

Curriculum Vita

Rita Hamlin Barger, Ph.D.

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Education and Experience

Present Position

Associate Professor with Tenure
Division of Teacher Education and Curriculum Studies
School of Education - 309
University of Missouri-Kansas City
615 E. 52nd Street
Kansas City, MO 64110

Education and Professional Preparation

- 1999 Ph.D., University of Missouri-Columbia
Major: Curriculum and Instruction
Area of specialization: Mathematics Education
- 1989 M.S. in Education, Drury College, Springfield, MO
Major: Gifted Education
- 1970 M.A. in Mathematics, University of Missouri-Columbia
- 1968 B.S. in Education, *cum laude*, University of Missouri-Columbia
Double Major: Mathematics and Music

Academic Positions

- 1996 University of Missouri-Kansas City
to Division of Teacher Education and Curriculum Studies
present Positions
- Chair, Curriculum and Instructional Leadership (2011-2015)
 - Interim Chair, CIL (2009-2011)
 - Associate Professor (2009-present)
 - Assistant Professor (2002-2009)
 - Acting Director, Teacher Education (2004)
 - Visiting Assistant Professor (1996-2002)
- Courses Taught:
- Mathematics in Early Childhood and Elementary
(graduate/undergraduate)
 - Mathematics in Elementary and Middle Schools
(graduate/undergraduate)

- Secondary Mathematics Methods (graduate/undergraduate)
Algebra for Teachers (graduate/undergraduate)
Diagnosis and Remediation of Mathematics Learning Problems
(graduate)
Multidisciplinary Problem Solving (graduate)
Teaching Mathematics with Computers (graduate)
Student Teaching in Secondary Mathematics (graduate/undergraduate)
Number Systems and Related Topics (undergraduate)
Geometry (undergraduate)
Special Secondary Curriculum, Mathematics (graduate)
Mathematics Curriculum Development (graduate)
Apprenticeship in College Teaching (graduate)
Capstone for Secondary Mathematics Majors (graduate/undergraduate)
Seminar for Alternative Certification Majors (graduate)
Dissertation in Curriculum and Instruction (graduate)
Many independent and individual studies (graduate/undergraduate)
- 1972-97 Hickman Mills C-1 School District, Kansas City, MO
High School Mathematics (1983-84 and 1990-1997)
Secondary Mathematics Chair (1975-83 and 1992-1996)
Center of Gifted Education (Gifted Program), Grades 2-12 (1984-1989)
CODE Gifted Program Chair (1986-1989)
Junior High School Mathematics (1972-1983)
- 1994 University of Missouri-Kansas City
Mathematics Education Adjunct Instructor
- 1989-94 University of Missouri-Columbia Extension Division
Instructor, various Mathematics Education courses
- 1987 Baker University, Baldwin City, KS
Mathematics Education Instructor
- 1987 Drury College, Springfield, MO
Mathematics Education Instructor
- 1983-86 Longview Community College, Kansas City, MO
Mathematics Instructor
- 1971 Washburn University, Topeka, KS
Mathematics Instructor
- 1970-72 Washburn Rural School District, Topeka, KS
Junior High School Mathematics

Publications

Books

- 2015 Editorial Advisory Board for Handbook of Research on Gaming Trends in P-12 Education.
- 2002 Barger, R. (1998). Math for the gifted child. Jefferson City, MO: Gifted Association of Missouri.
- 1991 Reys, B. J., **Barger, R.**, et al. (1991). Developing number sense in the middle grades. Reston, VA: National Council of Teachers of Mathematics.

Book Chapters

- 2017 Demiroz, Erdem and **Barger, Rita**. Course Redesign and Infusion of Educational Technology into College Algebra. In Lin & R. Atkinson (Eds.), *Educational Technologies: Challenges, Applications and Learning Outcomes*. Nova Science Publishers.
- 1994 Reys, Barbara and **Barger, Rita**. Mental Computation: Issues from the United States Perspective. In *Computational Alternatives for the Twenty-First Century: Cross-Cultural Perspectives from Japan and the United States*, pp. 31-47. 1994. NCTM, Reston, VA. Ed. Reys, Robert and Nohda, N.

Articles – Peer Reviewed

Asterisked articles were the featured cover article for the journal for that issue.

