CURRICULUM VITAE

**JOANNA O. MASINGILA**

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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, mathematics teacher educator preparation

**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)

Dean of the School of Education, Syracuse University (March 2015 – July 2021)

Interim Dean of the School of Education, Syracuse University (February 2014 – March 2015)

Chair of the Department of Teaching and Leadership, Syracuse University (August 2012 – January 2014)

Visiting Professor of Education, Kenyatta University, Nairobi, Kenya (July – December 2011)

Chair of the Department of Science Teaching, Syracuse University (July 2009 – June 2013)

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)

Coordinator, Accreditation process through Association for Advancing Quality for Educator Preparation (AAQEP) for Syracuse University (May 2018 – July 2021)

Coordinator, Accreditation process through National Council for Accreditation of Teacher Education (NCATE) for Syracuse University (November 2001 – May 2015)

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

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

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

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)

**CERTIFICATIONS**

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**

Masingila, Joanna O. (PI), Bull, Thomas H. (Co-PI), & Lei, Jing (Co-PI) (August 2019 – May 2020). *Collaborative University and School Experience for Fulbright International Teachers (CUSE FIT)*. International Research and Exchanges Board via the U.S. Department of State, Bureau of Educational and Cultural Affairs, $215,000.

Masingila, Joanna O. (PI). (July 2019 – June 2020). *4A Arts & Creative Literacies Academy*. Syracuse City School District, $600,000.

Masingila, Joanna O. (PI). (July – September 2019). *Summer at Dr. Weeks*. Onondaga County of Children and Family Services, $92,218.

Masingila, Joanna O. (PI), & Lei, Jing (Co-PI) (August 2018 – May 2019). *Collaborative University and School Experience for Fulbright International Teachers (CUSE FIT)*. International Research and Exchanges Board via the U.S. Department of State, Bureau of Educational and Cultural Affairs, $205,000.

Shedd, Joseph (PI), & Canino-Rispoli, Diane (Co-PI), Coggiola, John (Senior Personnel), Dotger, Sharon (Senior Personnel), Mangram, Jeffrey (Senior Personnel), & Masingila, Joanna O. (Senior Personnel) (September 2012-August 2015). *Educational Leadership Program Enhancement Project*. New York State Education Department, $300,000.

Dotger, Benjamin (PI), Dotger, Sharon, Masingila, Joanna O., & Rozelle, Jeffrey (Co-PIs) (August 2011 – July 2015). *The Science and Mathematics Simulated Interaction Model*, Discovery Research K12 Program (DR-K12), National Science Foundation, $449,563.

Masingila, Joanna O. (PI), Gathumbi, Agnes W. (Co-PI), Foley, Alan (Co-Pi). (April 2011 – August 2014). *Building Capacity Through Quality Teacher Preparation*, Africa – U.S. Higher Education Initiative, Higher Education for Development (HED), United States Agency for International Development (USAID), $1,122,210.

Miheso-O’Connor, Marguerite K. (PI), & Masingila, Joanna O. (Co-PI) (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. (PI), & Gathumbi, Agnes W. (Co-PI) (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. (PI), Masingila, Joanna O., Strempel, Eileen, Dotger, Sharon, & Wiles, Jason (Co-PIs) (June 2009-May 2014). *Syracuse University Noyce Scholars Program for Science and Mathematics Teachers*. National Science Foundation, $900,000.

Shedd, Joseph (PI), & Canino-Rispoli, Diane (Co-PI), Coggiola, John (Senior Personnel), Dotger, Sharon (Senior Personnel), Mangram, Jeffrey (Senior Personnel), Masingila, Joanna (Senior Personnel) (September 2009-August 2012). *Educational Leadership Program Enhancement Project*. New York State Education Department, $300,000.

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

Masingila, Joanna O. (PI), Ochanji, Moses K., Miheso, Marguerite, Twoli, Nicholas W., & Musyimi, Jonathan K. (Co-PIs) (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. (PI), Doerr, Helen M., Matyas, Stephen, & Velu, Raja (Co-PIs) (April 2003-March 2006). *Data-driven Algebra: Making Connections Through Business Cases*. GE Fund, $357,300.

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

Tinto, Patricia P. (PI), Doerr, Helen M., & **Masingila, Joanna O**. (Co-PIs) (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 (RED-9550147).

