

CURRICULUM VITAE
JOANNA O. MASINGILA

June 2011

Syracuse University
Department of Mathematics
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Present Appointment: Laura J. and L. Douglas Meredith Professor for Teaching Excellence and Professor of Mathematics and Mathematics Education [School of Education/Teaching and Leadership Programs (.5 appt), College of Arts and Sciences/Department of Mathematics (.5 appt)]

Academic Specialization: Mathematics Education

Research Areas: Out-of-school mathematics practice, teacher education

EDUCATION

Doctor of Philosophy, Mathematics Education (Double Cognate: Mathematics), Indiana University, Bloomington, Indiana. Dissertation: *Mathematics Practice and Apprenticeship in Carpet Laying: Suggestions for Mathematics Education* (Frank K. Lester, Jr., advisor). July 1992

Master of Science, Mathematics Education (Major: Mathematics), Indiana University - Purdue University at Indianapolis, Indianapolis, Indiana. August 1987

Bachelor of Arts, Mathematics (also completed program requirements to teach grades 7-12 mathematics), Goshen College, Goshen, Indiana. August 1982

Associate of Arts, Mathematics (Minor: Physics), Hesston College, Hesston, Kansas. May 1980

PROFESSIONAL POSITIONS HELD

(in reverse chronological order)

Chair of the Department of Science Teaching, Syracuse University (July 2009 – present)

Professor of Mathematics and Mathematics Education, Syracuse University (August 2004 – present)

Laura J. and L. Douglas Meredith Professor for Teaching Excellence, Syracuse University (April 2003 – present)

Gateway Fellow, Syracuse University (February 2002 – May 2005)

Coordinator, Assessment Team for the School of Education for the Middle States Review, Syracuse University (November 2001 – 2008)

Coordinator, Accreditation process through National Council for Accreditation of Teacher Education (NCATE) for Syracuse University (November 2001 – present)

Coordinator, Mathematics Education Program, Syracuse University (January 2000 – present)

Associate Professor of Mathematics and Mathematics Education, Syracuse University (July 1998 – July 2004)

Visiting Associate Professor of Education, Kenyatta University, Nairobi, Kenya (January – July 1998)

Assistant Professor of Mathematics and Mathematics Education, Syracuse University (August 1992 – June 1998)

Assistant Editor, *Journal for Research in Mathematics Education*, Indiana University (July 1991 – July 1992)

Associate Instructor, School of Education, Indiana University (August 1991 – May 1992)

Associate Instructor, Department of Mathematics, Indiana University (August 1989 – May 1990)

Mathematics Teacher, Bishop Chatard High School, Indianapolis, Indiana (August 1984 – June 1988)

Mathematics Teacher, Fairfield High School, Goshen, Indiana (August 1982 – June 1984)

CERTIFICATES

Permanent Certification to Teach Mathematics, Grades 7-12, Indiana Department of Education, 1987

Provisional Certification to Teach Mathematics, Grades 7-12, Indiana Department of Education, 1982

AWARDS

Excellence in Graduate Education Faculty Recognition Award, Graduate School, Syracuse University, Awarded in 2006.

Martin Luther King, Jr. Unsung Hero Award, Syracuse University, Awarded in 2005.

Laura J. and L. Douglas Meredith Professor for Teaching Excellence, Syracuse University, Awarded in 2003.

Gateway Fellow, Syracuse University, Awarded in 2002.

Fulbright Scholar Award for 1997-1998, lecturer/researcher at Kenyatta University, Nairobi, Kenya.

1992 Outstanding Dissertation Award, Instruction Category, Association for Supervision and Curriculum Development, Washington, D.C.

1992 Proffitt Dissertation Award for Outstanding Achievement, School of Education, Indiana University, Bloomington, Indiana.

1992 Outstanding Dissertation Award, Department of Curriculum and Instruction, School of Education, Indiana University, Bloomington, Indiana.

GRANTS

Dotger, Benjamin, Dotger, Sharon, Masingila, Joanna, & Rozelle, Jeffrey (August 2011 – July 2014). *The Science and Mathematics Simulated Interaction Model*, Discovery Research K12 Program (DR-K12), National Science Foundation, \$449,563.

Masingila, Joanna O., & Gathumbi, Agnes W. (April 2011 – March 2013). *Building Capacity Through Quality Teacher Education*, Africa – U.S. Higher Education Initiative, Higher Education for Development (HED), United States Agency for International Development (USAID), \$860,701.

Masingila, Joanna O., & Miheso-O'Connor, Marguerite K. (October 2010 – September 2012). *Using Technology to Support Teacher and Student Conceptual Learning in Mathematics and Science* (Awarded to Kenyatta University), Hewlett Packard Catalyst Initiative Grant, \$158,000.

Masingila, Joanna O., & Gathumbi, Agnes W. (October 2009 – March 2010). *Syracuse University and Kenyatta University: Building Capacity Through Quality Teacher Education*, Africa – U.S. Higher Education Initiative Planning Grant, Higher Education for Development (HED), United States Agency for International Development (USAID), \$50,000.

Tillotson, John W., Masingila, Joanna O., Stempel, Eileen, Dotger, Sharon, & Wiles, Jason (June 2009-May 2014). *Syracuse University Noyce Scholars Program for Science and Mathematics Teachers*. National Science Foundation, \$900,000.

Masingila, Joanna O. (May – June 2008). *Summer Proposal Development Grant*. School of Education, Syracuse University, \$1,500.

Masingila, Joanna O., Ochanji, Moses K., Miheso, Marguerite, Twoli, Nicholas W., & Musyimi, Jonathan K. (July 2007-August 2009). *Professional Development in Mathematics and Science for Teachers in Manyatta Zone in Kenya*. National Council of Teachers of Mathematics International Development Fund Grant, \$23,640.

Masingila, Joanna O., Doerr, Helen M., Matyas, Stephen, & Velu, Raja (April 2003-March 2006). *Data-driven Algebra: Making Connections Through Business Cases*. GE Fund, \$357,300.

Doerr, Helen M., Chandler-Olcott, Kelly, Hinchman, Kathy A., & Masingila, Joanna O. (April 2003-March 2006). *Investigating the Interrelated Development of Mathematics and Literacy in Urban Secondary Schools*. Research on Learning in Education, National Science Foundation, \$1,054,119.

Doerr, Helen M., Masingila, Joanna O., & Tinto, Patricia P. (September 2000-August 2003). *Algebra by Design: A Collaborative Inquiry Project*. Lucent Technologies Foundation K-16 Grants Program, \$449,033.

Tinto, Patricia P., Doerr, Helen M., & Masingila, Joanna O. (September 1999-August 2004). *Developing School-based Learning Communities*. New York State Education Department, Dwight D. Eisenhower Professional Development Award, \$272,500.

Bowers, Janet, Doerr, Helen M., Masingila, Joanna O., & McClain, Kay (June 1998-October 2002). *Investigating Multimedia Case Studies as a Tool for Pre-service Teacher Development*. Research on Education Policy and Practice, National Science Foundation, \$605,891.

Bowers, Janet, Doerr, Helen M., & Masingila Joanna O. (July 2001-June 2002). Supplemental award for *Investigating Multimedia Case Studies as a Tool for Pre-service Teacher Development*. Research on Education Policy and Practice, National Science Foundation, \$98,078.

Masingila, Joanna O. (January-July 1997). *Curriculum Development Grant*. Prentice Hall, \$5,000.

Tinto, Patricia P., Masingila, Joanna O., & Schafer, Larry E. (July 1996-August 1999). *Eisenhower Professional Development Program for Developing Inquiry Based Classrooms*. New York State Education Department, \$123,000.

Masingila, Joanna O. (June 1995-May 2000). *Connecting In-School and Out-of-School Mathematics Practice*. Faculty Early Career Development Grant, National Science Foundation, \$212,790.

Masingila, Joanna O. (Spring 1995). *Assessing Preservice Teachers' Growth*. Faculty Assessment Grants Program, Syracuse University, \$1,025.

Masingila, Joanna O. (Fall 1993). *Developing Resources for Prospective and Inservice Secondary Mathematics Teachers*. Faculty Instructional Grants Program, Syracuse University, \$3,000.

Masingila, Joanna O., & Snowman, Margaret (July 1993-June 1995). *Preparing Students to be Successful Quantitative Thinkers in their Course Work and Careers*. Fund for Innovation Grants Program, Syracuse University, \$19,100.

DOCTORAL DISSERTATION ADVISOR

(in chronological order)

Ewa Prus-Wisniowska (Ph.D.) 1995	deceased
Hani Khoury (Ph.D.) 1995	Mercer University, Mercer, GA
Mary K. Porter (Ph.D.) 1996	College of Saint Mary's, Notre Dame, IN
William Hardin (Ph.D.) 1997	College of Saint Rose, Albany, NY
Frank Giuliano (Ph.D.) 1997*	Westfield State College, Westfield, MA
Preety Nigam (Ph.D.) 1997	SUNY College at Oswego, Oswego, NY
Joseph Tripp (Ph.D.) 1999	Ferris State University, Ferris, MI
Susana Davidenko (Ph.D.) 1999	SUNY College at Cortland, Cortland, NY
Angeles Dominguez (Ph.D.) 2001	Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey, México
Rapti de Silva (Ph.D.) 2001*	California State University Chico, Chico, CA
Jean Hallagan Palm (Ph.D.) 2003*	SUNY College at Oswego, Oswego, NY
Bulent Cetinkaya (Ph.D.) 2006	Middle East Technical University, Ankara, Turkey
Francis Nzuki (Ph.D.) 2008	Richard Stockton College of New Jersey, Atlantic City, NJ
Patrick Kimani (Ph.D.) 2008	California State University, Fullerton, Fullerton, CA
Marguerite Miheso O'Connor (Ph.D. from Kenyatta University) 2009	Kenyatta University, Nairobi, Kenya
Dana Olanoff (Ph.D.) 2011*	Hobart & William Smith Colleges, Geneva, NY