- 2015 Demiroz, Erdem, and **Barger, Rita**. Impacts of the Math Emporium Delivery Model on Psychosocial Factors of Learning in College Algebra. *Journal of Research in Mathematics Education*. (Submitted)
- 2013 Keown, Daniel J., Robinson, Charles R., & **Barger, Rita**. (2013). Student-Centered Technology Use Among Missouri K-12 Music Students within Music Classrooms, *Missouri Journal of Research in Music Education, Number 50*, 33-50.
- 2012 Barger, Rita and Jarrah, Adeeb. (December 2012). Every Day Is Mathematical. *Mathematics Teaching in the Middle School*, 18(5), 280-285.*
- 2012 McCoy, Ann, **Barger, Rita**, Barnett, Joann, & Combs, Emily. (May 2012). Functions and the Volume of Vases. *Mathematics Teaching in the Middle School*, 17(9), 530-536.*
- 2010 Barger, Rita and McCoy, Ann. (February 2010). Calculus in the Middle School? It's Already There. *Mathematics Teaching in the Middle School*, 15(6), 348-353.

- 2009 Barger, Rita. (October 2009). Gifted, Talented, and High Achieving. *Teaching Children Mathematics*, 16(3), 154-161.
- 2009 Cooper, Brett and **Barger, Rita**. (September 2009). Listening to Geometry. *Mathematics Teacher*, 103(2), 108-115.*
- 2009 Barger, Rita and McCoy, Ann (February 2009). Sacred Cows Make the Best Hamburger. *Mathematics Teacher*, 102(6), 414-418.*
- 2008 Barger, Rita, (November 2008). Att använda tankenötter för att utveckla kritiskt tänkande [Using Brain Teasers to Develop Critical Thinking]. *Nämnnaren*, 35(4), 20-24.
- 2007 Barger, R. and Haehl, M. (April 2007). Guitars, Violins and Geometric Sequences. *Mathematics Teaching in the Middle School*, 12(8), 462-466.
- 2005 Barger, R. (2005). Using brain teasers to improve MAP scores. *Confluence*, 2(1), 5-8.
- 2003 Barger, R. H. and Bryant, C. G. (February 2003). Calendar capers: A star is born. *Mathematics Teaching in the Middle School*, 8(6), 317-323.
- 2003 Barger, R. (January 2003). What's up in mathematics education. *Missouri Council of Teachers of Mathematics Bulletin*, 29(1), 1-2.
- 2002 Barger, R. (Fall 2002). Uppslaget: Vid smalls sommarkurs i Skellefteå presenterade Rita Barger, University of Missouri, en aktivitet för det viktiga arbetet med att utveckla god taluppfattning [From SMaL's summer course in Skellefteå, presented by Rita Barger, University of Missouri, an activity for developing number sense in the middle grades]. *Nämnnaren*, 29(3), 32-33.
- 2002 Barger, R. (January 2002). Beliefs about mathematics, true or false. *Missouri Council of Teachers of Mathematics Bulletin*, 27(1), 1-2.
- 2001 Barger, R. (Fall 2001). Gifted children need help, too. *Nämnnaren*, 28(3), 18-23.
- 2000 Horn, J., Zamierowski, A. & **Barger, R.** (November 2000). Correspondence from mathematicians. *Mathematics Teacher*, 93(8), 688-691.*
- 1999 Barger, R. (Unpublished Dissertation). The effects of instruction in recreational mathematics on attitudes and beliefs about mathematics of high school, low-achieving mathematics students. (1999).
- 1998 Bock, M. A. and **Barger, R.** (May 1998). The popcorn book: A diagnostic teaching unit. *Intervention*, 33(5), 290-303.

- 1994 Reys, B. J. and **Barger, R. H.** (1994). Mental computation: Issues from the United States perspective. In Reys, R. E. and Nohda, N. (Eds.), Computational Alternatives for the 21st Century: Cross-Cultural Perspectives from Japan and the United States. 31-47. Reston, VA: National Council of Teachers of Mathematics.
- 1990 Edited the eighth grade edition of HBJ mathematics textbook series.

Research Monographs, Reports, etc.

- 2002 Barger, R. (2002). Developing number sense in the middle grades, in *Proceedings from Matematik I tiden, 12:3 Matematikbiennalen*. Norrköping, Sweden. January 24-26, 2002.
- 1990 Reys, B. J., Reys, R. E., **Barger, R.**, Hauck, J, Morton, L., Reehm, S., Sturdevant, R., & Wyatt, J. W. (1990) Calculator Use in Mathematics Teaching in Missouri Schools: A 1990 Status Report, a technical report resulting from statewide research on the use of calculators in mathematics classrooms throughout the state of Missouri.