**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 Saint Mary’s College, 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 (retired)

Angeles Dominguez (Ph.D.) 2001 Instituto Tecnológico y de Estudios Superiores de Monterrey,

Monterrey, México

Rapti de Silva (Ph.D.) 2001\* University of Moratuwa, Katubedda, Sri Lanka

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 Stockton University, Galloway, NJ

Patrick Kimani (Ph.D.) 2008 Glendale Community College, Phoenix, AZ

Marguerite Miheso O’Connor (Ph.D. Kenyatta University, Nairobi, Kenya

from Kenyatta University) 2009

Dana Olanoff (Ph.D.) 2011\* Widener University, Chester, PA

Leonard Kamau (Ph.D.) 2014\* South Eastern Kenyan University, Kitui, Kenya

Benjamin Arthur (Ph.D. from

Kenyatta University) 2014 University of Cape Coast, Cape Coast, Ghana

Brent Elder (Ph.D.) 2016\* Rowan University, Glassboro, New Jersey

Peter Rugano Nthiga (Ph.D.) 2016 University of Embu, Embu, Kenya

Jinxia Xie (Ph.D.) 2016 Mission Bay Senior High School, San Diego, CA

Krystal Barber (Ph.D.) 2016 SUNY College at Cortland, Cortland, NY

Fredrick Ssempala (Ph.D.) 2017 Busitema University, Tororo, Uganda

Victoria Wambua (Ph.D.) 2018 Hmong College Prep Academy, Saint Paul, MN

Grace Njuguna Visher (Ph.D.) 2020 College of Saint Rose, Albany, NY

Joash M. Geteregechi (Ph.D.) 2020\* Ithaca College, Ithaca, NY

Crispin Ojwang (Ph.D.) 2021

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

**MASTERS THESIS ADVISOR**

(in chronological order)

Frederick Odindo (M.S. Teaching and Curriculum) 2012\*

\**Recipient of the master’s prize award from the School of Education, Syracuse University*

**UNDERGRADUATE HONORS THESIS ADVISOR**

(in chronological order)

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

Julie Harnett (B.S. Mathematics and Mathematics Education) 2018

**PUBLICATIONS**

Articles Submitted for Publication and In Preparation

Graysay, Duane T., & **Masingila, Joanna O.** (in press). Simulations in secondary mathematics teacher education: The role of debriefing in providing opportunities to develop knowledge for teaching. In B. Dotger & K. Chandler-Olcott (Eds.), *Clinical simulations as a signature pedagogy for educator preparation across the disciplines*. Cambridge, MA: Harvard Education Press.

Refereed Research Articles

**Masingila, Joanna O.**, & Olanoff, Dana (2021). Who teaches mathematics content courses for prospective elementary teachers in the United States? Results of a second national survey. *Journal of Mathematics Teacher Education*. <https://doi.org/10.1007/s10857-021-09496-2> [refereed international research journal]

Wambua, Victoria M., Mbasu, Zachariah, **Masingila, Joanna O**., & Wilkinson, Louise C. (2019). The language demands in mathematics: A case of the Kenya Certificate of Secondary Education mathematics examination. *US-China Education Review A*, *9*(7), 279-288. <http://www.davidpublisher.org/Public/uploads/Contribute/5e7ae392b4671.pdf> [refereed international research journal]

Ssempala, Fredrick, & **Masingila, Joanna O.** (2019). Effect of professional development on chemistry teachers’ understanding and practice of inquiry-based instruction in Kampala, Uganda. *International Journal of Scientific Research and Education, 7*(2), 8085-8105. [refereed international research journal]

Ssempala, Fredrick, & **Masingila, Joanna O.** (2019). Factors influencing chemistry teachers’ understanding and practice of inquiry-based instruction in Kampala, Uganda. *International Journal of Scientific Research and Education, 7*(1), 8062-8071. [refereed international research journal]

**Masingila, Joanna O.**, Foley, Alan R., Khatete, David W., Ndethiu, Sophia M., Maundu, John N., & Twoli, Nicholas W. (2019). From implementation to efficacy: Factors affecting Kenyan secondary teachers’ technology integration. *Africa Education Review*, *16*(1), 58-87. <https://doi.org/10.1080/18146627.2016.1224574> [refereed international research journal]