*Recipient of the outstanding dissertation award from the School of Education, Syracuse University

HONORS THESIS ADVISOR
(in chronological order)

Sofia Pablo-Hoshino (B.A. mathematics) 2009

PUBLICATIONS

Refereed Research Articles

- Masingila, Joanna O., Muthwii, Samson M., & Kimani, Patrick M. (2011). Understanding students' out-of-school mathematics and science practice. *International Journal of Science and Mathematics Education, 9*, 89-108. [refereed international research journal]
- Masingila, Joanna O., Kimani, Patrick M., & Olanoff, Dana E. (2010). Learning to teach via problem solving. *Proceedings of the 3rd Africa Regional Congress of the International Commission on Mathematical Instruction*, Gaborone, Botswana. [refereed international research conference]
- Miheso-O'Connor, Marguerite K., & Masingila, Joanna O. (2010). Teacher proficiency in mathematics knowledge for teaching. *Proceedings of the 3rd Africa Regional Congress of the International Commission on Mathematical Instruction*, Gaborone, Botswana. [refereed international research conference]
- Olanoff, Dana E., Kimani, Patrick M., & Masingila, Joanna O. (2009). Learning to teach via problem solving and supporting pre-service teachers in learning via problem solving. *Proceedings for the 31st Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Atlanta, GA. [refereed international research conference]
- Masingila, Joanna O. (2009). Supporting pre-service teachers' study of teaching through the use of multimedia case studies. *Proceedings of the International Conference on Education*, Nairobi, Kenya. [refereed international research conference]
- Masingila, Joanna O. (2009). Using research-based guiding frameworks for making principled decisions in teacher preparation. *Proceedings of the International Conference on Education*, Nairobi, Kenya. [refereed international research conference]
- Masingila, Joanna O., & Kimani, Patrick M. (2007). Understanding urban and rural Kenyan students' out-of-school mathematics practice. *Proceedings for the 29th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Reno, NV. [refereed international research conference]
- Masingila, Joanna O., & Kamina, Penina Ogolla (2007). Mathematics for primary school teachers: Developing adult-level understandings of foundational mathematics ideas via problem solving. *Proceedings of the 2nd Africa Regional Congress of the International Commission on Mathematical Instruction*, Nairobi, Kenya. [refereed international research conference]
- Masingila, Joanna O., Muthwii, Samson M., & Kimani, Patrick M. (2007). Understanding and building on students' out-of-school mathematics practice. *Proceedings of the 2nd Africa Regional Congress of the International Commission on Mathematical Instruction*, Nairobi, Kenya. [refereed international research conference]
- Masingila, Joanna O., & Ochanji, Moses K. (2007). Preparing teacher educators: Creating multimedia case studies as a vehicle for better understanding teaching. *Proceedings of the 5th Annual Meeting of*

the Hawaii International Conference on Education, Honolulu, Hawaii. [refereed international research conference]

Pfister, Christina C., White, Daniel L., & Masingila, Joanna O. (2006). Using multimedia case studies to advance pre-service teacher knowing. *International Education Journal*, 7(7), 948-956. [refereed international research journal]

Masingila, Joanna O. (2006). A case study of a teacher's evolving practices in supporting students' mathematics and literacy development. *Proceedings of the 28th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Merida, Mexico. [refereed international research conference proceedings]

Kimani, Patrick M., & Masingila, Joanna O. (2006). Calculus students' perceptions of the relationship among the concepts of function transformation, function composition, and function inverse. *Proceedings of the 28th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Merida, Mexico. [refereed international research conference proceedings]

Nzuki, Francis N., & Masingila, Joanna O. (2006). Comparing the perceptions of teachers in high- and low-SES contexts towards the role of the graphing calculator in mathematics instruction. *Proceedings of the 28th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Merida, Mexico. [refereed international research conference proceedings]

Doerr, Helen M., Chandler-Olcott, K., & Masingila, Joanna O. (2006). An interdisciplinary perspective on learning to teach mathematical writing. *Proceedings of the 30th Annual Meeting of the International Group for the Psychology of Mathematics Education*, Prague, Czech Republic. [refereed international research conference proceedings]

Masingila, Joanna O., & Hinchman, Kathleen A. (2005). Teachers' evolving practices in supporting students' mathematics and literacy development. In G. M. Lloyd, M. R. Wilson, J. L. M. Wilkins, & S. L. Behm (Eds.), *Proceedings of the 27th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* [CD-ROM]. Eugene, OR: All Academic. [refereed international research conference proceedings]

Masingila, Joanna O. (2004). Prospective teacher educators' developing perspectives on teacher education through the creation of multimedia case studies. In D. E. McDougall, & J. A. Ross (Eds.), *Proceedings of the 26th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Vol. 3, pp. 1343-1347). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education. [refereed international research conference proceedings]

Cetinkaya, Bulent, & Masingila, Joanna O. (2004). Mathematics teachers' perceptions of their change: An inquiry through psychological type preference lenses. In D. E. McDougall, & J. A. Ross (Eds.), *Proceedings of the 26th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Vol 3, pp. 1125-1126). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education. [refereed international research conference proceedings]

Masingila, Joanna O., & Doerr, Helen M. (2002). Understanding pre-service teachers' emerging practices through their analyses of a multimedia case study of practice. *Journal of Mathematics Teacher Education*, 5, 235-263. [refereed international research journal]

- King, J., & Masingila, J. O. (2002). Pedagogical content knowledge development of preservice secondary mathematics teachers. In B. Barton, K. C. Irwin, M. Pfannkuch, & M. O. J. Thomas (Eds.), *Mathematics Education in the South Pacific* (Proceedings of the 25th annual conference of the Mathematics Education Research Group of Australasia, Auckland, pp. 382-389). Sydney: MERGA. [refereed international research conference proceedings]
- Doerr, H. M., & Masingila, J. O. (2001). Unpacking a case study: Understanding teacher educators as they understand their pre-service secondary teachers. In M. van den Heuvel-Panhuizen (Ed.), *Proceedings of the 25th Annual Meeting of the International Group for the Psychology of Mathematics Education* (Vol. 2, pp. 369-376). Utrecht, Netherlands: Freudenthal Institute, Utrecht University. [refereed international research conference proceedings]
- Porter, Mary K., & Masingila, Joanna O. (2001). Examining the effects of writing on conceptual and procedural knowledge in calculus. *Educational Studies in Mathematics*, 42, 165-177. [refereed international research journal]
- Masingila, Joanna O. (1999). Mathematics in practice: What have we learned? *La Ricerca Folklorica*, December 1999. [refereed international research journal]
- Masingila, Joanna O., & Doerr, Helen M. (1998). Students' use of function ideas in everyday activities. In S. Berenson, K. Dawkins, M. Blanton, W. Coulombe, J. Kolb, K. Norwood & L. Stiff (Eds.), *Proceedings of the 20th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Vol. 2, pp. 562-568). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education. [refereed international research conference proceedings]
- Masingila, Joanna O., & de Silva, Rapti (1997). Understanding angle ideas by connecting in-school and out-of-school mathematics practice. In J. Dossey, J. O. Swafford, M. Parmantie & A. E. Dossey (Eds.), *Proceedings of the 19th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 215-221). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education. [refereed international research conference proceedings]
- Doerr, Helen M., & Masingila, Joanna O. (1996). Insight into operation and variable from student explanations. In E. Jakubowski, D. Watkins & H. Biske (Eds.), *Proceedings of the 18th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 82-87). Panama City, FL: Florida State University. [refereed international research conference proceedings]
- Masingila, Joanna O., Davidenko, Susana, & Prus-Wisniowska, Ewa (1996). Mathematics learning and practice in and out of school: A framework for connecting these experiences. *Educational Studies in Mathematics*, 31 (1 & 2), 175-200. [refereed international research journal]
- Porter, Mary K., & Masingila, Joanna O. (1995). The effects of writing to learn mathematics on the types of errors students make in a college calculus class. In D. T. Owens, M. K. Reed & G. M. Millsaps (Eds.), *Proceedings of the 17th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 325-330). Columbus, OH: Ohio State University. [refereed international research conference proceedings]
- Masingila, Joanna O. (1994). Mathematics practice in carpet laying. *Anthropology and Education Quarterly*, 25 (4), 430-462. [refereed international research journal]

- Masingila, Joanna O. (1994). Middle school students' perceptions of their everyday mathematics usage. In D. Kirshner (Ed.), *Proceedings of the 16th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Vol. 2, pp. 77-83). Baton Rouge, LA: Louisiana State University. [refereed international research conference proceedings]
- Masingila, Joanna O. (1993). Problem solving in and out of school. In J. R. Becker & B. J. Pence (Eds.), *Proceedings of the 15th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (Vol. 2, pp. 40-46). San Jose, CA: San Jose State University. [refereed international research conference proceedings]
- Masingila, Joanna O. (1993). Narrowing the gap between doing mathematics in and out of school: Suggestions for teaching. In J. Novak (Ed.), *Proceedings of the Third International Seminar on Misconceptions and Educational Strategies in Science and Mathematics* (electronic publication). Ithaca, NY: Cornell University. [refereed international research conference proceedings]
- Masingila, Joanna O. (1993). Learning from mathematics practice in out-of-school situations. *For the Learning of Mathematics*, 13 (2), 18-22. [refereed international research journal]
- Masingila, Joanna O. (1992). Mathematics practice in carpet laying. In W. Geeslin & K. Graham (Eds.), *Proceedings of the 16th Annual Meeting of the International Group for the Psychology of Mathematics Education* (Vol. 2, pp. 80-87). Durham, NH: University of New Hampshire. [refereed international research conference proceedings]

