China Normal University*. Shanghai, China.
- Wu, Z. (2010, April). Helping all students learn solving equations. *Paper presented at AERA annual conference*. Denver, CO.
- Wu, Z. (2010, March). Videotape analysis of mathematics effective teaching. *Invited to provide a speech at California Mathematics Council Community College South (CMC3) conference*. Anaheim, CA
- Wu, Z. (2009, Dec.). History of math: the way to promote teaching and learning in 9-12. *Paper presented at CMC-N*. Asilomar, CA
- Wu, Z., & An, S. (2009, Nov.). History of math: the way to promote teaching and learning in K-8. *Paper presented at CMC-S*. Palm Springs, CA.
- An, S., & Wu, Z. (2009, Nov.). Subject-centered teaching in Chinese instruction. *Paper presented at CMC-S*, Palm Springs, CA
- Wu, Z. (2009, May). Lesson study: Method and implementation. *Paper presented at International History of mathematics Conference*. Beijing, China.
- An, S., & Wu, Z. (2009, July). A balance Chinese mathematics instruction and its cultural influences. *Paper presented at the 33rd Conference of the International Group for the Psychology of Mathematics Education*, Thessaloniki, Greece.
- Wu, Z., Ma, F., & An, S. (2009, July). Beyond traditional curriculum: Effectiveness of new mathematics curriculum achievement in China. *Paper presented at the 33rd Conference of the International Group for the Psychology of Mathematics Education*, Thessaloniki, Greece.
- Wu, Z. (2009, May). History mathematics: the way to promote K-12 student mathematical thinking. *Paper presented at International History of mathematics Conference*. Beijing, China.

- Wu, Z., Ye, L., & An, S. (2009, April). The new features of Chinese math instruction and cultural influences. *Paper presented at 2009 American Educational Research Association (AERA)*. San Diego, CA.
- An, S., Wu, Z., & An, S. A. (2009, April). Chinese teachers' knowledge of teaching whole number division with multiple digits. *Paper presented at 2009 American Educational Research Association (AERA)*. San Diego, CA.
- Wu, Z, & An, S. (2009, March). History of mathematics: The way to promote all student mathematical thinking. *Paper presented at T3 Regional Mathematics Conference*. Fullerton, CA.
- Wu, Z. (2008, Dec.). Assessing pre-service teachers' change through picture drawing. *Paper presented at CMC-North Annual Fall Conference*. Monterey Bay, CA.
- Wu, Z. (2008, Nov.). Balanced teaching and balanced learning Middle school mathematics concept, computation, and application. *Paper presented at 2007 School Science and Mathematics Association (SSMA) Annual Conference*. Durham, NC
- Wu, Z. (2008, Nov.). Teacher Performance Assessment (TPA): How Does This Change the Math Methods Course? *Paper presented at 49<sup>th</sup> CMC-South Annual Fall Conference*. Palm Spring, CA.
- Nguyen, D. & Wu, Z. (2008, Sept.). Enhancing Students' Mathematics and Science Knowledge through Math/Technology Activity. *Paper presented at National University Fall Assembly*. San Diego, CA.
- Wu, Z., & An, S. (2008, July). Using the Model-Strategy-Application Approach to Developing Pre-Service Teachers' Knowledge and Assessing Their Progress in Math Methods Courses. *Paper presented at 11<sup>th</sup> International Congress on Mathematics Education*. Monterrey, Mexico.
- An, S., & Wu, Z. (2008, July). Comparative Study on Modeling and Word Problem Application in Rational Numbers between U.S. and Chinese 6<sup>th</sup> Graders. *Paper presented at 11<sup>th</sup> International Congress on Mathematics Education*. Monterrey, Mexico.
- Wu, Z., & An, S. (2008, July). The mirror of social and cultural influence in mathematics Assessment: research on the effects of the new mathematics curriculum and its practice in China. Paper presented at ICME-11. Monterrey, México.
- Wu, Z., & Li, L. (2008, July). Sharpening Teaching Ability in K-8 Mathematics Classrooms. *Paper presented at 11<sup>th</sup> International Congress on Mathematics Education*. Monterrey, Mexico.
- Wu, Z., & An, S. (2008, April). Learning strategies in Chinese mathematics classroom. *Paper presented at American Educational Research Association Annual Conference*. New York.
- Acosta-Tello, E., & Wu, Z. (2008, March). Evaluating course design: Student input on effectiveness. *Paper presented at 20<sup>th</sup> Annual Lilly Conference on College & University Teaching West.* Pomona, CA.
- Wu, Z. (2008, March). A Bridge For ELL Students Learning Mathematics: Multiple representations. *Paper presented at Orange County Mathematics Annual Conference*. Garden Grove, CA.
- Wu, Z., & An, S. (2007, November). Invention approach of K-8 mathematics instruction. *Paper presented at 48<sup>th</sup> CMC-South Annual Fall Conference*. Palm Spring, CA.
- Wu, Z. (2007, October). Using the MSA model to assess students' learning in rational numbers with intervention approach. *Paper presented at 2007 School Science and Mathematics Association (SSMA) Annual Conference*. Indianapolis, Indiana.

