

## **Makoto Yoshida, Ph.D.**

### **PROFESSIONAL PREPARATION**

Ph.D., 1999 Educational Psychology, The University of Chicago (Chicago, IL)  
M.A., 1991 Educational Psychology, The University of Chicago (Chicago, IL)  
B.A., 1886 Education & Psychology, Lewis and Clark College (Portland, OR)

### **APPOINTMENTS**

2013 - present 3<sup>rd</sup> Vice-President, The Association of Mathematics Teachers of New Jersey (AMTNJ)  
2012 - present Consultant for iSingaporeMath LLC (Scarsdale, NY)  
2011 - present Co-PI, Institute of Education Science (IES) funded project "Focused and Coherent Elementary Mathematics: Japanese Curriculum Resources for U.S. Teachers" (3 year project)  
2011 - present Co-PI, Institute of Education Science (IES) funded project "Japanese Structured Problem-Solving as Resources for U.S. Teachers" (3 year project)  
2007 - present Director, Center for Lesson Study, William Paterson University (Wayne, NJ)  
2008 - present Adjunct Professor, William Paterson University – Elementary and Middle School Mathematics Methods Course instructor and Professor in Residence at Paterson Public School No. 2 (PD School).  
2001 - present President, Global Education Resources, L.L.C. (Madison, NJ) – Professional development provider on mathematics instruction and learning, lesson study, and Japanese elementary school mathematics curriculum. GER is the translator and distributor of *Tokyo Shoseki's* English translated version of Mathematics International (Grades 1 to 6, and 7 to 9) and *Kyoiku Dojinsha's* English version of the student workbooks (Grades 1-6).  
2003 - 2008 Consultant, Center for Evidence Based Education, (Princeton, NJ)  
1999 - 2001 Senior Researcher, Teachers College, Columbia University, (New York, NY) -- National Science Foundation (NSF) "Learning from Lesson Study, A Japanese Approach to Development Teaching Skills and Innovations, PI, Dr. Clear Fernandez.  
2000 - 2001 Professional Development Provider & Consultant for Mathematical Science Education Board, National Academies, (Washington, DC)  
1997 - 1999 Professional Development Provider & Consultant for Classroom Inc. (New York, NY), Mills College (working with Dr. Catherine Lewis; Oakland, CA), Teachers College, Columbia University (working with Dr. Clea Fernandez; New York, NY)  
1993 - 1995 Research Assistant, Third International Mathematics and Science Study (TIMSS), PI Dr. James Stigler (UCLA).  
1992 - 1996 Research Assistant, University of California at Los Angeles (UCLA), (working with Dr. James Stigler; Los Angeles, CA)  
1989 - 1993 Research Assistant, The University of Chicago, (working with Dr. James Stigler; Chicago, IL)

- 1991 - 1992      Research Assistant, The University of Chicago School Mathematics Project (UCSMP), (working with Dr. Max Bell, Chicago, IL)
- 1986 - 1989      Sales Data Analyst & Marketing Planner, Mazda Motor Corporation (Hiroshima, Japan, and Irvine, CA)

#### FIVE RECENT SIGNIFICANT PUBLICATIONS

- 2012      Yoshida, M. (2012). Mathematics Lesson Study in the United States: Current Status and Ideas for Conducting High Quality and Effective Lesson Study, *International Journal for Lesson Study and Learning Studies*, 140- 152
- 2011      Yoshida, M. and Jackson, W. (2011). Ideas for Developing Mathematical Pedagogical Content Knowledge Through Lesson Study. In Hart, L., Alston, A., and Murata, A. (Eds.), *Lesson Study Research and Practice in Mathematics Education: Learning Together*. New York, NY: Springer.
- 2010      Watanabe, T., Takahashi, A., and Yoshida, M. (2010). Supporting Focused and Cohesive Curricula through Visual Representations: An Example from Japanese Textbooks. *2010 Yearbook: Contemporary Issues in Mathematics Curriculum*. Reston, VA: National Council of Teachers of Mathematics.
- 2008      Yoshida, M. (2008). Exploring Ideas for a Mathematics Teacher Educator's Contribution to Lesson Study: Toward Improving Teachers' Mathematical Content and Pedagogical Knowledge. In Tirosh, D. and Wood, T. (Eds.), *The International Handbook of Mathematics Teacher Education, Volume 2, Tools and Processes in Mathematics Teacher Education*, 85-106. Rotterdam, Netherlands: Sense Publishers.
- 2008      Watanabe, T., Takahashi, A., and Yoshida, M. (2008). Kyozaikenkyu: A Critical Step for Conducting Effective Lesson Study and Beyond. In Arbaugh, F. and Taylor, P.M. (Eds.), *AMTE Monograph 5: Inquiry into Mathematics Teacher Education*, 131-142.
- 2004      Takahashi, A., and Yoshida, M. (2004). Ideas for Establishing Lesson-Study Communities. *Teaching Children Mathematics* (May), 436-443.
- 2004      Fernandez, C., and Yoshida, M. (2004). *Lesson Study: A Japanese Approach to Improving Mathematics Teaching and Learning*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