Refereed Research Book and Monograph Chapters

- Masingila, Joanna O. (Ed.) (2006). *Teachers engaged in research: Inquiry into mathematics practice, grades 6-8*. Greenwich, CT: Infoage/National Council of Teachers of Mathematics. [refereed national research book]
- Masingila, Joanna O. (2006). Introduction to the grades 6-8 volume. In J. O. Masingila (Ed.), *Teachers engaged in research: Inquiry into mathematics practice, grades 6-8* (pp. 1-14). Greenwich, CT: Infoage/National Council of Teachers of Mathematics. [refereed national research book]
- Masingila, Joanna O. (2002). Examining students' perceptions of their everyday mathematics practice. In M. Brenner & J. Moschkovich (Eds.), *Everyday and academic mathematics in the classroom* (pp. 30-39). *Journal for Research in Mathematics Education, Monograph No. 11*. [refereed international research monograph]
- Masingila, Joanna O., & de Silva, Rapti (2001). Teaching and learning school mathematics by building on students' out-of-school mathematics practice. In B. Atweh, H. Forgasz & B. Nebres (Eds.), *Sociocultural research on mathematics education: An international perspective* (pp. 329-344). Mahwah, NJ: Lawrence Erlbaum Associates. [refereed international research book]
- Masingila, Joanna O., Tinto, Patricia P., & Johnson, Loren (1997). Evolutionary reform at East Collins. In J. Ferrini-Mundy & T. Schram (Eds.), *The Recognizing and Recording Reform in Mathematics Education Project: Insights, issues and implications* (pp. 71-85). *Journal for Research in Mathematics Education, Monograph No. 8*. [refereed international research monograph]

Refereed Research-into-Practice Articles

- Masingila, Joanna O., Ochanji, Moses K., & Pfister, Christina C. (2004). Learning from the process: The making of a multimedia case study. *Contemporary Issues in Technology and Teacher Education*

[Online serial], 4(3). (<http://www.citejournal.org/vol4/iss3/mathematics/article1.cfm>) [refereed international research-into-practice journal]

Masingila, Joanna O. (1998). Thinking deeply about knowing mathematics. *Mathematics Teacher*, 91 (7), 610-614. [refereed national research-into-practice journal]

Masingila, Joanna O. (1997). Mathematics unbeknownst! *Australian Mathematics Teacher*, 43 (2), 27-31. [refereed international research-into-practice journal]

Masingila, Joanna O., Nigam, Preety, & Dominguez, Angeles (1997). Evaluación: una herramienta para enseñar y para aprender. *Uno: Revista de Didáctica de las Matemáticas*, 11, 33-41. [refereed international research-into-practice journal]

Masingila, Joanna O. (1997). Let's be realistic. *Mathematics Teaching in the Middle School*, 2 (3), 136-137. [refereed national research-into-practice journal]

Masingila, Joanna O., & Moellwald, Francisco Egger (1993). Using Polya to foster a classroom environment for real-world problem solving. *School Science and Mathematics*, 93 (5), 245-249. [refereed national research-into-practice journal]

Masingila, Joanna O. (1993). Secondary geometry: A lack of evolution. *School Science and Mathematics*, 93 (1), 38-44. [refereed national research-into-practice journal]

Kroll, Diana Lambdin, Masingila, Joanna O., & Mau, Sue Tinsley (1992). Grading cooperative problem solving. *Mathematics Teacher*, 85 (8), 619-627. [refereed national research-into-practice journal]

Kroll, Diana Lambdin, Masingila, Joanna O., & Mau, Sue Tinsley (1992). Cooperative problem solving: But what about grading? *Arithmetic Teacher*, 39 (6), 17-23. [refereed national research-into-practice journal]

Refereed Research-into-Practice Book Chapters

Masingila, Joanna O., & Tinto, Patricia P. (1998). What leadership models are successful in reform efforts? In J. Ferrini-Mundy, K. Graham, L. Johnson & G. Mills (Eds.), *Making change in mathematics education: Learning from the field* (pp. 59-72). Reston, VA: National Council of Teachers of Mathematics. [refereed national research-into-practice book]

Tinto, Patricia P., & Masingila, Joanna O. (1998). What supports teachers as they change their practice? In J. Ferrini-Mundy, K. Graham, L. Johnson & G. Mills (Eds.), *Making change in mathematics education: Learning from the field* (pp. 43-57). Reston, VA: National Council of Teachers of Mathematics. [refereed national research-into-practice book]

Masingila, Joanna O., & King, K. Jamie (1997). Using ethnomathematics as a classroom tool. In J. Trentacosta (Ed.), *Multicultural and gender equity in the mathematics classroom: The gift of diversity* (pp. 115-120), 1997 Yearbook of the National Council of Teachers of Mathematics. Reston, VA: National Council of Teachers of Mathematics. [refereed national research-into-practice book]

Kroll, Diana Lambdin, Masingila, Joanna O., & Mau, Sue Tinsley (1996). Grading cooperative problem solving. In D. V. Lambdin, P. E. Kehle & R. V. Preston (Eds.), *Emphasis on assessment: Readings from NCTM's school-based journals* (pp. 50-57). Reston, VA: National Council of Teachers of Mathematics. [refereed national research-into-practice book]

- Masingila, Joanna O., & Prus-Wisniowska, Ewa (1996). Developing and assessing mathematical understanding in calculus through writing. In P. C. Elliott (Ed.), *Communication in mathematics, K-12 and beyond* (pp. 95-104), 1996 Yearbook of the National Council of Teachers of Mathematics. Reston, VA: National Council of Teachers of Mathematics. [refereed national research-into-practice book]
- Masingila, Joanna O. (1995). Carpet laying: An illustration of everyday mathematics. In P. A. House (Ed.), *Connecting mathematics across the curriculum* (pp. 163-169), 1995 Yearbook of the National Council of Teachers of Mathematics. Reston, VA: National Council of Teachers of Mathematics. [refereed national research-into-practice book]
- Lester, Jr., Frank K., Masingila, Joanna O., Mau, Sue Tinsley, Lambdin, Diana V., Santos, Vânia Maria Pereira dos, & Raymond, Anne M. (1994). Learning how to teach via problem solving. In D. Aichele (Ed.), *Professional development for teachers of mathematics* (pp. 152-166), 1994 Yearbook of the National Council of Teachers of Mathematics. Reston, VA: National Council of Teachers of Mathematics. [refereed national research-into-practice book]

Non-Refereed Articles

- Masingila, Joanna O. (1999). Report on ethnomathematics research. *International Study Group on Ethnomathematics Newsletter*, 14 (2), 13.
- Masingila, Joanna O. (1998). Review of "Mind and social practice: Selected writings of Sylvia Scribner." *Anthropology & Education Quarterly*, 29 (4), 509-510. [invited book review for international research journal]
- Masingila, Joanna O. (1998). Report on ethnomathematics research. *International Study Group on Ethnomathematics Newsletter*, 14 (1), 1.
- Masingila, Joanna O. (1998). Report on ethnomathematics research. *International Study Group on Ethnomathematics Newsletter*, 13 (2), 1-2.
- Masingila, Joanna O. (1998). Report on ethnomathematics research. *International Study Group on Ethnomathematics Newsletter*, 13 (1), 1.
- Masingila, Joanna O. (1997). Report on ethnomathematics research. *International Study Group on Ethnomathematics Newsletter*, 12 (2), 1-2.
- Masingila, Joanna O. (1996). Report on ethnomathematics research. *International Study Group on Ethnomathematics Newsletter*, 12 (1), 1-2.
- Masingila, Joanna O. (1996). Report on ethnomathematics research. *International Study Group on Ethnomathematics Newsletter*, 11 (1), 2.
- Masingila, Joanna O. (1995). Book Review: Cooperative informal geometry. *Mathematics Teaching in the Middle Grades*, 1 (7), 592.
- Masingila, Joanna O. (1995). Report on ethnomathematics research. *International Study Group on Ethnomathematics Newsletter*, 10 (2), 4-5.
- Masingila, Joanna O. (1993). Connecting the ethnomathematics of carpet layers with school learning. *International Study Group on Ethnomathematics Newsletter*, 8 (2), 4-7.

Textbooks

- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2011). *Mathematics for elementary teachers via problem solving: Student activity manual* (3rd ed). Acton, MA: Copley Custom Textbooks.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2011). *Mathematics for elementary teachers via problem solving: Student resource handbook* (3rd ed). Acton, MA: Copley Custom Textbooks.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2011). *Mathematics for elementary teachers via problem solving: Instructor resource manual* (3rd ed). Acton, MA: Copley Custom Textbooks.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2006). *Mathematics for elementary teachers via problem solving: Student activity manual* (2nd ed). Bloomington, IN: Tichenor Publishing.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2006). *Mathematics for elementary teachers via problem solving: Student resource handbook* (2nd ed). Bloomington, IN: Tichenor Publishing.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2006). *Mathematics for elementary teachers via problem solving: Instructor resource manual* (2nd ed). Bloomington, IN: Tichenor Publishing.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2005). *Mathematics for elementary teachers via problem solving: Student activity manual*. Bloomington, IN: Tichenor Publishing.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2005). *Mathematics for elementary teachers via problem solving: Student resource handbook*. Bloomington, IN: Tichenor Publishing.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2005). *Mathematics for elementary teachers via problem solving: Instructor resource manual*. Bloomington, IN: Tichenor Publishing.
- Masingila, Joanna O. (2004). *Algebraic operations and functions* (6th edition). Needham, MA: Pearson Custom Publishing.
- Masingila, Joanna O. (2002). *Algebraic operations and functions* (5th edition). Needham, MA: Pearson Custom Publishing.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2002). *Mathematics for elementary teachers via problem solving: Student activity manual*. Upper Saddle River, NJ: Prentice Hall.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2002). *Mathematics for elementary teachers via problem solving: Student resource handbook*. Upper Saddle River, NJ: Prentice Hall.
- Masingila, Joanna O., Lester, Frank K., & Raymond, Anne M. (2002). *Mathematics for elementary teachers via problem solving: Instructor resource manual*. Upper Saddle River, NJ: Prentice Hall.
- Masingila, Joanna O. (2000). *Algebraic operations and functions* (4th edition). Needham, MA: Pearson Custom Publishing.