- Wu, Z. (2007, July). Mathematics assessment at middle school level. Lecture at Middle school mathematics curriculum and instruction assessment training of Department of Education of PRC. Qindao, Chin.
- Wu, Z. (2007, July). Mathematics education research: past, present, and future. *Lecture at Tianjing Normal University (Tianjing) and Nanjing Normal University (Nanjing)*, China.
- Wu, Z. (2007, July). Algebraic thinking in elementary schools. *Lecture at Beijing Academy of Educational Science*. *Beijing*, China
- Wu, Z. (2007, April). Beyond Traditional Curriculum Effectiveness of New Mathematics Curriculum on Student Achievement in China. *Paper presented at 2007 AERA Annual Meeting. Chicago, IL.*
- Wu, Z. & An. S. (2007, April). The Effects of Research on the New Mathematics Curriculum and Its Practice in China. *Paper presented at NCTM 2007 Annual Meeting Research Session. Atlanta, GA.*
- An, S. & Wu, Z. (2007, March). Conducting Open Class by Teacher Leaders Effective Professional Development Model in China. *Paper presented at NCSM 2007 Annual Meeting. Atlanta, GA*.
- Wu, Z. & An. S. (2007, Jan.). Sharpening Teaching Ability in Mathematics Classrooms. *Paper presented at Association of Mathematics Teacher Educators (AMTE) 11<sup>th</sup> Annual Conference. Irvine, CA.*
- Wu, Z., & An, S. (2006, Nov.). Using the Model-Strategy-Application approach to teaching elementary and middle school mathematics proficiently and effectively. *Paper presented at 47<sup>th</sup> CMC-South Annual Fall Conference*. Palm Spring, CA.
- Wu, Z., & An, S. (2006, Oct.). Teaching and assessing K-8 mathematics with understanding: Effects of the MSA approach. *Paper presented at 2006 SSMA Annual Conference. Missoula, MT*.
- Wu, Z., & An, S. (2006, Apr.). Mathematical word problems: A useful tool for assessing students' understanding. *Paper presented at 84<sup>th</sup> Annual Meeting of the National Council of Teachers of Mathematics*. St. Louis, MO.
- Wu, Z. (2006, April). Using the Model-Strategy-Application Approach to developing pre-service teachers' pedagogical content knowledge and assessing their progress. *Paper presented at 2006 AERA Annual Meeting*. San Francisco, CA.
- Wu, Z. (2005, Oct.). The study of learning and use mathematical representation in mathematics instruction. *Paper presented at 2005 SSMA Annual Conference, Fort Worth.* Dallas, TX.
- Wu, Z., An, S. & Wang, L. (2005, Aug.). Comparison study of integrating technology in mathematics teachers' knowledge and confidence between U.S. and Chinese teachers. *Third ICMI-East Asian Regional. Conference on Mathematics Education (EARCOME 3)*, Shanghai, China.
- Wu, Z. (2005, April). The effect of "Open Class"- the new model of professional development on enhancing teachers' pedagogical content knowledge. *Paper presented at 2005 AERA Annual Meeting*. Montreal, Canada.
- Wu, Z. (2005, April). The study of middle school math teachers' use of and understanding math representation. *Paper presented at 2005 AERA Annual Meeting. Montreal, Canada.*
- Wu, Z., An, S., Wang, L., An, J, Zhang, Y., & Wei, J. (2005, April). Improving mathematics teachers' professional development School-Based Teachers' Training Program in China. *Paper presented at 83rd Annual Meeting of the National Council of Teachers of Mathematics Research Session.* Anaheim, CA.