**Masingila, Joanna O.*,*** Olanoff, Dana, & Kimani, Patrick M. (2018). Mathematical knowledge for teaching teachers: Knowledge used and developed by mathematics teacher educators in learning to teach via problem solving. *Journal for Mathematics Teacher Education, 21*(5), 429-450. <https://link.springer.com/article/10.1007/s10857-017-9389-8> [refereed international research journal]

Dotger, Benjamin, Dotger, Sharon, **Masingila, Joanna O**., Rozelle, Jeffrey, Bearkland, Mary, & Binnert, Ashley (2017). The right “fit”: Exploring science teacher candidates’ approaches to natural selection within a clinical simulation. *Research in Science Education, 48*(3), 637-661. <https://doi.org/10.1007/s11165-016-9582-2> [refereed international research journal]

Ndethiu, Sophia M., **Masingila, Joanna O**., Miheso-O’Connor, Marguerite K., Khatete, David W., & Heath, Katie L. (2017). Kenyan secondary teachers’ and principals’ perspectives and strategies on teaching and learning with large classes. *Africa Education Review, 14*(1), 58-86. DOI: 10.1080/18146627.2016.1224573*.* [refereed international research journal]

Xie, Jinxia, & **Masingila, Joanna O.** (2017). Examining interactions between problem posing and problem solving with prospective primary teachers: A case of using fractions. *Educational Studies in Mathematics*, *96*(1), 101-118. [refereed international research journal]

Chandler-Olcott, Kelly, Doerr, Helen M., Hinchman, Kathleen A., & **Masingila, Joanna O**. (2015). Bypass, augment, or integrate: How secondary mathematics teachers address the literacy demands of standards-based curriculum materials. *Journal of Literacy Research, 47*, 439-472. [refereed international research journal]

Dotger, Benjamin, **Masingila, Joanna O**., Bearkland, Mary, & Dotger, Sharon (2015). Exploring iconic interpretation and mathematics teacher development through clinical simulations. *Journal of Mathematics Teacher Education, 18*(6), 577-601. [refereed international research journal]

Foley, Alan R., & **Masingila, Joanna O**. (2015). The use of mobile devices as assistive technology in resource-limited environments: Access for learners with visual impairments in Kenya. *Disability and Rehabilitation: Assistive Technology, 10*(4), 332-339. [refereed international research journal]

Foley, Alan R., & **Masingila, Joanna O**. (2014). Building capacity: Challenges and opportunities in large class pedagogy (LCP) in Sub-Saharan Africa. *Higher Education, 67*(6), 797-808. [refereed international research journal]

**Masingila, Joanna O**., Olanoff, Dana E., & Kwaka, Dennis K. (2012). Who teaches mathematics content courses for prospective elementary teachers in the United States? Results of a national survey. *Journal of Mathematics Teacher Education, 15*(5), 347-358. [refereed international research journal]

**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*(1), 89-108. [refereed international research journal]

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**., & 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*(3), 235-263. [refereed international research journal]

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**., 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]

**Masingila, Joanna O**. (1994). Mathematics practice in carpet laying. *Anthropology and Education Quarterly, 25* (4), 430-462. [refereed international research journal]

**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]

Referred Research Conference Proceedings

**Masingila, Joanna O**., Kimani, Patrick M., & Olanoff, Dana (2019). Using a community of practice to support mathematics teacher educators' growth and development. In M. Graven, H. Venkat, A. Essien, & P. Vale (Eds.). *Proceedings of the 43rd Conference of the International Group for the Psychology of Mathematics Education* (Vol. 3, pp. 81-88). Pretoria, South Africa: PME.

Cherinda, Marcos, Kesianye, Sesutho, Webb, Lyn, El-Yacoubi, Nouzha, Kazima, Mercy, & **Masingila, Joanna O.** (2019). Southern Africa regional presentation. In M. Graven, H. Venkat, A. Essien, & P. Vale (Eds.). *Proceedings of the 43rd Conference of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 221-240). Pretoria, South Africa: PME.