Newsletters

- 2004 Author of more than 75 newsletter articles for the following organizations:
to Missouri Council of Teachers of Mathematics
2017 Gifted Association of Missouri
Kansas City Area Teachers of Mathematics

Presentations

International

Barger, R. Teaching Creative Problem Solving. Paper presented at the International Conference on Education (ICE2017). Al Ain, United Arab Emirates. (2017).

Barger, R. Pre-Service elementary teachers' beliefs about mathematics: Implications for improving pedagogy. Invited paper for the Midsummer World Mathematics Education Conference. Lingatan, Sweden. (2003).

Barger, R. Using brain teasers to change beliefs about mathematics. Invited paper for the Midsummer World Mathematics Education Conference. Lingatan, Sweden. (2003).

Barger, R. Developing number sense in the middle grades. Invited presentation for the biannual conference on mathematics education, Matematikbiennalen. Norrköping, Sweden. (2002).

Barger, R. Developing number sense in the middle grades. Invited lecture for the annual summer course for SMaL (Sweden's National Mathematics Teachers Organization). Skellefteå, Sweden. (2002).

Barger, R. Gifted students in the mathematics classroom: Issues and ideas. Invited presentation for the biannual meeting, Matematikbiennalen 2000. Göteborg, Sweden. (2000).

Barger, R. Gifted students in the mathematics classroom: Issues and ideas. Invited seminar for parents, at the biannual meeting, Tid För Matematik. Göteborg, Sweden. (2000).

Barger, R. Teaching number sense in elementary mathematics classes. Invited presentation for pre-service teachers at ITL, Universitetet. Linköping, Sweden. (2000).
Barger, R. Using brain teasers to develop mathematical thinking and problem solving. Invited presentation for pre-service teachers at ITL, Universitetet. Linköping, Sweden. (2000).

Barger, R. A new approach to mathematical drill. Invited presentation for pre-service teachers at ITL, Universitetet. Linköping, Sweden. (2000).

Barger, R. Using brain teasers to develop mathematical thinking and problem solving. Invited presentation for the biannual meeting, Matematikbienneten. Linköping, Sweden. (1999).

Barger, R. A new approach to mathematical drill. Invited presentation for pre-service teachers at ITL, Universitetet. Linköping, Sweden. (1999).

Barger, R. Using brain teasers to develop mathematical thinking and problem solving. Invited presentation for pre-service teachers at ITL, Universitetet. Linköping, Sweden. (1999).

National – Peer Reviewed

Barger, R. That's not all, folks: Assessments that extend learning. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. Washington DC. (2018).

Barger, R. & Smith, E. Learning styles: Reaching the students who think in different ways. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. Boston, MA. (2015).

Barger, R. Top ten ways to motivate your students. Paper and lecture presented at the

annual meeting of the National Council of Teachers of Mathematics. New Orleans, LA. (2014)

Barger, R. Every day is mathematical. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. Philadelphia, PA. (2012)

Barger, R. I believe: Common myths about learning mathematics. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. Indianapolis, IN. (2011).

Barger, R. Mathematical learning styles: Teaching so everyone can learn. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. San Diego, CA. (2010).

Barger, R. Using recreational mathematics to engage and motivate students in all areas of mathematics. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. Salt Lake City, UT. (2008).

Barger, R. The interdisciplinary PhD in mathematics education. Poster presented at the National Conference on Doctoral Programs in Mathematics Education. Kansas City, MO. (2007).

Barger, R. Closing the gap: Successful remediation strategies. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. Atlanta, GA. (2007).

Barger, R. Beliefs about mathematics: What difference do they make? Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. St. Louis, MO. (2006).

Erikson, S. and **Barger, R.** Ideas for improving scores on high-stakes performance tests. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. Philadelphia, PA. (2004).

Barger, R. Mathematics learning styles: Adapting your teaching to students' styles. Three-hour minicourse presented at the annual meeting of the National Council of Teachers of Mathematics. Philadelphia, PA. (2004).

Erikson, S. G. and **Barger, R.** 90 ways to improve scores on high-stakes performance assessments. Three-hour minicourse presented at the annual meeting of the National Council of Teachers of Mathematics. Las Vegas, NV. (2002).