- An, S., & Wu, Z. (2005, April). Developing proficiency in fraction operations: Chinese computational strategies. *Paper presented at 83rd Annual Meeting of the National Council of Teachers of Mathematics*. Anaheim, CA.
- Wu, Z. (2004, July). The study of elementary school students' algebraic thinking. *Paper presented at 10<sup>th</sup> International Congress on Mathematics Education*. Copenhagen, Denmark.
- Wu, Z. & Kulm, G. (2004, July). The Study of teachers' learning to use mathematical representation in teaching. *Paper presented at 10<sup>th</sup> International Congress on Mathematics Education*. Copenhagen, Denmark.
- Wu, Z. (2004, April). Enhancing elementary students' proficiency and promoting mathematics understanding. *Paper presented at American Educational Research Association (AERA) Annual Meeting.* San Diego, CA.
- Wu, Z., An, S., & Li, L. (2004, April). Improving mathematics proficiency in the classroom Chinese mathematics lessons. *Paper presented at 82<sup>nd</sup> Annual Meeting of the National Council of Teachers of Mathematics research session*. Philadelphia, PA.
- An, S. & Wu, Z. (2004, April). Teaching fractions from a Chinese perspective. *Paper presented at 82<sup>nd</sup> Annual Meeting of the National Council of Teachers of Mathematics*. Philadelphia, PA.

#### AWARDS AND HONORS

- Outstanding Service Award: School Science and Mathematics Association (2013)
- Outstanding and Dedicated Research in Education: Chinese American Educational Research and Development Association (2011)
- Graduate Council Certificate of Appreciation: National University (2012)
- National University Presidential award (2009-2010)
- Certificate of Appreciation: National Council of Teachers of Mathematics (2010)
- National University Presidential award (2008-2009)
- Outstanding Service Recognition from California Department of Education (2007)
- TI-Navigator Seed Grant from Texas Instrument (Summer, 2005)

### OTHER PROFESSIONAL EXPERIENCES

- Fall 2015: Served as a Multiple Subject Credential Program SCET revision Review Committee for State of California.
- Fall 2013: Served as a Mathematics Subject Matter Advisory Panel member for CSET revision
- Summer 2013: Appointed by California State Board of Education (SBE) to be a member of the mathematics Instructional Materials Advisory Panel (IMAP) for mathematics textbook (2004-2021)
- Summer 2011 and 2010: Invited as a visiting professor for research collaboratively on Chinese Minority group in Northwest University for Nationalities
- 2008 2009: Obtained California Teacher Performance assessment Certificate 1-4 (2008): Subject Specific Pedagogy; Designing Instruction; Assessing Learning Task; Culminating Teaching Experience Task.
- Summer 2007: International Studies Database Training, Program for International Student Assessment (PISA), U.S. Department of Education, Washington, D.C.

- Summer 2007: Appointed by State Board of Education (SBE) to be a member of the mathematics Instructional Materials Advisory Panel (IMAP) for mathematics textbook (2007-2014)
- Summer 2006: TI-NetLogo Workshop: NETLOGO-TI Research and Application, Northwest University, Chicago, IL
- Summer, 2006: Research Method and Assessment Training: National Assessment of Educational Progress (NAEP), U.S. Department of Education, Washington, D.C.
- Summer, 2005: Research Method and Assessment Training: Program for International Student Assessment (PISA), U.S. Department of Education, Washington, D.C.