- Chapin, S. H., Gardella, T. J., Illingworth, M., Landau, M. S., Masingila, J. O., & McCracken, L. (1999). *Middle grades math: Tools for success—Course 1, Course 2, Course 3: Preparing for algebra and geometry*. Needham, MA: Prentice Hall.
- Masingila, Joanna O. (1999). *Algebraic operations and functions* (3rd edition). Needham, MA: Pearson Custom Publishing.
- Masingila, Joanna O. (1998). *Algebraic operations and functions* (2nd edition). Needham, MA: Simon & Schuster Custom Publishing.
- Masingila, Joanna O., & Lester, Frank K. (1998). *Mathematics for elementary teachers via problem solving: Student activity manual* (Preliminary edition). Upper Saddle River, NJ: Prentice Hall.
- Masingila, Joanna O., & Lester, Frank K. (1998). *Mathematics for elementary teachers via problem solving: Student resource handbook*. (Preliminary edition). Upper Saddle River, NJ: Prentice Hall.
- Masingila, Joanna O., & Lester, Frank K. (1998). *Mathematics for elementary teachers via problem solving: Instructor resource manual*. (Preliminary edition). Upper Saddle River, NJ: Prentice Hall.
- Chapin, S. H., Illingworth, M., Landau, M., Masingila, J. O., McCracken, L. (1997). *Middle grades math: Tools for success—Course 1, Course 2, Course 3*. Needham, MA: Prentice Hall.
- Masingila, Joanna O. (1997). *Algebraic operations and functions*. Needham, MA: Simon & Schuster Custom Publishing.
- Chapin, S. H., Illingworth, M., Landau, M., Masingila, J. O., McCracken, L. (1995). *Middle grades mathematics: An interactive approach—Course 1, Course 2, Course 3*. Needham, MA: Prentice Hall.

Other Products

- Masingila, Joanna O., & Pfister, Christina C. (2005). *Leading recitations: A multimedia tool for professional development*. [CD-ROM] [Multimedia Case Study Product for use with new teaching assistants in the Department of Mathematics and elsewhere at Syracuse University.]
- Masingila, Joanna O., Bridgers, Leah., & Pfister, Christina C. (2003). *Tension test: An investigation of linear relationships*. [CD-ROM]. [Multimedia Case Study Product and Tool for Research]
- Bowers, Janet S., Doerr, Helen M., Masingila, Joanna O., McClain, Kay, & Sale, Jeff (2002). *The case-maker tool* [<http://www.sci.sdsu.edu/mathvideo/cc/index.html>]. [Software for Making Multimedia Case Studies]
- Masingila, Joanna O., & Pfister, Christina C. (2002). *Building bridges: An investigation of truss design* [CD-ROM]. [Multimedia Case Study Product and Tool for Research]
- Bowers, Janet, Doerr, Helen M., Masingila, Joanna O., & McClain, Kay (2000). *Multimedia case studies for teacher development: Case II: Weighty decisions* [CD-ROM]. [Multimedia Case Study Product and Tool for Research]
- Bowers, Janet, Doerr, Helen M., Masingila, Joanna O., & McClain, Kay (1999). *Multimedia case studies for teacher development: Case I: Sneakers* [CD-ROM]. [Multimedia Case Study Product and Tool for Research]

Refereed Research Conference Papers

- Masingila, Joanna O., Olanoff, Dana, & Kwaka, Dennis K. (2011). Who teaches mathematics content courses for preservice elementary teachers? *Paper presented at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics*, Indianapolis, Indiana. [refereed national research conference]
- Kwaka, Dennis K., & Masingila, Joanna O. (2011). Pre-service elementary teachers' perceptions of mathematics and a problem-solving approach in the teaching and learning of mathematics. *Paper presented at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics*, Indianapolis, Indiana. [refereed national research conference]
- Chandler-Olcott, Kelly, Doerr, Helen M., Hinchman, Kathleen A., & Masingila, Joanna O. (2011). How secondary mathematics teachers address the literacy demands of Standards-based materials. *Paper presented at the Annual Meeting of the American Educational Research Association*, New Orleans, LA. [refereed national research conference]
- Kimani, Patrick M., Olanoff, Dana & Masingila, Joanna O. (2008). *Reflecting on the process of learning to teach via problem solving and to support pre-service teachers in learning via problem solving*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY. [refereed national research conference]
- Chandler-Olcott, Kelly, Doerr, Helen M., Hinchman, Kathleen A., Masingila, Joanna O., Temple, Codruta F., & Voelker, Kristen A. (2007). *Mathematical communication in reform-based teaching: Balancing competing demands*. Paper presented at the Annual Meeting for the American Educational Research Association, Chicago, IL. [refereed national research conference]
- Doerr, Helen M., Chandler-Olcott, Kelly, Hinchman, Kathleen A., & Masingila, Joanna O. (2007). *Mathematical communication in reform-based teaching: Moving towards student independence*. Paper presented at the Annual Meeting for the American Educational Research Association, Chicago, IL. [refereed national research conference]
- Temple, Codruta, Hinchman, Kathleen, A., Chandler-Olcott, Kelly, Doerr, Helen M., & Masingila, Joanna O. (2007). *Mathematical communication in reform-based teaching: Understanding register in varied classroom tasks*. Paper presented at the Annual Meeting for the American Educational Research Association, Chicago, IL. [refereed national research conference]
- Masingila, Joanna O., Chandler-Olcott, Kelly, Doerr, Helen, M., Hinchman, Kathleen A., Temple, Codruta, F., & Voelker, Kristen A. (2007). *Mathematical communication in reform-based teaching: Developing scaffolding tools*. Paper presented at the Annual Meeting for the American Educational Research Association, Chicago, IL. [refereed national research conference]
- Masingila, Joanna O., Fisher, Sally, Hallquist, Julia, & Voelker, Kristen (2007). *Learning to scaffold for increased student communication and independence*. Paper presented at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Atlanta, Georgia. [refereed national research conference]
- Masingila, Joanna O., & Cetinkaya, Bulent (2006). *Prospective teacher educators' developing perspectives on teacher education through the creation of multimedia case studies*. Paper presented at the International Workshop on Research in Secondary and Tertiary Mathematics Education, Ankara, Turkey. [refereed international research conference]

- Cetinkaya, Bulent, & Masingila, Joanna O. (2006). *Change in mathematics teachers' views and practices: The role of personality characteristics*. Paper presented at the Third International Conference on the Teaching of Mathematics at the Undergraduate Level, Istanbul, Turkey. [refereed international research conference]
- Masingila, Joanna O., & Cetinkaya, Bulent (2006). *Engaging pre-service primary teachers in learning via problem solving*. Paper presented at the Third International Conference on the Teaching of Mathematics at the Undergraduate Level, Istanbul, Turkey. [refereed international research conference]
- Doerr, Helen M., Chandler-Olcott, Kelly, Masingila, Joanna O., Coles, Carol, Martin, Sherry, & Neddo, Theresa (2005). *Negotiating the literacy demands of reform-based curricula in an urban middle school*. Work session held at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Anaheim, California. [refereed national research conference]
- Pfister, Christina C., White, Daniel L., & Masingila, Joanna O. (2004). *Using multimedia case studies to advance pre-service teacher knowing*. Paper presented at the Annual Summer Meeting of the Association of Teacher Educators, Boston, Massachusetts. [refereed national research conference]
- Pfister, Christina C., White, Daniel L., & Masingila, Joanna O. (2004). *Multimedia case studies and pre-service teacher knowing*. Paper presented at the Annual Meeting of the New York State Association of Teacher Educators, Saratoga, New York. [refereed state research conference]
- Chandler-Olcott, Kelly, Doerr, Helen M., Hinchman, Kathleen A., & Masingila, Joanna O. (2004). *Negotiating the literacy demands of reform-based mathematics curricula*. Paper presented at the Annual Meeting of the American Educational Research Association, April 2004, San Diego, CA. [refereed national research conference]
- Pfister, Christina C., White, Daniel L., & Masingila, Joanna O. (2004). *Multimedia case studies as applied to introductory teacher education*. Paper presented at the Annual Meeting of the Association of Teacher Educators, Dallas, Texas. [refereed national research conference]
- Masingila, Joanna O., Dominguez, Angeles, & Palm, Jean Hallagan (2003). *Perspectives on teachers' and students' algebraic understandings*. Papers presented at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, San Antonio, Texas. [refereed national research conference]
- Masingila, Joanna O., & Doerr, Helen M. (2001). *Linking reflections on a case study to emerging practices*. Paper presented at the Annual Meeting of the American Educational Research Association, Seattle, Washington. [refereed national research conference]
- Doerr, Helen M., & Masingila, Joanna O. (2000). *Linking the emerging practices of pre-service teachers to an experienced teacher's practice through the use of multimedia case studies*. Paper presented at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Chicago, Illinois. [refereed national research conference]
- Masingila, Joanna O., & de Silva, Rapti, & Sellmeyer, Nancy (1999). *Teaching and Learning School Mathematics by Building on Students' Out-of-school Mathematics Practice: Is This Realistic?* Paper presented at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, San Francisco, California. [refereed national research conference]