Barger, R. Gifted students in the mathematics classroom: Issues and ideas. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. San Francisco, CA. (1999).

Barger, R., Smith, R., & Pearson, C. Amazing mazes, networks, fractals -- and more. Workshop presented at the annual meeting of the National Council of Teachers of Mathematics. Washington, DC. (1998).

Kuhs, T., Daro, P., Long, V., Benson, C., & **Barger, R.** Assessment of learning: Portfolios, performance tasks, rubrics, and other topics. Paper and presentation (Conference within a Conference) for the annual meeting of the National Council of Teachers of Mathematics. Minneapolis, MN. (1997).

Reys, B. and **Barger, R.** Developing number sense in the middle grades. Workshop presented at the annual meeting of the National Council of Teachers of Mathematics. San Diego, CA. (1996).

Barger, R. Number sense addenda book. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. New Orleans, LA. (1991).

Barger, R. Use of calculators in Missouri schools. Paper and lecture presented at the annual meeting of the National Council of Teachers of Mathematics. New Orleans, LA. (1991).

Regional – Peer Reviewed

Barger, R. and Song, H. ELL students and strategies: Enhancing learning in Traditional Math Classrooms. Paper and lecture presented at the Regional Conference of the National Council of Teachers of Mathematics. Chicago, IL. (2017).

Barger, R. Working with Gifted Elementary Students. Paper and lecture presented at the Innov8 Conference of the National Council of Teachers of Mathematics. Las Vegas, NV. (2017).

Barger, R. and Smith, E. Learning styles: Reaching the students who think in different ways. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Minneapolis, MN. (2015).

Barger, R. Fair is fair: Meeting the needs of your gifted students. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Houston, TX. (2014).

Barger, R. Every day is mathematical. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Las Vegas, NV. (2013).

Barger, R. Motivating students to learn and succeed. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Baltimore, MD. (2013).

Barger, R. Every day is mathematical. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Dallas, TX. (2012).

Barger, R. I believe: Common myths about learning mathematics. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Albuquerque, NM. (2011).

Barger, R. I believe: Common myths about learning mathematics. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. St. Louis, MO. (2011).

McCoy, A. and **Barger, R.** Rational number aerobics. Workshop presented at the regional meeting of the National Council of Teachers of Mathematics. Minneapolis, MN. (2009).

Barger, R. Using brain teasers to develop critical thinking. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Reno, NV. (2008).

Barger, R. A framework for remediating. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Reno, NV. (2008).

Barger, R. Issues and challenges in K-12 mathematics education. Paper and lecture presented at the American Academy of Sciences/National School Boards Association (AAAS/ NSBA) Science, Math and Technology Education Seminar. Kansas City, MO. (2007).

Barger, R. Mathematics learning styles: Adapting your teaching to students' styles. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Minneapolis, MN. (2004).

Barger, R. Dynamic openings to excite and motivate. Paper and lecture presented for the T-Cubed (Teachers Teaching with Technology) regional conference. Minneapolis, MN. (2004).

Barger, R. and Erikson, S. 90 ideas for improving scores on high-stakes performance tests. Workshop for the regional meeting of the National Council of Teachers of Mathematics. Paducah, KY. (2002).

Barger, R. Urban students can successfully learn mathematics: A multicultural approach. Paper and presentation for the annual spring conference for Region VII of the National Association for Multicultural Education. Kansas City, MO. (2002).

Barger, R. Mathematics and the gifted child: Ideas for adjusting curriculum and instruction. Paper and presentation for the regional meeting of the National Council of Teachers of Mathematics. Des Moines, IA. (1999).

Barger, R. Mathematics for the gifted children in your classroom. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. St. Louis, MO. (1998).

Barger, R. Using brain teasers to develop problem solving and critical thinking. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Springfield, MO. (1997).

Barger, R. Using brain teasers to develop problem solving and critical thinking. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Kansas City, MO. (1996).

Barger, R. Recreational mathematics. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Des Moines, IA. (1995).

Barger, R. Investigations in number sense and estimation. Paper and lecture presented at the regional meeting of the National Council of Teachers of Mathematics. Omaha, NE. (1992).

Regional – Invited

Barger, R. Mathematics learning styles: Adapting your teaching to students' styles. Invited and supported lecture presented at the South Dakota Joint Professional Development Conference. Huron, SD. (2006).

