

Andrea McCloskey

Assistant Professor of Mathematics Education
Penn State University

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PROFESSIONAL EXPERIENCE

Assistant Professor, Penn State University 2008-

Mathematics Education Program Area in the Department of Curriculum & Instruction

Associate Instructor, Indiana University 2005-2008

Field experience coordinator and supervisor; Recitation instructor for elementary mathematics methods courses

Mathematics Teacher, Martinsville East Middle School, Martinsville IN 2002-2004

Mathematics department chair; Taught Pre-algebra

Mathematics Teacher, Edgewood High School, Trenton OH 2001-2002

Taught Algebra I and II.

EDUCATION

Ph.D., Curriculum and Instruction. Indiana University, 2009

Doctoral Major: Mathematics Education

Doctoral Minor: Mathematics
Dissertation title: *Jaworski's Teaching Triad as a tool: Refinement and extensions into teaching experiment settings*

Dissertation director: Frank Lester

M.A.T., Secondary Education. Miami University, 2001

Master's Thesis: A descriptive study of the features of five tenth-grade mathematics textbooks

B.S., Mathematics. Wheaton College (IL), 2000

PUBLICATIONS

McCloskey, A. (2013). The promise of ritual: A lens for understanding persistent practices in mathematics classrooms. *Educational Studies in Mathematics*. doi: 10.1007/s10649-013-9520-4

Welder, R.A., McCloskey, A., & Searle, S. (2013). Teaching to teach without having taught: Teacher educators preparing elementary teachers of mathematics. In Martinez, M., & Castro Superfine, A. (Eds.), *Proceedings of the 35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 969). Chicago, IL: University of Illinois at Chicago.

McCloskey, A. & Borgioli, G. (2012, fall). Don't move on just yet! Following up on students' successful solution strategies using "Next step, but deeper" tasks. *Indiana Mathematics Teacher*.

- McCloskey, A. (2012). Caring in professional development projects for mathematics teachers: An example of stimulation and harmonizing. *For the Learning of Mathematics*, 32(3), 28-33.
- McCloskey, A., Beisiegel, M., Eli, J., Welder, R., & Yow, J. (2012). Parallel transitions: Challenges faced by new mathematics teachers and new mathematics teacher educators. In Van Zoest, L.R., Lo, J.-J., & Kratsky, 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. 737-740). Kalamazoo: Western Michigan University.
- Beisiegel, M., Eli, J., McCloskey, A., Welder, R., & Yow, J. (2011). Transforming practices by understanding connections between new mathematics teacher educators and new K-12 mathematics teachers. In L.R. Wiest & T. Lamberg (Eds.), *Proceedings of the 33rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 1912). Reno, NV: University of Nevada, Reno.
- McCloskey, A., & Winarski, E. (2011). Preservice teachers' learning in K-12 classrooms: Engaging with Standards-based mathematics curriculum materials in field experiences. In G. M. Lloyd & V. R. Pitts Bannister (Eds.), *Curriculum-based activities and resources for preservice math teachers*. Reston, VA: National Council of Teachers of Mathematics.
- Norton, A., McCloskey, A., & Hudson, R. (2011). Prediction assessments: Using video-based predictions to assess prospective teachers' knowledge of students' mathematical thinking. *Journal of Mathematics Teacher Education*, 14(4), 305-325.
- McCloskey, A., & Norton, A. (2009). Using Steffe's advanced fraction schemes. *Mathematics Teaching in the Middle School*, 15(1), 44-50.
- Norton, A.H., & McCloskey, A. (2008). Teaching experiments and professional development. *Journal of Mathematics Teacher Education*, 11(4), 285-305.
- Norton, A., & McCloskey, A. (2008). Modeling students' mathematics using Steffe's fractions schemes. *Teaching Children Mathematics*, 15(1), 48-54.

PRESENTATIONS

- McCloskey, A. (April, 2014). *Teachers and teaching: Why the distinction is important and what it might mean for mathematics education research*. Roundtable Session of the American Educational Research Association (AERA). Philadelphia, PA. *served as session chair
- McCloskey, A., Lloyd, G., & Lynch, C. (April, 2014). *The ritual aspects of teaching fractions in a 5th-grade classroom*. Poster presentation at the Research Presession of the Annual Meeting of the National Council of Teachers of Mathematics (NCTM). New Orleans, LA.
- McCloskey, A., Lloyd, G., & Lynch, C. (February, 2014). *Fractions, algorithms, story problems, and families: Learning to teach math in a 5th grade classroom*. Presentation at the Annual Conference of the Association of Mathematics Teacher Educators (AMTE). Irvine, CA.
- McCloskey, A. (April, 2013). *Ritual: A category for understanding persistent practices in math education*. Presentation at the Research Presession of the Annual Meeting of the National Council of Teachers of Mathematics (NCTM). Denver, CO.