Njuguna, Grace, & **Masingila, Joanna O.** (2017). Exploring teachers’ scaffolding of students’ mathematical explanations in secondary schools. *Proceedings of the Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (PME-NA), Indianapolis, Indiana. [refereed international conference]

**Masingila, Joanna O.**, & Olanoff, Dana (2017). Who teaches mathematics content courses for prospective elementary teachers? Results of a second national survey. *Proceedings of the Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (PME-NA), Indianapolis, Indiana. [refereed international conference]

Wambua, Victoria M., Wilkinson, Louise, & **Masingila, Joanna O.** (2017). The effect of item modification on students’ strategies for negotiating linguistic challenges in mathematics word problems. *Proceedings of the Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (PME-NA), Indianapolis, Indiana. [refereed international conference]

Njuguna, Grace, & **Masingila, Joanna O.** (2017). Teachers’ scaffolding of students’ mathematical explanations in secondary schools. *Proceedings of the 5th International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

Njoroge, John M., & **Masingila, Joanna O.** (2017). Prospective teacher educators’ learning to integrate information communication technology: Perspectives on teaching assistantship experiences. *Proceedings of the 5th International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

Ssempala, Fredrick, & **Masingila, Joanna O.** (2017). The effect of an explicit-reflective professional development workshop on inquiry and nature of science on science teachers’ understanding and practice of inquiry-based instruction. *Proceedings of the 5th International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

Ssempala, Fredrick, & **Masingila, Joanna O.** (2017). The factors influencing science teachers’ understanding and practice of inquiry-based instruction in Uganda. *Proceedings of the 5th International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

Wambua, Victoria M., & **Masingila, Joanna O.** (2016). Linguistic challenges in the Kenya Certificate of Secondary Education (KCSE) mathematics word problems. *Proceedings of the 38th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Tucson, AZ: University of Arizona. [refereed international research conference]

**Masingila, Joanna O.,** & Wambua, Victoria M. (2015). Improving mathematical achievement by engaging prospective primary teachers in learning mathematics through problem solving. *Proceedings of the 4th International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

Wambua, Victoria M., **Masingila, Joanna O.**, Mbasu, Zachariah L., & Wilkinson, Louise C. (2015). The language demands of the Kenya Certificate of Secondary Education mathematics examination. *Proceedings of the 4th International Conference on Education,* Nairobi, Kenya. [refereed international research conference]

**Masingila, Joanna O**., Dotger, Benjamin, Dotger, Sharon, & Bearkland, Mary (2013). Simulated interaction model (SIM): An innovative approach for preparing preservice mathematics teachers. *Proceedings of the 35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Chicago, IL: University of Illinois – Chicago. [refereed international research conference]

**Masingila, Joanna O**., & Oyuga, John (2013). Kenyan secondary teachers’ integration of technology into their teaching practice. *Proceedings of the 3rd International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

**Masingila, Joanna O.**, & Nthiga, Peter R. (2013). Using case studies to promote teacher learning. *Proceedings of the 3rd International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

Foley, Alan R., & **Masingila, Joanna O**. (2013). Using mobile devices to improve access to education for university students with visual impairments. *Proceedings of the 3rd International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

**Masingila, Joanna O**., & Miheso-O’Connor, Marguerite (2013). Kenyan secondary mathematics teachers’ integration of technology in their teaching: Challenges and opportunities. *Proceedings of the 4th AFRICME conference,* Maseru, Lesotho. [refereed international research conference]

Odindo, Fredrick, & **Masingila, Joanna O**. (2013). Teaching and learning of mathematics through problem-solving activities in Kenyan secondary schools. *Proceedings of the 4th AFRICME conference*, Maseru, Lesotho. [refereed international research conference]

**Masingila, Joanna O**., & Olanoff, Dana E. (2012). Who teaches mathematics content courses for prospective elementary teachers? Results of a national survey. In Van Zoest, L. R., Lo, J.-J., & Kratky, J. L. (Eds.) *Proceedings of the 34th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 787, abstract of poster presented). Kalamazoo, MI: Western Michigan University. [refereed international research conference]

Miheso-O’Connor, Marguerite, & **Masingila, Joanna O**. (2012). Supporting teachers in technology integration in Kenyan secondary schools. In Van Zoest, L. R., Lo, J.-J., & Kratky, J. L. (Eds.) *Proceedings of the 34th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 572, abstract of poster presented). Kalamazoo, MI: Western Michigan University. [refereed international research conference]

Odindo, Fred O., & **Masingila, Joanna O**. (2012). Teaching and learning of mathematics through problem-solving activities in Kenyan secondary schools. In Van Zoest, L. R., Lo, J.-J., & Kratky, J. L. (Eds.). *Proceedings of the 34th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 897-900). Kalamazoo, MI: Western Michigan University. [refereed international research conference]

**Masingila, Joanna O**., & Gathumbi, Agnes W. (2011). A collaborative project to build capacity through quality teacher preparation. *Proceedings of the 2nd International Conference on Education*, Nairobi, Kenya. [refereed international research conference]

**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]

**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]

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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 Presession 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 Presession 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 O.** (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** **O**. (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 O**. (2020, November). *Student activism and social justice in higher education in the United States*. Virtual presentation at the annual International Forum on Higher Education, Zhengzhou, Henan Province, China.