Barger, R. Ideas for improving scores on high stakes performance tests. Invited and supported lecture presented at the South Dakota Joint Professional Development Conference. Huron, SD. (2006).

Barger, R. Dynamic openings to excite and motivate. Invited and supported lecture presented at the South Dakota Joint Professional Development Conference for teachers of science and mathematics. Huron, SD. (2006).

State

Barger, R. Mathematically gifted students: Motivation, Challenge, and Engagement. Invited presentation for PAGE (Parents and Advocates for Gifted Education). Springfield, MO. (2017).

Barger, R. Teaching geometry: Becoming engaging. Lecture presented at the annual meeting of the Missouri Mathematics Association for the Advancement of Teacher Training. Columbia, MO. (2016).

Barger, R. A dynamic lesson for algebra. One of a panel of presentations for pre-service teachers presented at the annual conference of the Missouri Council of Teachers

of Mathematics. Columbia, MO. (2015).

Barger, R. Concepts and procedures: A happy combination. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2014).

Barger, R. Common core – the basics. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2013).

Barger, R. Motivating students to learn and succeed. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2012).

Barger, R. Every day is mathematical. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2011).

Barger, R. Common myths about the learning of mathematics. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2010).

Barger, R. Mathematical learning styles. Invited presentation for the Sonia Kovalevsky High School Mathematics Day. Warrensburg, MO. (2010).

Barger, R. Helping the other half of your students be successful. Invited lecture at the annual meeting of the Missouri Mathematics Association of Two Year Colleges. St. Louis, MO. (2009).

Barger, R. Differentiating instruction for gifted and struggling students. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2008).

Barger, R. Mathematical learning styles. Series of lectures presented to Missouri Mathematics Academies at eight individual sites across the state of Missouri. (2007).

Barger, R. Beliefs about mathematics: What difference do they make? Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2006).

Barger, R. Remediation strategies: Ideas beyond “slower and louder.” Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2006).

Sharp, C., **Barger, R.**, & Coutts, L. Unlocking the mysteries of the algebra GLEs. Invited lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2005).

Barger, R. Dynamic openings to excite and motivate. Lecture presented at the annual

meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2004).

Barger, R. Recreational mathematics. Invited presentation for the Snowball Retreat, a conference on gifted education. Camdenton, MO. (2003).

Barger, R. One hundred ways to improve scores on the MAP. Invited presentation for the winter conference of the Math Educators of Greater St. Louis. St. Louis, MO. (2003).

Barger, R. First timer's session. Invited presentations for the annual conference of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2002, 2003).

Barger, R. Learning styles in mathematics. Invited lecture for two regional regroupings for middle school mathematics teachers who participated in the Missouri Math Academy. Clinton, MO, and Blue Springs, MO. (2003).

Barger, R. A humorous look at problem solving. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2002).

Barger, R., Richardson, L., & Tarr, J. University of Missouri collaborative on doctoral programs in math education. Lectures presented at the annual meetings of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2001, 2002).

Barger, R. University of Missouri collaborative on doctoral programs in math education. Lecture presented at the annual meeting of the Missouri Mathematics Association for Two Year Colleges. Lake of the Ozarks, MO. (2002).

Barger, R. Adjusting assignments in the regular math classroom. Lecture presented at the annual meeting of the Gifted Association of Missouri. Lake of the Ozarks, MO. (2001).

Horn, J., **Barger, R.**, Zamierowski, A., & Stuck, P. Dynamic openings for algebra and geometry. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2001).

Reys, R., Richardson, L., Reys, B., & **Barger, R.** University of Missouri collaborative on doctoral programs in math education. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2000).

Zamierowski, A., **Barger, R.**, Horn, J., & Stuck, P. When will we ever use this? Beyond the poster. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (2000).

Barger, R. MAP: Is it our problem, too? Lecture presented at the annual meeting of the Gifted Association of Missouri. Lake of the Ozarks, MO. (2000).

Barger, R. Principles and Standards Document: An introduction. Four invited presentations to Kansas City area teachers of mathematics (PK-12) as part of day-long workshops on national standards and state assessment. Kansas City, MO. (2000).

Barger, R. Recreational mathematics. Series of three in-services for middle school mathematics teachers in the Columbia (MO) School District. Columbia, MO. (2000).