- Masingila, Joanna O., & de Silva, Rapti (1998). *Solving problems that arise in realistic contexts*. Paper presented at the 22nd Annual Meeting of the International Group for the Psychology of Mathematics Education (Short Oral Communication), South Africa. [refereed international research conference]
- de Silva, Rapti, Masingila, Joanna, Sellmeyer, Nancy, & King, Jamie (1997). *Exploring multiple mathematical concepts within a single context*. Paper prepared for the Annual Meeting of the National Council of Teachers of Mathematics (Poster Session), Minneapolis, Minnesota. [research session at a refereed national research-into-practice conference]
- Masingila, Joanna O. (1996). *Examining students' out-of-school mathematics practice*. Paper prepared for the Eighth Meeting of the International Congress of Mathematical Education (Poster Session), Seville, Spain. [refereed international research conference]
- Masingila, Joanna O. (1996). *Learning from students' out-of-school mathematics practice*. Paper presented at the 20th Annual Meeting of the International Group for the Psychology of Mathematics Education (Short Oral Communication), Valencia, Spain. [refereed international research conference]
- Masingila, Joanna O., & King, K. Jamie (1996). *Middle school students' use of function ideas in everyday mathematics*. Paper presented at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, San Diego, California. [refereed national research conference]
- Masingila, Joanna O. (1996). *The mathematics practice of carpet layers: A closer look at problem solving in context*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, New York. [refereed national research conference]
- Masingila, Joanna O., & King, K. Jamie (1996). *Middle school students' use of function ideas in everyday mathematics*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, New York. [refereed national research conference]
- Lambdin, Diana V., Masingila, Joanna O., & Tinto, Patricia P. (1996). *Professional development: Supporting change in teachers' roles*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, New York. [refereed national research conference]
- Masingila, Joanna O. (1995). *Examining students' perceptions of their everyday mathematics practice*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, California. [refereed national research conference]
- Masingila, Joanna O., Davidenko, Susana, Prus-Wisniowska, Ewa, & Agwu, Nkechi (1994). *Mathematics learning and practice in and out of school: A framework for making these experiences complementary*. Paper presented at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Indianapolis, Indiana. [refereed national research conference]
- Masingila, Joanna O. (1994). *Making mathematics learning in and out of school complementary*. Paper prepared for the Annual Meeting of the American Educational Research Association (Interactive Structured Poster Session—Everyday Mathematics: What Is It and What Can Schools Do About It?), New Orleans, Louisiana. [refereed national research conference]
- Masingila, Joanna O. (1993). *Comparing in-school and out-of-school mathematics practice*. Paper prepared for the Annual Meeting of the American Educational Research Association (Poster Session—Attitudes, Practice, and Mathematics Reform), Atlanta, Georgia. [refereed national research conference]

- Masingila, Joanna O. (1993). *Mathematics practice and apprenticeship in carpet laying: Suggestions for mathematics education*. Paper presented at the 48th Annual Meeting of the Association for Supervision and Curriculum Development, Washington, D.C. [research session at a refereed national research-into-practice conference]
- Raymond, Anne, Santos, Vânia, & Masingila, Joanna O. (1991). *The influence of innovative instructional processes on mathematical belief systems*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, Illinois. [refereed national research conference]
- Masingila, Joanna O., & Santos, Vânia (1990). *Mathematical lessons via problem solving for prospective elementary teachers*. Paper prepared for the 14th Annual Meeting of the International Group for the Psychology of Mathematics Education (Poster Session), Oaxtepec, Mexico. [refereed international research conference]
- Santos, Vânia, & Masingila, Joanna O. (1990). *Changing prospective teachers' conceptions about fractions via problem solving*. Paper prepared for the 14th Annual Meeting of the International Group for the Psychology of Mathematics Education (Poster Session), Oaxtepec, Mexico. [refereed international research conference]

Non-Refereed Conference Papers

- Masingila, Joanna (1996). *What can we learn from students' out-of-school mathematics practice?* Paper prepared for the Eighth Meeting of the International Congress on Mathematical Education (Working Group: The Teaching of Mathematics in Different Cultures), Seville, Spain. [international research conference]
- Masingila, Joanna O. (1993). *Connecting the ethnomathematics of carpet layers with school learning*. Invited paper presented at the Annual Business and Program Meeting of the International Study Group on Ethnomathematics, Annual Meeting of the National Council of Teachers of Mathematics, Seattle, Washington. [international research meeting]
- Masingila, Joanna O., & Lester, Jr., Frank K. (1992). *Experience-based knowledge vs. school-based knowledge*. Paper prepared for the Seventh Meeting of the International Congress on Mathematical Education (Topic Group: Ethnomathematics and Mathematics Education), Quebec City, Quebec, Canada. [international research conference]
- Lester, Frank K., Jr., Kloosterman, Peter, Santos, Vânia, & Masingila, Joanna (1990). *The influence of teachers' beliefs on children's learning*. Paper prepared for the 14th Annual Meeting of the International Group for the Psychology of Mathematics Education (Working Group: Research on the Psychology of Mathematics Teacher Development), Oaxtepec, Mexico. [international research conference]

Reports

- Kroll, Diana Lambdin, Lester, Jr., Frank K., Masingila, Joanna O., Mau, Sue Tinsley, & Santos, Vânia Maria Pereira dos (1992). *Final report of National Science Foundation Grant TEI 8751478—Preparing elementary teachers to teach mathematics: A problem-solving approach. Volume II: Content component*. Bloomington, IN: Indiana University Mathematics Education Development Center.

PRESENTATIONS

Conference Presentations

- Masingila, Joanna, Olanoff, Dana, & Kwaka, Dennis (2011). *Who teaches mathematics content courses for preservice elementary teachers? Results of a nationwide survey*. Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, California.
- Masingila, Joanna (2010). *Using research-based guiding frameworks for making principled decisions in secondary mathematics teacher preparation*. Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, California.
- Mager, Jodelle, Masingila, Joanna O., Moss, Meg, Olanoff, Dana, & Kimani, Patrick (2010). *Preparing instructors to teach mathematics content courses for pre-service elementary teachers: Perspectives from diverse settings*. Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, California.
- Masingila, Joanna O. (2008). *Weighty decisions*. Invited presentation at the Making Connections: Using Cases to Develop Knowledge for Teaching Mathematics three-day workshop through the Institute for Mathematics and Education, a National Science Foundation-funded institute at the University of Arizona.
- Masingila, Joanna O., & Ochanji, Moses K. (2007). *Developing prospective teacher educators' understanding of teacher education through the creation of multimedia case studies*. Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, California.
- Masingila, Joanna O., Cetinkaya, Bulent, & Molenje, Levi (2004). *Prospective teacher educators' developing perspectives on teacher education through the creation of multimedia case studies*. Annual Meeting of the Association of Mathematics Teacher Educators, San Diego, California.
- Masingila, Joanna O. (2003). *Teaching, scholarship and service: Balancing your roles as a new faculty member*. Annual Conference of the Professional Partners in Education: A Program for New Faculty, Syracuse, New York.
- Pfister, Christina C., Bridgers, Leah C., Keogh, Mary D., King, K. Jamie, Masingila, Joanna O., Ogolla, Penina, & Silverstein, Tanya (2003). *Development and use of multimedia case studies: Enhancing the quality of teacher education for students and instructors*. Annual Meeting of the New York State Association of Teacher Educators, Saratoga, New York.
- Pfister, Christina C., Bridgers, Leah C., Keogh, Mary D., King, K. Jamie, Masingila, Joanna O., Ogolla, Penina, & Silverstein, Tanya (2003). *Development and use of multimedia case studies: Enhancing the quality of teacher education for students and instructors*. Annual Meeting of the Association of Teacher Educators, Jacksonville, Florida.
- Masingila, Joanna O. and others (2002). *Creating multimedia case studies for teacher education*. Teaching Tools 2002 Conference, Syracuse University, Syracuse, New York.
- Masingila, Joanna O. (1999). *Assessing cooperative problem solving*. Annual Meeting of the Association of Mathematics Teachers of New York State. Buffalo, New York.
- Masingila, Joanna O. (1999). *Transforming textbook exercises into problems*. Annual Workshop of the Onondaga County Mathematics Teachers Association, Camillus, New York.

- Masingila, Joanna O., & Sellmeyer, Nancy A. (1998). *Exploring geometry and measurement through miniature golf*. Annual Meeting of the National Council of Teachers of Mathematics, Washington, DC.
- Masingila, Joanna O. (1997). *Transforming textbook exercises into realistic problems*. Annual Meeting of the Association of Mathematics Teachers of New York State. Syracuse, New York.
- Masingila, Joanna O. (1997). *Transforming textbook exercises into problems*. Eastern Regional Meeting of the National Council of Teachers of Mathematics, Rochester, New York.
- Masingila, Joanna O. (1996). *Assessing cooperative problem solving*. Annual Meeting of the Association of Mathematics Teachers of New York State. Monticello, New York.
- Masingila, Joanna O. (1996). *Assessing cooperative problem solving*. Annual Meeting of the National Council of Teachers of Mathematics, San Diego, California.
- Masingila, Joanna O. (1995). *Making sense of data in the middle grades*. Annual Meeting of the Association of Mathematics Teachers of New York State. Rye town, New York.
- Masingila, Joanna O. (1995). *Transforming textbook exercises into real-world problems*. Annual Meeting of the National Council of Teachers of Mathematics, Boston, Massachusetts.
- Masingila, Joanna O. (1995). *Invited discussant: Collaborative action research in mathematics classrooms*. Presentation at the RAC/SIG-RME Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Boston, Massachusetts.
- Yarger-Kane, Gwen, Mager, Gerald M., Masingila, Joanna O., Mahar, Donna, Warchol, Marie, & Kiander, Aaron (1995). *Academies of educators: Implementing the Professional Development School at the secondary level*. Annual Meeting of the Association of Teacher Educators. Detroit, Michigan.
- Masingila, Joanna O. (1994). *Grading cooperative problem solving*. Annual Meeting of the Association of Mathematics Teachers of New York State. Monticello, New York.
- Masingila, Joanna O. (1994). *Making sense of data in the middle grades*. Annual Fall Workshop of the Onondaga County Mathematics Teachers Association, Syracuse, New York.
- Masingila, Joanna O. (1993). *Grading cooperative problem solving*. Eastern Regional Meeting of the National Council of Teachers of Mathematics, Pittsburgh, Pennsylvania.
- Masingila, Joanna O. (1993). *Assessing cooperative problem solving*. Annual Fall Workshop of the Onondaga County Mathematics Teachers Association, Syracuse, New York.
- Masingila, Joanna O., & Mau, Sue Tinsley (1993). *Assessing cooperative problem solving*. Annual Meeting of Problem Solving Across the Curriculum, Geneva, New York.
- Mau, Sue Tinsley, & Masingila, Joanna O. (1993). *Experiencing the development of mathematical knowledge via problem solving*. Annual Meeting of Problem Solving Across the Curriculum, Geneva, New York.
- Mau, Sue Tinsley, & Masingila, Joanna O. (1993). *Exploring area and perimeter* (Lesson Plan Display). Annual Meeting of the National Council of Teachers of Mathematics, Seattle, Washington.