**Masingila, Joanna O**. (2019, September). *Reflections on 20+ years of collaborating with Kenyan partners.* **Keynote address** at the 12th annual conference of the Kenya Scholars and Studies Association, Atlanta, Georgia.

**Masingila, Joanna O**. (2018, September). *Professional standards for teachers: What role have they served? What role can they serve?* **Keynote address** at the 2018 International Forum on Education Policy: China’s Perspective and Global Trends, Shanghai, China.

**Masingila, Joanna O.,** Altindis, Nigar, Wambua, Mitchelle, Wambua, Victoria, Waswa, Anne, & Wilson, Tonya (2018, February). *Preparing prospective mathematics teacher educators to teach via problem solving*. Annual Conference of the Association of Mathematics Teacher Educators, Houston, Texas.

**Masingila, Joanna O**. (2017, September). *Kenyatta University and Syracuse University: Building capacity in teacher education and doctoral preparation through collaboration*. Annual Conference of the Kenya Scholars and Studies Association, Atlanta, Georgia.

**Masingila, Joanna O**. (2017, July). *The value of international partnerships: Collaborative work among teacher educators at Kenyatta University and Syracuse University since 1998*. **Keynote address** at the 5th International Conference on Education, Nairobi, Kenya.

Xie, Jinxia, & **Masingila, Joanna O**. (2015, February). *Examining pre-service elementary teachers’ interactions with problem posing and problem solving*. Annual Conference of the Association of Mathematics Teacher Educators, Orlando, Florida.

Rugano, Peter, & **Masingila, Joanna O**. (2014, September). *Teacher educators’ preparation for using multimedia case studies in large classes at a Kenyan university*. Annual Conference on Case Study Teaching in Science, Buffalo, New York.

**Masingila, Joanna O**. (2012, July). *Two decades of research on student, teacher and teacher educator learning.* Keynote Address at the International Mathematics Research Meeting, Centre for Applied Research in Mathematical Sciences, Strathmore University, Nairobi, Kenya.

**Masingila, Joanna O**. (2012, July). *Two decades of collaborative, international research in mathematics education: An overview and a detailed example*. Plenary Address at the International Mathematics Research Meeting, Centre for Applied Research in Mathematical Sciences, Strathmore University, Nairobi, Kenya.

**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. Ryetown, 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 Presession 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**. (2021). *Developing a research concept and question.* Presentation at Graduate Research Workshop, University of Embu, Embu, Kenya.

**Masingila, Joanna O.,** & Graysay, Duane T. (2021). *Designing a high-quality research study: Qualitative, quantitative, or mixed methods*. Presentation at Graduate Research Workshop, University of Embu, Embu, Kenya.

**Masingila, J.,** & Graysay, D. (2020). *Engaging students in active learning, even in large classes.* Virtual workshop, University of Embu, Embu, Kenya (July 6–7, 2020).

**Masingila, Joanna O**. (2018). *Supporting mathematics teacher educators’ growth and development through communities of practice*. East China Normal University School of Education, Shanghai, China.

**Masingila, Joanna O**. (2018). *Seeing with new eyes*. Hesston College Forum, Hesston, Kansas.

**Masingila, Joanna O.** (2018). *Designing a high-quality research study: Qualitative, quantitative, or mixed methods*. Presentation at Doctoral Research Workshop, The Catholic University of Eastern Africa, Nairobi, Kenya.

**Masingila, Joanna O.** (2018). *Developing a research concept and question.* Presentation at Doctoral Research Workshop, The Catholic University of Eastern Africa, Nairobi, Kenya.

**Masingila, Joanna O**., Gathumbi, Agnes, Bwire, Adelheid, & Miheso-O’Connor, Marguerite (2018). *Kenyatta University and Syracuse University: Building capacity in teacher education and doctoral preparation through collaboration*. Kenyatta University, Nairobi, Kenya.

**Masingila, Joanna O.** (2016). *The role of faculty members in mentoring graduate students*. Member of panel discussion in Graduate School Mentoring Workshop, Syracuse University.