Barger, R. *Principles and Standards* and the MAP: A winning combination. Day-long conference for secondary mathematics teachers in Missouri sponsored by the Missouri Council of Teachers of Mathematics. Columbia, MO. (2000).

Barger, R. Developing creativity through mathematical humor. Lecture presented at the annual meeting of the Gifted Association of Missouri. Lake of the Ozarks, MO. (1999).

Barger, R. and Erikson, S. 92 ways to improve scores on MAP. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (1999).

Barger, R. Algebra's future and the TI-92. Invited presentation for Interface C, a state meeting for teachers of science, mathematics, and technology. Lake of the Ozarks, MO. (1999).

Barger, R. Mathematics learning styles: What they are and what they mean. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (1998).

Barger, R. Beautiful lady or old hag? Looking at the possibilities in optical illusions. Invited presentation for the annual meeting of the Gifted Association of Missouri. Lake of the Ozarks, MO. (1998).

Barger, R. Calculators and little kids. Invited presentation for Interface A, a state meeting for elementary teachers of science, mathematics, and technology. Lake of the Ozarks, MO. (1998).

Barger, R. Block scheduling. Chat session hosted at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (1997).

Barger, R. Math and the gifted child. Lecture presented at the annual meeting of the Gifted Association of Missouri. Lake of the Ozarks, MO. (1997).

Barger, R. and Ramey, C. Critical issues in mathematics. Invited presentation for Missouri teachers in the Warrensburg (MO) School District. Warrensburg, MO. (1997).

Barger, R. Curriculum differentiation. Eleven invited presentations to the annual Conferences for New Teachers of the Gifted, sponsored by the Gifted Association of Missouri and DESE. Springfield, MO. (Yearly presentations 1986-1997).

Barger, R. Assessing almost anything in consumer math. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (1996).

Barger, R. Teaching algebra in a technological world. Three-day summer workshop for high school mathematics teachers on using technology in teaching math. Jefferson City, MO. (1996).

Barger, R., and Sharp, C. Implementing Missouri standards, frameworks, and assessment in the classroom. Invited presentations for statewide Institutes on the Show-Me Mathematics Standards and Assessment, sponsored by the Missouri Council of Teachers of Mathematics, Missouri Department of Elementary and Secondary Education, University of Missouri Department of Curriculum and Instruction, and Missouri Association of Secondary School Principals. Separate presentations were held in St. Charles, Kansas City, and Columbia, MO. (1996).

Barger, R. and Sharp, C. Classroom practices and implications. Invited presentations for statewide Institutes on the Show-Me Mathematics Standards and Assessment, sponsored by Missouri Council of Teachers of Mathematics, Missouri Department of Elementary and Secondary Education, University of Missouri Department of Curriculum and Instruction, and Missouri Association of Secondary School Principals. Separate presentations were held in St. Charles, Kansas City, and Columbia, MO. (1996).

Barger, R. Algebra tiles, recreational mathematics, and brain teasers. Six invited presentations for Math Attack, a week-long summer experience for teachers of middle school mathematics, sponsored by the Department of Elementary and Secondary Education. Lake of the Ozarks, MO. (1995, 1996).

Barger, R. Algebra tiles and recreational mathematics. Two invited presentations for Shaking Up Missouri Math, a three-day summer experience for high school mathematics teachers, sponsored by the Department of Elementary and Secondary Education. Jefferson City, MO. (1995).

Barger, R. Using projects in the consumer math classroom. Invited presentation for Interface B, a state meeting for high school teachers of science, mathematics, and technology. Lake of the Ozarks, MO. (1995).

Barger, R. Number sense. Invited presentation for Math Attack Regroup. Math Attack was a week-long summer experience for teachers of middle school mathematics, sponsored by the Department of Elementary and Secondary Education. Springfield, MO. (1995).

Anstaett, D. and **Barger, R.** Gifted education. Co-host of two-hour satellite program

using UMKC's video programming. Kansas City, MO. (1995).

Barger, R. Number sense. Invited presentation for one session of UMKC's satellite course on teaching middle school mathematics. Kansas City, MO. (1993).

Barger, R. Number Sense...A way of thinking. Invited presentation for the Spring Conference of the Missouri Council of Teachers of Mathematics. Maryville, MO. (1991).

Barger, R. Number sense...A way of thinking. Lecture presented at the annual meeting of the Missouri Council of Teachers of Mathematics. Columbia, MO. (1990).