- Masingila, Joanna O. (1992). *Extending geometric ideas through problem solving*. Annual Fall Workshop of the Onondaga County Mathematics Teacher Association, Syracuse, New York.
- Masingila, Joanna O., & Mau, Sue Tinsley (1992). *Cooperative problem solving: But what about grading?* Annual Meeting of the National Council of Teachers of Mathematics, Nashville, Tennessee.
- Masingila, Joanna O., & Mau, Sue Tinsley (1991). *Mathematics for elementary teachers via problem solving*. Invited Presentation at the Annual Meeting of the Kentucky Mathematics Association of Teachers of Teachers, Elizabethtown, Kentucky.
- Masingila, Joanna O. (1991). *Grading cooperative problem solving*. Annual Meeting of the Indiana Council of Teachers of Mathematics, Indianapolis, Indiana.
- Masingila, Joanna O., Mau, M. Sue, & Santos, Vânia (1991). *Mathematics for elementary teachers via problem solving*. Midwestern Regional Meeting of the National Council of Teachers of Mathematics, South Bend, Indiana.
- Masingila, Joanna O., & Mau, M. Sue (1990). *Extending geometric ideas through problem solving*. Annual Meeting of the Indiana Council of Teachers of Mathematics, Indianapolis, Indiana.

Other Presentations

- Masingila, Joanna O. (2010). *Kenyatta University and Syracuse University: Africa – U.S. Higher Education Initiative Partnership*. Africa Initiative Brown Bag Series, Syracuse University.
- Masingila, Joanna O. (2010). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (2009). *Reflecting on active learning, active teaching*. Follow-up workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (2009). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (2009). *Making small group work effective*. Workshop for all Teaching Fellows through the Teaching Assistant Program, Graduate School, Syracuse University.
- Masingila, Joanna O. (2008). *Reflecting on active learning, active teaching*. Follow-up workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (2008). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O., & Johnson, Ken (2008). *Writing your teaching philosophy*. Future Professoriate Program Retreat at Minnowbrook through the Teaching Assistant Program, Graduate School, Syracuse University.
- Masingila, Joanna O. (2008). *Connecting to scholarly networks across universities and disciplines* (facilitated roundtable discussion). Future Professoriate Program Retreat at Minnowbrook through the Teaching Assistant Program, Graduate School, Syracuse University.
- Masingila, Joanna O. (2007). *Reflecting on active learning, active teaching*. Follow-up workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.

- Masingila, Joanna O. (2007). *How Much Math Do I Really Need to Know to Teach Elementary School? Take Your Parents To Class* session, Parents' Weekend, Syracuse University, Syracuse, New York.
- Masingila, Joanna O., & Janjaroon, Anek (2007). *A few examples of using technology as a tool in teaching and learning mathematics*. Invited talk given for Thai Educators visiting Syracuse University, Syracuse, New York.
- Masingila, Joanna O. (2007). *Teachers' evolving practices in supporting students' mathematics and literacy development*. Invited colloquium talk given for Department of Mathematics at SUNY Oswego, Oswego, NY.
- Masingila, Joanna O. (2007). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O., & Western, John (2007). *Energizing the classroom*. Future Professoriate Program Retreat at Minnowbrook through the Teaching Assistant Program, Graduate School, Syracuse University.
- Masingila, Joanna O. (2007). *Active learning, active teaching*. Workshop for all new Teaching Assistants through the Teaching Assistant Program, Graduate School, Syracuse University.
- Masingila, Joanna O. (2006). *Reflecting on encouraging active learning*. Follow-up workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (2006). *My experience as a Fulbright Scholar*. Presentation for First- and Second-year Faculty, Syracuse University.
- Masingila, Joanna O. (2006). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (2006). *Making the most out of microteaching*. Teaching Fellow Spring Workshop, Graduate School, Syracuse University.
- Masingila, Joanna O. (2006). *Teachers' evolving practices in supporting students' mathematics and literacy development*. Invited colloquium talk given for Department of Mathematics at SUNY Geneseo, Geneseo, NY.
- Masingila, Joanna O. (2005). *Reflecting on encourage active learning*. Follow-up workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (2005). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.
- Masingila, Joanna O., Ochanji, Moses K., & Pfister, Christina C. (2003). *The Algebra by Design Project*. Inside SU Corporate Event, Syracuse, New York.
- Masingila, Joanna O. (2002). *How Much Math Do I Really Need to Know to Teach Elementary School? Take Your Parents To Class* session, Parents' Weekend, Syracuse University, Syracuse, New York.
- Masingila, Joanna O. and others (2002). *Multimedia Case Studies for Teacher Education*. School of Education, Syracuse University, Syracuse, New York.

- Masingila, Joanna O. (2000). *Encouraging active learning*. Workshop for all new Teaching Assistants through the Teaching Assistant Program, Graduate School, Syracuse University.
- Doerr, Helen M., & Masingila, Joanna O. (1999). *Investigating Multimedia Case Studies as a Tool for Pre-service Teacher Development*. Mathematics Graduate Organization Colloquium, Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (1999). *Microteaching workshop*. Teaching Associate Orientation for the TA Program, Graduate School, Syracuse University.
- Masingila, Joanna O. (1999). *Using writing to actively engage students in mathematical thinking*. Focus on Teaching Luncheon, Center for Support of Teaching and Learning, Syracuse University.
- Masingila, Joanna O. (April 1997, August 1997). *Microteaching workshop*. Teaching Associate Orientation for the TA Program, Graduate School, Syracuse University.
- Masingila, Joanna (1997). *Stay Tuned! and Chill Out!* Linking Life with Math and Science: Using TI Graphing Calculators and CBL's workshop through S.U.P.E.R., Syracuse, New York.
- Masingila, Joanna O. (1997). *Cooperative learning in mathematics: Engaging students in thinking mathematically together*. Workshop for Jamesville-Dewitt High School Mathematics Teachers, Dewitt, New York.
- Graver, Jack E., & Masingila, Joanna O. (1996). *Engaging students in active learning*. Workshop for Mid-level Teaching Assistants in the Department of Mathematics, Syracuse University, Syracuse, New York.
- Doerr, Helen M., & Masingila, Joanna O. (1996). *Stay tuned!* Lesson taught in a Course III class at Nottingham High School, Syracuse, New York.
- Masingila, Joanna O., Doerr, Helen M., de Silva, Rapti, & Nigam, Preeti (1995). *Math in Motion: Using a Motion Detector, a Graphing Calculator and a Computer to Analyze Motion*. Teaching Tools Conference, Syracuse, New York.
- Masingila, Joanna O. (1995). *Mathematics for Inclusive students*. Poster session at School of Education Faculty Retreat, Alexandria Bay, New York.
- Masingila, Joanna O. (1995). *Collecting and analyzing real data*. Workshop for Members of the Mathematics Teacher/Researchers Collaborating for Collaboration in the Classroom Project, Syracuse, New York.
- Masingila, Joanna O. (1995). *Assessing students' collaborative problem solving*. 1995 Seminar on Teaching, Syracuse University, Syracuse, New York.
- Masingila, Joanna O. (1995). *Using writing and concept maps to assess students' thinking*. Presentation at the All Academies Meeting, Syracuse, New York.
- Masingila, Joanna O. (1995). *Engaging students in analyzing real data*. Mathematics Graduate Organization Colloquium, Department of Mathematics, Syracuse University.
- Masingila, Joanna O. (1994). *Assessing cooperative problem solving*. Workshop for Syracuse City School District Secondary Mathematics Teachers, Syracuse, New York.

- Masingila, Joanna O. (1994). *Grading cooperative problem solving*. Authentic Assessment Fair, S.U.P.E.R. Workshop, Syracuse, New York.
- Masingila, Joanna O. (1994). *Teaching In Step with the Standards: Using the Addenda Series*. Two-day Workshop for the Grades 5-8 Jamesville-Dewitt Middle School Mathematics and Resource Teachers, Dewitt, New York.
- Masingila, Joanna O., & Jerauld, Lloyd (1994). *Data analysis as a tool for exploring mathematics*. Workshop for Members of the Mathematics Teacher/Researchers Collaborating for Collaboration in the Classroom Project, Syracuse, New York.
- Masingila, Joanna O. (1994). *Teaching in step with the Standards*. Workshop for Poland Central 7-12 Mathematics Teachers, Poland, New York.
- Masingila, Joanna O. (1994). *Being a mathematics educator*. Career Day at Percy Hughes Magnet Elementary School, Syracuse, New York.
- Masingila, Joanna O. (1994). *Using the TI-82 in Course II*. Workshop for Members of the Mathematics Teacher/Researchers Collaborating for Collaboration in the Classroom Project, Tully, New York.
- Masingila, Joanna O., & Sellmeyer, Nancy (1994). *Teaching in step with the Standards*. Workshop for Poland Central K-6 Teachers, Poland, New York.
- Masingila, Joanna O. (1994). *The job search process*. Spring Colloquium of the TA Program, Graduate School, Syracuse University.
- Masingila, Joanna O. (1994). *Linking the classroom with what's out there*. Spring Inservice Seminar for Syracuse University Project Advance Computer Engineering, Syracuse, New York.
- Masingila, Joanna O. (1994). *Grading cooperative problem solving*. Presentation at the All Cadres Meeting, Syracuse, New York.
- Masingila, Joanna O. (1994). *Why should we change the way we teach: What the Standards have to say*. Workshop for Percy Hughes Magnet School K-7 Teachers, Syracuse, New York.
- Masingila, Joanna O. (1994). *Why should we change the way we teach: What the Standards have to say*. Workshop for Seymour Elementary School K-6 Teachers, Syracuse, New York.
- Masingila, Joanna O. (1993). *Are college expectations congruent with the mathematics we teach in high school?* Annual Banquet of the Onondaga County Mathematics Teachers Association, Syracuse, New York.
- Masingila, Joanna O. (1993). *Problem solving in mathematics*. Pre-College Initiative Program, National Society of Black Engineers, Syracuse University.
- Masingila, Joanna O., & Sellmeyer, Nancy (1993). *The changing mathematics classroom*. Workshop for Poland Central K-6 Teachers, Poland, New York.
- Masingila, Joanna O. (1993). *Assessing cooperative problem solving: Grades 2-6*. Math Can Be Different, Workshop Day for Elementary Teachers and Middle School Mathematics Teachers, Syracuse, New York.