- Welder, R., & McCloskey, A. (April, 2013). *Teaching to teach without having taught: New mathematics teacher educators*. Presentation at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics (NCTM). Denver, CO.
- McCloskey, A., & Yoder, G. (January, 2013). *Assessment for learning: Grading practices in methods courses at two universities and implications for equity*. Presentation at the Annual Conference of the Association of Mathematics Teacher Educators (AMTE). Orlando, FL.
- Eli, J., McCloskey, A., & Beisiegel, M. (April, 2012). *New mathematics teachers preparation for academic careers: An exploratory study*. Poster presentation at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics (NCTM). Philadelphia, PA.
- McCloskey, A., Arbaugh, F., Lloyd, G. (January, 2011). *Student Teachers and Their Mentors in Mathematics Teacher Education: Preliminary Findings from a Research Study*. Presentation at the Annual Conference of the Association of Mathematics Teacher Educators (AMTE). Irvine, CA.
- Beisiegel, M., Eli, J., McCloskey, A., Welder, R., & Yow, J. (January, 2011). *How do the experiences of new mathematics teachers and new mathematics teacher educators compare?* Poster presentation at the Annual Conference of the Association of Mathematics Teacher Educators (AMTE). Irvine, CA.
- McCloskey, A., Hudson, R., Galindo, E., & Essex, K. (April, 2010). *Fostering Reflective Teaching and Identifying Predictors of Teacher Quality*. Presentation at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics (NCTM). San Diego, CA.
- Galindo, E., McCloskey, A., Kloosterman, P., & Tsegai, S. (January, 2010). *Reflecting on Practice and Learning to Pay Attention to Students' Thinking*. Presentation at The Annual Conference of the Association of Mathematics Teacher Educators (AMTE). Irvine, CA.
- Galindo, E., Norton, A., Essex, K., McCloskey, A., & Hudson, R. (April, 2009). *Factors contributing to the preparation of quality mathematics teachers*. Poster presentation at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics (NCTM). Washington, DC.
- McCloskey, A., & Norton, A. (2008, November). *Using video-based predictions to assess preservice teachers' knowledge of students' math and science thinking*. Presentation at the School Science and Mathematics Association Annual Convention. Raleigh, NC.
- Norton, A., McCloskey, A., & Ellison, D. (2007, March). *Gaining insight into students' development of fraction concepts*. Poster presentation at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics (NCTM). Atlanta, GA.
- Kastberg, S., D'Ambrosio, B.S., Yoder, G., McCloskey, A., & Gutierrez, R. (2006, April.) *Issues of equity in pre-service mathematics teachers' developing practice*. Research symposium at the NCTM research pre-session, St. Louis, MO.
- McCloskey, A., & Norton, A. (2006, April). *Fractions Recovery triads*. Presentation at the National Math Recovery Conference, Denver, CO.
- McCloskey, A. (2005, November). *A NetLogo simulation of cheating in a classroom*. Presentation at the regional meeting of the Indiana Section of the Mathematical Association of America, Greencastle.

Galindo, E., Norton, A., McCloskey, A., & Borgioli, G. (2005, March). *Making elementary mathematics problematic*. Inservice professional development presentation and workshop, Hoosier Road Elementary School, Fishers, IN.

ACADEMIC HONORS AND GRANTS

STaR Fellow, 2010-2011

National Science Foundation funded Mentorship Project for Early Career Mathematics and Mathematics Education Faculty

Doctoral Student Grant-in-Aid of Research Award, Fall 2007

Awarded \$1000 for dissertation research from Indiana University Graduate School

Chancellor's Fellowship, Indiana University, Fall 2004-May 2008

SERVICE

Member of the Nominations and Elections Committee of AMTE (Association of Mathematics Teacher Educators), 2013-2016.

Search committee member, Penn State Abington (MTHED search; 2010-2011) and University Park (SCIED search 2012-2013)

2011-2013. DI Blockhead

SCASD math committee

2009-2013. Member of the College of Education's Diversity and Community Enhancement Committee (DCEC). Chair of the Climate and Community Subcommittee, 2012-13.

2009-2013. Member of the Department of Curriculum and Instruction's Curricular Affairs Committee.

Reviewer

Journals

Journal for Research in Mathematics Education

Journal of Mathematics Teacher Education

Journal of Teacher Education

School Science and Mathematics

Teaching Children Mathematics

Catalyst for Change (invited)

Science (invited)

Conferences

Annual Meeting for the Psychology of Mathematics Education-North America

Research Pre-session of the National Council of Teachers of Mathematics

Association of Mathematics Teacher Educators

Professional Memberships

American Educational Research Association

SIG: Research in Mathematics Education

Association of Mathematics Teacher Educators

National Council of Teachers of Mathematics