**Masingila, Joanna O.** (2016). *Challenges and opportunities in today’s higher education*. Central New York Association of Business Officials, Syracuse, New York.

**Masingila, Joanna O.** (2016). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.

**Masingila, Joanna O.** (2016). *Designing a high-quality research study: Qualitative, quantitative, or mixed methods*. Presentation at Doctoral Research Workshop, Kenyatta University, Nairobi, Kenya.

**Masingila, Joanna O.,** & Twoli, Nicholas W. (2016). *Developing a research concept and question.* Presentation at Doctoral Research Workshop, Kenyatta University, Nairobi, Kenya.

**Masingila, Joanna O.** (2015). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.

**Masingila, Joanna O**. (2015). *What makes a good research question*? Presentation at the Pre-conference Research Workshop, Kenyatta University, Nairobi, Kenya.

**Masingila, Joanna O**. (2014). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.

Foley, Alan, & **Masingila, Joanna O**. (2013). *Using mobile devices to support learning for students with visual impairments in Kenya*. Africa Initiative Brown Bag Series, Syracuse University.

**Masingila, Joanna O**. (2013). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.

**Masingila, Joanna O**., Foley, Alan, Miheso-O’Connor, Marguerite, Ondigi, Samson, & Twoli, Nicholas (2012). *Capacity built through the Kenyatta University-Syracuse University partnership*. School of Education colloquium, Syracuse University.

**Masingila, Joanna O**., & Arthur, Benjamin (2012). *Teaching mathematics content courses for primary teachers through problem solving* [Two-day workshop with lecturers]. Centre for Distance Education, University of Cape Coast, Ghana.

**Masingila, Joanna O**. (2012). *Encouraging active learning*. Workshop for all new Teaching Assistants in the Department of Mathematics, Syracuse University.

**Masingila, Joanna O**., Miheso-O’Connor, Marguerite, & Khatete, David (2011). *Using technology to support conceptual STEM teaching and learning*. HP Catalyst Initiative Pedagogy 3.0 Consortium.

**Masingila, Joanna O**., Miheso-O’Connor, Marguerite, & Khatete, David (2011). *Using technology to support conceptual STEM teaching and learning*. Sloane Consortium.

**Masingila, Joanna O**., & Khatete, David (2011). *Kenyatta University-Syracuse University partnership: Building capacity through quality teacher preparation.* School of Education colloquium, Syracuse University.

**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, Preety (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. Note that this course is no longer offered. 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. *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, 2012, 2013*

*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*

*Fulbright Distinguished Awards in Teaching for International Teachers (Fulbright DAI) Seminar*. This seminar was designed for participants in the Fulbright DAI program hosted by the Syracuse University School of Education and supported them in professional growth in leadership, pedagogy, and teacher learning. *Spring 2019, 2020*

*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, 2013, 2017, Summer 2007, 2009, 2011*

*Mathematical Problem Solving and Problem Posing*. This course is designed for graduate students in mathematics education and mathematics teachers. The course looked at problems and tasks, problem solving, problem posing and the importance of engaging students in learning mathematics through problem solving and problem posing. *Spring 2016*

*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, 2011, 2012, 2013, 2015*

*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, 2017, Summer 2002, 2003, 2015, Fall 2008, 2010, 2012*

*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, 2012, 2013*

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; Served as chair Fall 2016-Spring 2017)

Course supervisor for MAT 117/118 Foundational Mathematics via Problem Solving I and II (Fall 1995 – present)

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)

Member of the Departmental Chair Selection Committee (January – March 2014)

# Service to the Department of Teaching and Leadership

Chair of the Academy of Mathematics Educators (Fall 1992 – Spring 2010)

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 – Spring 2011)

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 – June 2013)

Member of a Science Teaching Search Committee (Spring 2009)

Member of a Mentoring Committee for Sharon Dotger (Spring 2009 – Spring 2013)

Member of a Mentoring Committee for Jeffrey Rozelle (Spring 2010 – Spring 2012)

First-Year Forum leader (Fall 1997, 1999, 2000, 2007, 2008, 2009, 2010, 2012, 2013)

Advisor for Summer Advising for Incoming Students (Summer 2000)

Lower Division advisor (2000-2002)

Service to the School of Education

Chair of the Department of Teaching and Leadership (August 2012 – January 2014)