- Masingila, Joanna O. (1993). *The impact on collegiate mathematics instruction of the NCTM Curriculum and Evaluation Standards*. Future Professoriate Seminar, Department of Mathematics, Syracuse University.
- Riordan, Jean, & Masingila, Joanna O. (1993). *A software sampler*. Technology for Teachers Workshop, Mathematics S.U.P.E.R. Workshop, Syracuse, New York.
- Masingila, Joanna O. (1993). *What candy bar do we like best?* Lesson taught in a kindergarten class at Percy Hughes Magnet Elementary School, Syracuse, New York.
- Masingila, Joanna O. (1993). *Implementing the Standards: Suggestions for secondary mathematics*. North Syracuse Central School's Staff Development Program, Celebration IV, North Syracuse, New York.

TEACHING EXPERIENCE

College

Assistant Professor (Fall 1992 - Spring 1998)/ Associate Professor (Fall 1998 - Spring 2004)/Professor (Fall 2004 - Spring 2004)/Professor (Fall 2004 - present). Department of Mathematics, College of Arts and Sciences, Syracuse University.

Algebraic Operations and Functions. I have served typically as the course supervisor for the Algebra course since Fall 1995. During the spring and summer of 1996, I oversaw a major revision of the course; the revision included (a) integrating the use of the TI-83/84 calculator into the course to be used as tool in solving problems, (b) organizing the course around the big ideas of variable and function, (c) developing activities that engage students in problem solving, and (d) developing teacher notes to help teaching assistants in teaching a course where the teacher's role is a facilitator rather than only a lecturer. The main goal of the course is to help students gain algebraic concepts and procedures as usable tools. *Taught course Fall 1996*

Calculus I. This course is a first semester calculus course for mathematics and science majors. The graphing calculator was used throughout the course as a tool for learning mathematics. My objectives for the course were to have students develop (a) conceptual understandings of two foundational ideas in calculus—limit and derivative, (b) proficiency in calculus methods and techniques, and (c) proficiency in using a graphing calculator to represent calculus concepts and functions. *Fall 1993, 2001*

Calculus II. This course is a second semester calculus course for non-science majors. My objectives for the course were to have students develop (a) conceptual understandings of integration, (b) proficiency in calculus methods and techniques, (c) the ability to apply calculus concepts to a variety of problem situations. *Summer 1994*

Elements of Modern Mathematics. This course is a course for students in the School of Management and had three main content units: Probability Theory, Mathematics of Finance, and Topics from Linear Algebra. My objectives for the course were to have students develop (a) conceptual understandings of the content ideas, (b) proficiency in the techniques included in the course, and (c) the ability to solve problems. The TI-83+ graphing calculator was used as an integral tool for learning in this course. *Summer 1995, Spring 2001, Fall 2002, Spring 2007, Spring 2009*

Foundational Mathematics via Problem Solving I. I have served typically as the course supervisor for this course since Fall 1995. This course serves prospective elementary teachers

and the primary goal was to help these students develop adult-level perspectives and insights into the nature of foundational mathematics. The mathematics content of the course includes number concepts (numeration, algorithms, number theory), probability, statistics, and functions. The TI-73/84 graphics calculator is used as an integral tool for learning in this course. I developed the course materials, including teacher notes, and implemented the course as part of my Faculty Early Career Grant from the National Science Foundation. *Fall 1995, 1999, 2001, 2007, 2008, 2009, 2010*

Foundational Mathematics via Problem Solving II. I have served typically as the course supervisor for this course since Spring 1996. This course serves prospective elementary teachers and the primary goal was to help these students develop adult-level perspectives and insights into the nature of foundational mathematics. The mathematics content of the course includes geometry, measurement, rational number ideas, and algebraic concepts. The *Geometer's Sketchpad™* is used as an integral tool for learning in this course. I developed the course materials, including teacher notes, and implemented the course as part of my Faculty Early Career Grant from the National Science Foundation. *Spring 1996, 1997, 1999, 2008*

Precalculus. This course is taken by students to prepare further for taking calculus courses. My objectives for the course were to have students develop (a) conceptual understandings of the content, and (b) proficiency in the procedural aspects of the course. The graphing calculator was used as an integral tool for learning mathematics in this course. *Spring 2000, Fall 2000, 2003, Spring 2005*

Probability and Statistics for the Liberal Arts I. This course is the first in a two-course sequence for many students on campus that satisfies the quantitative literacy requirement in the Liberal Arts core at Syracuse University. My objectives for the course were to have students develop (a) conceptual understandings of the content, (b) proficiency in the procedural aspects of the course, and (c) the ability to analyze data. *Fall 1997*

Assistant Professor (Fall 1992 - Spring 1998)/ Associate Professor (Fall 1998 - Spring 2004)/Professor (Fall 2004 - present). Teaching and Leadership, School of Education, Syracuse University.

Assessing Mathematical Understanding. This course serves graduate mathematics education students and inservice mathematics teachers. The course is a blend of theoretical and philosophical readings and discussions about issues related to assessment in the mathematics classroom and pragmatic activities involving the development and implementation of alternative assessment methods. *Fall 1993, Summer 1995, 2000, 2003*

Empowering Students in Algebra and Communication Within the NYS Mathematics Curriculum, Grades 7-12. This course was a one-week long course taught in a summer session. The objectives of the course were to (a) broaden students' perspectives about the mathematical big ideas of algebra and curriculum design model of *Understanding by Design* (Wiggins & McTighe, 2005), (b) use these perspectives to examine and identify key issues related to the teaching and learning of algebra, and (c) gain experience in planning lessons and units involving algebraic ideas using the principles of *Understanding by Design*. *Summer 2007, 2010*

Empowering Students in Geometry and Communication Within the NYS Mathematics Curriculum, Grades 7-12. This course was a one-week long course taught in a summer session. The objectives of the course were to (a) broaden students' perspectives about the mathematical big ideas of geometry and curriculum design model of *Understanding by Design* (Wiggins & McTighe, 2005), (b) use these perspectives to examine and identify key issues related to the teaching and learning of geometry and (c) gain experience in planning lessons and units involving geometric ideas using the principles of *Understanding by Design*. *Summer 2008*

Empowering Students in Algebra 2 and Trigonometry and Communication Within the NYS Mathematics Curriculum, Grades 7-12. This course was a one-week long course taught in a summer session. The objectives of the course were to (a) broaden students' perspectives about the mathematical big ideas of advanced algebra and trigonometry and curriculum design model of *Understanding by Design* (Wiggins & McTighe, 2005), (b) use these perspectives to examine and identify key issues related to the teaching and learning of advanced algebra and trigonometry and (c) gain experience in planning lessons and units involving advanced algebra and trigonometry ideas using the principles of *Understanding by Design*. *Summer 2009*

Establishing Mathematical Learning Environments, K-8. This course was a year-long course offered through Extended Campus and was taught by multiple instructors—two Syracuse University professors and several inservice teachers. I taught three class periods during the year. The objectives of the course were to (a) meet the needs of K-8 teachers attempting to make changes consistent with the National Council of Teachers of Mathematics *Standards* in their mathematics classrooms, (b) pool resources, and (c) to create a network of teachers promoting active learning in mathematics. *October 1993 - March 1994; October 1994 - March 1995*

Investigating Functions Through Real-world Data. This one-credit course was designed for preservice and inservice secondary mathematics and science teachers. The course consisted of developing and exploring the concept of function through the use of hand-held calculator-based laboratory (CBL™) equipment and TI-82 graphics calculators. *Summer 1996*

Learning Theories in Mathematics Education. This course serves graduate mathematics education students, and incorporates graduate students in other School of Education programs. The course examined the influence of cognitive science, constructivism, and social cognition on how mathematics educators view the learning of mathematics. *Spring 1994, Fall 1996, 2000, 2002, 2004, Summer 2007, 2009*

Methods and Curriculum in Teaching Mathematics. This course is designed for students in the mathematics education certification program and is an indepth examination and experience of the methods and curriculum of teaching mathematics in grades 7-12. *Spring 1994, 1995, 1996, 1997, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2007, 2008, 2009, 2010*

Program Development in Teacher Education. This course is designed for graduate students interested in exploring issues in teacher education. The course examined current issues in teacher education, and looked carefully at the use of case studies as a vehicle for preparing teachers. The major assignment in the class engaged students in creating multimedia case studies to be used in professional development. *Spring 2002, Summer 2002, 2003, Fall 2008, 2010*

Research Apprenticeship in Mathematics Education. This course was an apprenticeship in research for doctoral students in mathematics education. Building on previous research concerning mathematics practice in everyday situations, the students worked with me to design, develop, and carry out research studies to determine the mathematics concepts and processes used in some everyday situations. *Spring 1993*

Research in Mathematics Education. This course was a seminar course for graduate students in mathematics education. Class time was devoted primarily to in-depth discussions of selected readings related to philosophical, theoretical, and research-oriented issues in mathematics education. *Fall 1992, 1994*

Teacher Development in Mathematics. This course is designed for students in the mathematics education certification program and is an indepth examination and experience of teaching and assessing mathematics learning using a constructivist approach. *Fall 1994, 1998, 1999*

Teaching and Learning Algebra. This course serves graduate students in mathematics education and inservice mathematics teachers, grades 5-12. The course consists of a blend of (a) readings and discussions about issues related to the teaching and learning of algebra, and (b) pragmatic activities involving the development and adaptation of, and reflection on, lessons and activities involving algebraic concepts and procedures. *Summer 2001*