#### OTHER PUBLICATIONS

- In Press      Fernandez, C., Chokshi, S., Cannon, J., & Yoshida, M. (in press). Learning about lesson study in the United States. In E. Beauchamp (Ed.), *New and old voices on Japanese education*. Armonk, NY: M.E. Sharpe.
- 2005      Wang-Iverson, P., & Yoshida, M. (Eds.). (2005). *Building Our Understanding of Lesson Study*. Philadelphia, PA: Research for Better Schools, Inc.
- 2000      Fernandez, C., & Yoshida, M. (2000). Lesson study as a model for improving teaching: Insights, challenges and a vision for the future. In A. Poliakoff and T. D. Schwartzbeck (Series Eds.), *The eye of the storm: Improving teaching practices to achieve higher standards*. Washington, DC: Council for Basic Education.

- 1997 Jacobs, J. K., Yoshida, M., Stigler, J. W., & Fernandez, C. (1997). Japanese and American teachers' evaluations of mathematics lessons: A new technique for exploring beliefs. *Journal of Mathematical Behavior*, 16(1) 7-24.
- 1996 Stigler, J. W., Fernandez, C., & Yoshida, M. (1996). Cultures of mathematics instruction in Japanese and American elementary classrooms. In T. P. Rohlen and G. R. LeTendre (Eds.), *Teaching and learning in Japan*. Cambridge, England: Cambridge University Press.
- 1996 Stigler, J. W., Fernandez, C., & Yoshida, M. (1996). Traditions of school mathematics in Japanese and American elementary classrooms. In P. Nesher, L. P. Steffe, P. Cobb, G. Goldin, and B. Greer (Eds.), *Theories of mathematical learning*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- 1993 Yoshida, M., Fernandez, C., & Stigler, J. W. (1993). Japanese and American students' differential recognition memory for teachers' statements during a mathematics lesson. *Journal of Educational Psychology*, 85(4), 610-617.
- 1992 Fernandez, C., Yoshida, M., & Stigler, J. W. (1992). Learning mathematics from classroom instruction: On relating lessons to pupils' interpretations. *Journal of the Learning Sciences*, 2(4), 333-365.

#### SYNERGISTIC ACTIVITIES

- 2012 English translation of elementary and lower secondary Japanese mathematics textbook series entitled *Mathematics International* (Grades 1 to 6 and 7 to 9), Project funded by Tokyo Shoseki and available at Global Education Resources)
- 2009 English translation of *Elementary School Teaching Guide for the Japanese Course of Study: Arithmetic (Grades 1-6)*, published in Japan in 2009. ([www.sei2003.com/APEC/APEC\\_KB/KBDisplay.aspx?lngPkID=1567](http://www.sei2003.com/APEC/APEC_KB/KBDisplay.aspx?lngPkID=1567))
- 2007 *Japanese Lesson Study: Grade 4 "Perimeter and Area" DVD (80 min.)*, produced by Akihiko Takahashi and Makoto Yoshida
- 2007 Translation of *Teacher Manual for Math Tool Kit and One Year Plans for Tokyo Shoseki's Mathematics for Elementary School*, produced by Makoto Yoshida
- 2004 – 06 English translation of a Japanese elementary school mathematics textbook, *Mathematics for Elementary School (Grade 1 to 6)*. Project funded by Global Education Resources (GER) and Tokyo Shoseki.
- 2006 Translation of *Lower Secondary School Teaching Guide for the Japanese Course of Study: Mathematics (Grades 7 – 9)*. Originally published in Japan in 1989.
- 2006 Translation of *Elementary School Teaching Guide for the Japanese Course of Study: Arithmetic (Grades 1-6)*. Originally published in Japan in 1989.
- 2002 *Lesson Study: An Introduction DVD (23 min.)*, produced by Makoto Yoshida and Clea Fernandez

#### SELLECTED PRESENTATIONS

- Oct. 2012 Yoshida, M. (2012). *Teaching Fractions and Decimals Under Common Core State Standards*, Association of Mathematics Teachers of New Jersey (AMTNJ) Annual Meeting: Monroe, NJ