## **COMMUNITY SERVICE ACTIVITIES**

- President of US Chinese Scholars Association (2016-2018)
- Director of Board of Chinese Scholars Association Southern California (2014 2016)
- Served as a Judge for the Orange County Science annual competition (OCSEF) since 2012
- Served as a Judge for the California State Science Fair (CSSF) since 2012
- Served as a Judge for the Intel International Science and Engineering Fair (INTEL) since 2014

#### PROFESSIONAL ACTIVITIES

#### Activities in Scholarly and Professional Societies

- Served as a Mathematics Subject Matter Advisory Panel member for CA CSET Exam (Feb, 2013)
- Served as a chair for the Membership Committee of California Association of Mathematics Teacher Education (CAMTE) (2012-2014)
- Served as a Chair of the Discussion Group of Mathematical Modeling (DG14) at The 12<sup>th</sup> International Congress on Mathematics Education, the largest mathematics education conference in the world;
- Board of director of School of Science and Mathematics Association (SSMA) (2010 2013)
- Serving as a chair for Membership Committee of California Association of Mathematics Teacher Education (CAMTE) (2008-2010)
- Appointed by State Board of Education (SBE) to be a member of the mathematics Instructional Materials Advisory Panel (IMAP) for mathematics textbook (2007-2014)
- Serving on financial and membership committee for *School Science and Mathematics Association* (SSMA) (2006 2008).
- Mathematics assessment item developer for Intel-Assess project (2006-2007).
- Invited by Beijing Academy of Education to provide a workshop on US mathematics teaching. Beijing, China. Summer 2007.
- Invited by the Education Department of Jiangsu Province, China to conduct Large-scale elementary school students' mathematics assessment project in China in January 2007.

- Invited by the Education Department of China to conduct Large-scale middle school students' mathematics assessment project in China in March 2006.
- Chaired a Division K session at the 2006 AERA Meeting in San Francisco, CA.
- Co-chaired a workshop on algebra teaching and learning of the International Program Committee (IPC) for the Third ICMI-East Asian Regional. Conference on Mathematics Education (EARCOME 3), Shanghai, China. August 7-12, 2005.
- A reviewer of *Teaching Children Mathematics* (NCTM) since 2006
- An associate director editor and member for *Editorial Board of Journal of Mathematics Education* since 2005

## Activities in Scholarly and Professional Societies within University

- Scholarship and Research Committee member, CSOE, National University (2013 present)
- Graduate Associate & Adjunct Affairs Committee member, National University (2013 present)
- Team lead for development of MAT Teaching Mathematics Program (2011- present)
- Team member for development of credential program (2008 present)
- Vice chair of National University Research Council (2009-2012)
- National University Faculty Senate Committee -- Graduate Council Program Review Committee (2009 2010)
- Team lead for development of BA in Mathematics with Preliminary Single Subject Credentials program (2007 present)
- National University Faculty Senate Committee -- Senate Academic Policy and Planning Committee (2008 2009)
- Chair of WASC Faculty Allocation and Deployment Committee (2007)
- NCATE Standards Committee (2007)
- National University Faculty Senate Committee -- Review and Grievance Committee (2006 2008)

# **Memberships**

American Educational Research Association (AERA); National Council of Teachers of Mathematics (NCTM); Association for Supervision and Curriculum Development (ASCD); Association of Mathematics Teacher Educators (AMTE); School Science and Mathematics Association (SSMA); Phi Delta Kappa; International Group of the Psychology of Mathematics Education (PME); International Society for Technology in Education (ISTE); Computer-Using Educators (CUE); California Mathematics Council (CMC); California Association of Mathematics Teacher Education (CAMTE)

#### Editorial Services to Scholarly Publications

- Serving as an editor for *Journal of Mathematics Education (JME)* since fall 2008.
- Serve as an editor of Social Science for Academic Perspectives, the official journal of Chinese Scholars Association (2013 2015)
- Serving as an associated editor for *School of Science and Mathematics Journal (SSMJ)* (2008 2012)

- Invited to serve as Editorial Board member of Quaderni Di Ricerca in Didattca (Scienze Matematiche) since April 2008: <a href="http://math.unipa.it/~grim/quaderno19\_suppl\_1.htm">http://math.unipa.it/~grim/quaderno19\_suppl\_1.htm</a>
- Serve as an associate director editor for *Journal of Mathematics Education, China* since 2004.
- Serve as a reviewer for *Teaching Children Mathematics* (TCM) since 2006

## LANGUAGE PROFICIENCY

Chinese (Mandarin)