Teaching and Learning Geometry. This course serves graduate mathematics education students and inservice mathematics teachers. The course consists of a blend of (a) theoretical and philosophical readings and discussions about geometry and teaching geometry, and (b) pragmatic activities involving exploring some geometry concepts and developing ideas for teaching geometric concepts. *Fall 1995, 1997, 1999, Summer 2002, Fall 2003, 2007, 2009*

Teaching Undergraduate Mathematics. This course was designed for graduate mathematics and mathematics education students who intend to teach mathematics at the undergraduate level. The course consisted of an indepth examination and experience of the methods and curriculum of teaching mathematics at the undergraduate level. *Summer 1996*

Tools for Teaching Mathematics. This course was designed for graduate mathematics education students and inservice mathematics teachers. The course consisted of a blend of (a) theoretical and philosophical readings and discussions about issues related to using tools in the mathematics classroom to help students develop mathematical understandings, and (b) pragmatic activities involving the development and implementation of activities using tools for teaching mathematics. *Spring 1995*

TRANSIT Institute: Integrating Technology Into the Mathematics Classroom. This course was a two-week intensive institute for secondary mathematics teachers. The institute focused on helping teachers become familiar with using technology—specifically the TI-82 graphics calculator, Calculator Based Laboratory™, and Explorer software—in teaching and learning mathematics, and aiding teachers in developing curriculum that uses the technology as a tool for teaching and learning mathematics. *July 1994*

Writing a Research Proposal. This course was designed for graduate students in education who are working on research apprenticeship or dissertation proposals. The course covered conceptualizing, writing and revising research proposals. *Summer 2008*

Other Teaching at Syracuse University.

First Year Forum. This course was designed for first-semester, first-year students at Syracuse University as a way for helping these students become members of the university community. *Fall 1997, 1998, 1999, 2000, 2007, 2008, 2009, 2010*

Associate Instructor. School of Education, Indiana University. I taught *Computer Applications to Professional Education.* (8 sections) *Fall 1991, Spring 1992*

Associate Instructor. Mathematics Department, Indiana University. I taught *Mathematics for Elementary Teachers Via Problem Solving.* (1 section) *Spring 1990* and *Mathematics for Elementary Teachers I* (1 section) *Fall 1989*

Teaching Assistant. School of Education, Indiana University. I worked with Dr. Frank Lester to teach *Mathematics in the Elementary School*. (1 section) *Spring 1991* and I worked with Dr. Jerry McIntosh to teach *Methods of Teaching Secondary/Junior High/Middle School Mathematics*. (1 section) *Fall 1989*

Secondary School

Mathematics Teacher. Bishop Chatard High School, Indianapolis, Indiana. I taught Algebra I, Geometry, Algebra II, and Analytic Geometry and Trigonometry. *August 1984 - June 1988*

Mathematics Teacher. Fairfield High School, Goshen, Indiana. I taught Consumer Mathematics, General Mathematics and Algebra I. *August 1982 - June 1984*

SERVICE

Service to the Department of Mathematics

Member of the Mathematics Education Search Committee (Fall 1992 – Spring 1994)

Faculty representative for the oral interview for new international teaching assistants (August 1993)

Member of the Mathematics Education Committee (Fall 1994 – present)

Coordinator for the Mathematics Placement Exam (Fall 1999 – Spring 2004)

Elected member of the Executive Committee (Fall 2001 – Spring 2003, Fall 2004 - Spring 2005, Fall 2008 – Spring 2009)

Chair of the Ad Hoc Committee for the Promotion and Tenure of Assistant Professor Helen Doerr (June – September 2000)

Chair of the Ad Hoc Committee for the Promotion of Associate Professor Helen Doerr (June - September 2005)

Member of the Ad Hoc Committee for the Department of Mathematics External Review (December 2006 – March 2007)

Chair of the Departmental Chair Selection Committee (May – November 2007)

Member of the Carnegie Centennial Celebration Committee (February – October 2007)

Service to Teaching and Leadership Programs

Chair of the Academy of Mathematics Educators (Fall 1992 – present)

Faculty representative to the Professional Development School (Fall 1992 – Spring 1995)

Elected Member of the Teaching and Leadership Programs Administrative Committee (Fall 1992 – Spring 1995)

Member of the Secondary Education Programs Group (Fall 1992 – present; Served as chair Fall 1998 – Spring 2002, Fall 2005 - present)

Member of a Social Studies Education Search Committee (Spring 1993—two positions; Spring 1997)

Coordinator of the Mathematics Education Program (2000 – present)

Service to the College of Arts and Sciences

Chair of the Department of Science Teaching (July 2009 – present)

Member of a Science Teaching Search Committee (Spring 2009)

Member of a Mentoring Committee for Sharon Dotger (Spring 2009 – present)

Member of a Mentoring Committee for Jeffrey Rozelle (Spring 2010 – present)

First-Year Forum leader (Fall 1997, 1999, 2000, 2007, 2008, 2009, 2010)

Advisor for Summer Advising for Incoming Students (Summer 2000)

Lower Division advisor (2000-2002)

Service to the School of Education

Member of the Awards and Scholarship Committee (Fall 1993 – Spring 1995)

Member of the Committee on Teaching for Saouma BouJaoude (Spring 1993)

Member of the Committee on Teaching for Rob Branch (Spring and Fall 1994)

Elected member of the Promotion and Tenure Committee (Fall 1995 – Spring 1996; Fall 1999 – Spring 2000; Fall 2007 – Spring 2010)

Member of the Curriculum Committee (Fall 1996 – Spring 2001)

First-Year Forum leader (Fall 1998)

Advisor for Undergraduate and Graduate Students in Mathematics Education (Fall 1992 - present)

Representative to the University Assessment Council for the Middle States Review (Fall 2001 – Summer 2006)

Member of the Search Committee of the Dean for the School of Education (Summer and Fall 2002)

Member of the Counseling and Human Services Search Committee (Fall 2007 – Spring 2008)

Service to the University

Faculty interviewer in the Overseas Fellowship Committee's Interview and Reception for the 1996 Rhodes and Marshall Scholarship Candidates

Elected member and chair of the Affirmative Action Grievance Committee (Fall 1999 – Spring 2002)

Member of the Outstanding TA Selection Committee for the Graduate School (2001; 2003; 2005)

Member of the Teaching Recognition Awards Committee (2005, 2006—served as chair of committee)

Member of the Teaching Fellow Selection Committee for the Graduate School (2008, 2010)

Coordinator for the NCATE (National Council for the Accreditation of Teacher Education) review for all programs at Syracuse University that prepare candidates to work in P-12 schools (Fall 2001 – present)

Have served as an outside reader on 19 dissertations at Syracuse University through Summer 2010

Service to the Profession

Member of the Awards Committee for the Association of Mathematics Teacher Educators (February 2008 – January 2011)

Manuscript reviewer for the *Handbook for Research in Mathematics Education* (2nd edition)

Manuscript reviewer for the *Journal for Research in Mathematics Education* (1992 – present)

Manuscript reviewer for *Mathematics Teaching in the Middle School* (1992 – present)

Manuscript reviewer for *Teaching and Teacher Education* (1993 – 1999)

Proposal reviewer for Division C for the Annual Meeting of the American Educational Research Association (1993 – present)

Presider for a session at the Annual Meeting of the National Council of Teachers of Mathematics (April 1993, 1994)

Proposal reviewer for the Special Interest Group for Research in Mathematics Education for the Annual Meeting of the American Educational Research Association (1994 – present)

Manuscript reviewer for State University of New York Press (1 manuscript in 1995)

Manuscript reviewer for the *Journal for Research in Mathematics Education Monograph Series* (1 manuscript in 1995)

Proposal reviewer for the Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (Spring 1995 – present)

Manuscript reviewer for Addison Wesley Publications (1 manuscript in 1996; 1 manuscript in 1997)

Guest editor for the June 1996 issue of the *International Study Group on Ethnomathematics Newsletter*

Invited reviewer on research panel for National Science Foundation (1997)

Manuscript reviewer for *Anthropology and Education Quarterly* (1997 – present)

Manuscript reviewer for the *Journal of Mathematical Behavior* (1999 – present)

External examiner for a doctoral dissertation completed by a candidate at the University of the Western Cape, South Africa (2000)

Manuscript reviewer for *Educational Studies in Mathematics* (2001 – present)

Manuscript reviewer for *Mathematical Thinking and Learning* (2003 – present)

Manuscript reviewer for *Journal of Mathematics Teacher Education* (2005 – present)

External Reviewer for Promotion and Tenure Cases for eight cases through Fall 2009

OTHER PROFESSIONAL EXPERIENCES

Assistant Editor. *Journal for Research in Mathematics Education*, Frank K. Lester, Jr. (Editor), Indiana University. I was responsible for the overall management of all business matters related to the operation of the journal, setting up and maintaining the manuscript filing system, developing and maintaining the reviewer data base, and assisting in technical editing and proofreading of manuscripts submitted for publication. *July 1991 - July 1992*

Research Assistant. *Mathematics Education Development Center*, Indiana University. I worked as a member of a team on a project, directed by Frank Lester and funded by the National Science Foundation, to develop a new mathematics content course for prospective elementary teachers entitled, *Mathematics for Elementary Teachers Via Problem Solving*. In addition to helping (a) develop and write the curriculum for this course, (b) develop assessment procedures, reflective writing assignments, and out-of-class projects, and (c) write the final report, I taught a pilot section of the course and served as materials editor and course coordinator. *May 1989 - May 1992*

PROFESSIONAL ORGANIZATIONS

American Association of University Professors (AAUP)

American Educational Research Association (AERA)

AERA Special Interest Group for Research in Mathematics Education (SIG/RME)

Association of Mathematics Teacher Educators (AMTE)

Association of Mathematics Teachers in New York State (AMTNYS)

International Group for the Psychology of Mathematics Education (PME)

National Council of Teachers of Mathematics (NCTM)

North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)