- April 2012 Yoshida, M. (2012). *Enhancing Students' Writing and Interpretation Skills of Numerical Expressions*, National Council Teachers of Mathematics (NCTM) 90<sup>th</sup> Annual Meeting: Philadelphia, PA.
- Oct. 2011 Yoshida, M. (2011). *Discuss, Develop, and Justify Formulas for Area of Plane Figures*, National Council Teachers of Mathematics (NCTM) Regional Meeting: Atlantic City, NJ.
- March 2011 Yoshida, M. (2011). *Building Conceptual Understanding of Circumference and Area of Circles*, National Council Teachers of Mathematics (NCTM) 89<sup>th</sup> Annual Meeting: Indianapolis, IN.
- Oct. 2010 Yoshida, M. (2010). *Teaching Mathematics Through Problem Solving: What is it and Why Should We?*, Association of Mathematics Teachers of New Jersey (AMTNJ) Annual Meeting: Monroe, NJ
- April 2010 Yoshida, M. (2010). *Improving Blackboard Organization to Enhance Students' Mathematical Thinking and Understanding*, National Council Teachers of Mathematics (NCTM) 88<sup>th</sup> Annual Meeting: San Diego, CA.
- Aug. 2009 Yoshida, M. (2009). *Keynote: Status and Issues Involving Lesson Study in the U.S.: What we can learn from the U.S.?*, Keynote address, Action Research Study Conference 2009: Atami, Japan.
- April 2009 Yoshida, M. (2009). *Is Multiplication Just Repeated Addition?: Insights from Japanese Mathematics Textbooks for Expanding the Multiplication Concept*, National Council Teachers of Mathematics (NCTM) 87<sup>th</sup> Annual Meeting: Washington, DC.
- Dec. 2008 Yoshida, M. (2008). *Mathematics Lesson Study in the United States: Current Status and Idea for Conducting Effective Lesson Study*. Keynote Address, The World Association of Lesson Study, 2009 Conference: Hong Kong, China.
- Oct. 2007 Yoshida, M. (2007). *Importance of Writing and Interpreting Mathematical Expressions in Elementary School Mathematics: Ideas for Building a Smooth Transition from Elementary to Middle school Mathematic*, The 48<sup>th</sup> Annual Georgia Mathematics Conference: Rock Eagle, GA.
- March 2007 Yoshida, M. (2007). *10! A Big Idea for Primary Mathematics*, National Council Teachers of Mathematics (NCTM) 85<sup>th</sup> Annual Meeting: Atlanta, GA.
- March 2007 Yoshida, M. & Jackson, B. (2007). *Fractions are not Easy as Pie!: Fraction Meaning and Representation in Asian Textbooks*. National Council Teachers of Mathematics (NCTM) 85<sup>th</sup> Annual Meeting: Atlanta, GA.
- Jan. 2007 Yoshida, M. & Watanabe, T. (2007). *Importance of Conducting Kyozaikenkyu During Lesson Study: Toward Improving Teachers' Pedagogical and Mathematical Knowledge*, Association of Mathematics Teacher Educators (AMTE) 11<sup>th</sup> Annual Conference: Irvine, CA.
- Oct. 2006 Yoshida, M. (2006). *Characteristics of the Japanese Elementary Mathematics Textbooks: What Can We Learn from Them?*, National Council Teachers of Mathematics (NCTM) Regional Meeting: Atlantic City, NJ.
- Oct. 2005 Yoshida, M. (2005). *Bring Georgia's New Mathematics Standards to Life through Lesson Study*, The 46<sup>th</sup> Annual Georgia Mathematics Conference: Rock Eagle, GA.

- Oct. 2005 Yoshida, M. (2005). *Lesson Study: A Professional Development Approach for Improving Classroom Teaching*, The 46<sup>th</sup> Annual Georgia Mathematics Conference: Rock Eagle, GA.
- July 2005 Yoshida, M. (2005). *Developing Students' Expressive Ability, Communication Skills, and Mathematical Language*, American Federation of Teachers, Quality Educational Standards in Teaching (QuEST) 2005 Annual Conference: Washington, DC.
- Mary 2005 Yoshida, M. & Shouffler, J. (2005). *Improving Lesson Study by Conducting Effective Post-Research-Lesson Discussion*, Co-presented with Jennifer Shouffler, The Association of Mathematics Teachers of New Jersey (AMTNJ) 2005 Spring Regional Conference: Union, NJ.
- May 2005 Yoshida, M. (2005). *Conducting Kyozaikenkyu (Instructional Material Investigation) During Lesson Study: Toward Improving Teachers' Content and Pedagogical Knowledge*. Keynote address at Western Washington University, North Cascades and Olympic Science Partnership Conference, Bellingham, WA.
- April 2004 Yoshida, M. & Jackson, B. (2004). *Supporting Lesson Study Effectively: The Role of Supporters*, National Council Teachers of Mathematics (NCTM) 80<sup>th</sup> Annual Meeting: Philadelphia, PA.
- April 2002 Yoshida, M. (2002). *Lesson Study at Paterson Public School No. 2 (Paterson, NJ)*, National Council Teachers of Mathematics (NCTM) 78<sup>th</sup> Annual Meeting: Las Vegas, NV.
- 2001 Fernandez, C., Jackson, B., & Yoshida, M. (2001). *Building a comprehensive mathematics program in your school: Important elements to consider*. Invited address at the U.S. Department of Education's Seventh Annual Regional Conference on Improving America's Schools, Washington, D. C.
- 2001 Cannon, J., Fernandez, C., & Yoshida, M. (2001). *Teacher planning and reflection: A cross-cultural examination of Japanese and American teachers' thinking and practice outside of the classroom*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- 2000 Fernandez, C. & Yoshida, M. (2000). *Lesson study: The Japanese approach to improving instruction*. Invited address for the Mathematical Sciences Education Board, National Academy of Sciences: Washington, DC.
- 2000 Fernandez, C., Yoshida, M., Cannon, J., & Chokshi, S. (2000). *An exploration of Japanese teaching and lesson study: Is there something we can learn from all this?*, Workshop conducted at the annual meeting of the Association of Mathematics Teachers of New Jersey.