Local

Barger, R. Every day is mathematical. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2013).

Barger, R. Motivating your students to learn and succeed: A top ten list. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2013).

Barger, R. Common core – elementary. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2012).

Barger, R. Common core – middle school. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2012).

Barger, R. Common core – high school. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2012).

Barger, R. Every day is mathematical. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2011).

Haehl, M. and **Barger, R.** Music and math – a fun combination. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2009).

Barger, R. Learning styles. In-service for all middle and high school teachers at Imagine Renaissance Academy, a Kansas City, MO, charter school. (2008).

Barger, R. Number concepts using simple manipulatives. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2007).

Barger, R. Teaching for understanding. In-service presentation for elementary teachers at William Allen White Elementary School. Kansas City, KS. (2007).

Barger, R. Learning styles: Adapting your teaching styles to students' styles. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2006).

Barger, R. College faculty life. Invited presentation at UMKC's Interdisciplinary Doctoral Student Council Outstanding Faculty Lunch Series. (2005).

Barger, R. Learning and teaching styles in mathematics. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2005).

Barger, R. Developing number sense and number skills. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2005).

Barger, R. Developing number sense in the primary grades. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2005).

Barger, R. Teaching basic addition and subtraction facts. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2004).

Barger, R. Teaching the multiplication facts. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2004).

Barger, R. and Smith, E. Questioning in the mathematics classroom. In-service presentation for middle school mathematics teachers in Lawson (MO). (2003).

Barger, R. Improving scores on state assessment tests. Invited plenary presentation for the annual meeting of the Kansas City Area Teachers of Mathematics. (2002).

Barger, R. Improving instruction in mathematics. Series of three in-service sessions for teachers in Lawson, MO. (2002).

Barger, R. Using brain teasers to develop mathematical thinking. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2001).

Barger, R. A humorous approach to problem solving. Invited plenary presentation for the annual meeting of the Kansas City Area Teachers of Mathematics. (2001).

Barger, R. Improving scores on state tests. Lecture presented at the annual meeting of the Kansas City Area Teachers of Mathematics. (2001).

Barger, R. Making teaching dynamic. In-service for mathematics teachers at the Blue Springs (MO) Freshman Center. (2001).

Barger, R. Multi-disciplinary problem solving. Two in-service presentations for the

Kansas City Teaching Fellows of the Kansas City, Missouri, School District. (2001).

Barger, R. Recreational mathematics: Enrichment ideas for the classroom. In-service presentation for middle and high school mathematics teachers in the Springfield (MO) School District. (2001).

Barger, R. Gifted curriculum. In-service for teachers of the gifted in the Kansas City, Missouri, School District. (2000).

Barger, R. Introduction to NCTM's new document: *Principles and Standards for School Mathematics*. Series of three presentations to Kansas City Area Teachers of Mathematics for grades 9-12, grades 5-8, and grades 3-5. (2000).

Barger, R. 92 Ways to improve scores on MAP. Invited in-service for teachers at Robeson Middle School in the Kansas City, Missouri, School District. (2000).

Barger, R. Elementary math with Rita Barger. In-service for elementary teachers in the Park Hill (MO) School District. (2000).

Barger, R. Activities to improve performance on MAP. In-service for middle school mathematics teachers in the Park Hill (MO) School District. (2000).

Barger, R. Games and puzzles for gifted children. Workshop for gifted students and their parents in the Grandview (MO) School District. (2000).

Barger, R. Infusing technology: Using computers in K-8 mathematics classes. In-service for elementary teachers at St. Joseph Elementary School in Kansas City, KS. (2000).

Barger, R. Alternative assessment strategies in math. Series of three in-services for mathematics teachers in the Park Hill (MO) School District. (1999-2000).

Barger, R. Strategies for improving scores on the Missouri state assessment. Series of four in-services for mathematics teachers at Ruskin High School in the Hickman Mills C-1 School District. (1999).

Barger, R. Strategies for improving scores on the Missouri state assessment. In-service presentation for mathematics teachers in the Fort Osage (MO) School District. (1999).

Barger, R. Strategies for improving scores on the Missouri state assessment. In-service presentation for mathematics teachers at Blue Springs (MO) High School. (1999).

Barger, R. High school algebra I and the *Standards* Gr. 8-12. Series of four in-services for mathematics teachers in the Kansas City, Missouri, School District. (1997).