Member of the Doctoral Council (Fall 2009 – Fall 2013; Fall 2021 - present)

Elected member of the Promotion and Tenure Committee (Fall 1995 – Spring 1996; Fall 1999 – Spring 2000; Fall 2007 – Spring 2010; Fall 2012 – Spring 2014)

Member of Mathematics Education Search Committees (Spring 2016; Fall 2016 – Spring 2017)

Member of the Physical Education Search Committee (Summer – Fall 2010)

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

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

Advisor for Undergraduate and Graduate Students in Mathematics Education (Fall 1992 – Fall 2013)

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

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)

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

First-Year Forum leader (Fall 1998)

Service to the University

Accreditation Coordinator for all programs at Syracuse University that prepare candidates to work in P-12 schools (Fall 2001 – Spring 2015; Summer 2018 – Summer 2021)

Member of the University Leadership Team (Fall 2014 – Spring 2021)

Co-coordinator of the University Leadership Team (August 2016 – June 2018)

Member of the Chancellor’s Council (Fall 2014 – Summer 2021)

Member of the Academic Deans’ Cabinet (February 2014 – Summer 2021)

Dean Representative to the Syracuse University Board of Trustees (May 2017 – May 2019)

Co-chair of the Disability External Review Committee (Spring 2018 – Spring 2021)

Co-chair of the Syracuse University United Way campaign (Spring 2020 – Spring 2021)

Co-chair of the Chancellor’s Task Force on Sexual and Relationship Violence (Spring 2015 – May 2017)

Member of the Internationalization Council (October 2016 – present; Co-chair Fall 2017 – Spring 2018)

Member of the Search Committee for the Director of the Slutzker Center for International Services (2018-2019)

Member of the Search Committee for the Dean of the College of Visual and Performing Arts (2015-2016)

Member of the Search committee for the Director of the Office of Institutional Research and Assessment (Fall 2012 – Spring 2013)

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

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

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

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

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

Have served as an outside reader on 22 dissertations at Syracuse University through Spring 2015

Service to the Profession

Member of the Executive Committee of the Council of Academic Deans from Research Education Institutions (February 2020 – July 2021; Treasurer January - July 2021)

Member of the Professional Standards and Practices Board, advisory council to the New York State Education Department Board of Regents and Commissioner of Education (September 2019 – present); Co-chair of the Higher Education Sub-committee (August 2021 – present)

Member of the NYACTE Executive Board (Vice President/President Elect October 2015 – October 2016; President November 2016 – October 2018; Past President November 2018 – October 2020)

Member of the New York State Teacher Education Advisory Group to Commissioner of Education Elia (October 2015 – October 2020)

Member of the TeachNY Statewide Roundtable (December 2016 – June 2018)

Member of the NY Teacher Table (August 2018 – May 2019)

Member of the NCATE/CAEP Board of Program Reviewers (Fall 2011 - Spring 2016)

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

Participated in AACTE Washington Week in advocating for teacher and leader education policy (June 2015, 2016, 2017, 2018, 2019; September 2020)

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 – 2015)

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

Proposal reviewer for the Annual Meeting of the American Educational Research Association (1993 – 2013)

Proposal reviewer for the Special Interest Group for Research in Mathematics Education for the Annual Meeting of the American Educational Research Association (1994 – 2013)

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 (1995 – 2010)

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 – 2015)

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

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)

Manuscript reviewer for *International Journal for Science and Mathematics Education* (2012 – present)

External Reviewer for Promotion and Tenure Cases for nine cases through Fall 2013

External examiner for a master’s thesis completed by a candidate at the University of Embu, Kenya (2021)

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

Service to the Community

Board Member of United Way of Central New York, 2020 to present

Board Member of People in Action for Cultural Enrichment in Ghana (PACE-Ghana), 2012 to 2019

**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**

Africa Regional Congress of Mathematics Education (AFRICME)

American Association of Colleges for Teacher Education (AACTE; institutional member)

American Association of University Professors (AAUP)

American Educational Research Association (AERA)

American Educational Research Association – Council for University and Research Institutes (AERA-CURI; institutional member)

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)

Council of Academic Deans of Education Research Institutions (CADREI; institutional member)

International Group for the Psychology of Mathematics Education (PME)

National Council of Teachers of Mathematics (NCTM)

New York Association of Colleges for Teacher Education (NYACTE; institutional member)

New York State Association of Teacher Educators (NYSATE)

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