Barger, R. Using the TI-82 graphing calculator. In-service presentation for middle school and high school mathematics teachers in the Hickman Mills C-1 School District. (1997).

Barger, R. Preparing for performance assessment. In-service presentation for middle school and high school mathematics teachers in the Hickman Mills C-1 School District. (1997).

Barger, R. ScienceWise - Enhancing mathematics teaching at the middle school level. Series of four weekly classes for area middle school mathematics teachers sponsored by Science Pioneers and Midwest Research Institute. Kansas City, MO. (1996).

Barger, R. Gregorc learning styles. In-service presentation for site-based management teams in the Hickman Mills C-1 School District. (1995).

Barger, R. Positive classroom discipline. In-service for new teachers in the Hickman Mills C-1 School District. (1994).

Barger, R. Algebra tiles. In-service for mathematics teachers in the Hickman Mills C-1 School District. (1994).

Barger, R. Problem solving skills and activities. Series of four in-services for participants in the Elementary Math Academy of the Hickman Mills C-1 School District. (1993).

Barger, R. Math manipulatives, math games, and activities. Series of four in-services for participants in the Elementary Math Academy of the Hickman Mills C-1 School District. (1993).

Barger, R. Expanding your horizons. Three invited presentations for the Midwest Research Institute conference for girls interested in careers in math and science. Kansas City, MO. (1990-1992).

Barger, R. Calculators and problem solving. In-service for participants in the Elementary Math Academy of the Hickman Mills C-1 School District. (1992).

Panels

Haehl, M., **Barger, R.**, & Delaware, R. AMATYC, MAA, and NCTM standards panel. Invited panel member at Missouri Mathematics Association of Two-Year Colleges and Kansas Mathematics Association of Two-Year Colleges joint annual conference. Kansas City, MO. (2006).

Horne, M. Making a difference in the early years. Invited Discussant at Madif3, the

research pre-session for the international biannual conference on mathematics education, Matematikbiennalen. Norrköping, Sweden. (2002).

Previous Mathematics Workshops and Presentations

National Association for Gifted Children - 1986-1987
Gifted Association of Missouri - annually 1987-1995
Springfield (MO) Public Schools - 1995
William Woods College, Fulton, MO - 1994
Lincoln University, Jefferson City, MO - 1991
Drury College, Springfield, MO - 1991
Fort Zumwalt (MO) Public Schools - 1989
Missouri Western State College, St. Joseph, MO - 1987
Johnson County Community College, Overland Park, KS - 1987
Waynesville (MO) Public Schools - 1987

Grants

Received

United States Department of Education (DOE). “Project EXCELL: Excellent Collaboration for English Language Learners.” Grant partnering with the North Kansas City (MO) Public Schools to develop and train 60 new certified ELL teachers in North Kansas City and to inform the Teacher Education Program at UMKC. I was asked to take over as PI of this five-year grant when Dr. Susan Adler retired. I have been responsible for all the work of the last three years of the grant, plus one additional no-cost extension year. Approx. \$1,500,000.

Missouri Department of Higher Education (MDHE). “(EMT)²: Empowering Elementary Missouri Mathematics Teacher Teams.” Grant to create a community of learners from KCMO elementary teachers. I was the PI and the co-author of the grant with one of my doctoral students, Ann McCoy. (EMT)² established a partnership between UMKC, the University of Central Missouri, and the Kansas City, Missouri, School District. \$137,587.

Dean’s Small Grant, School of Education. “Mathematical Learning Styles.” Grant to validate an instrument to be used in mathematics education. I am the PI and only author of the grant. \$750.

Ewing Marion Kauffman Foundation. “AAAS/NSBA Science, Mathematics, and Technology Education Seminar Project.” Grant to develop resources in the areas of science, mathematics, and technology to be presented to and used by school boards across the nation. Originally submitted to the funding agent as a science grant only, the proposal was returned to AAAS with the recommendation that it be expanded to include mathematics and technology. The President of the National Council of Teachers of Mathematics asked me to join the grant at this

stage on the organization's behalf. It was resubmitted in January 2007. I provided all plans and narrative relating to mathematics, and I served as the lead person on the mathematics portions of the grant. \$738,851.

Ewing Marion Kauffman Foundation. "Math = KCATM." Grant to support the Kansas City Area Teachers of Mathematics' work with mathematics teachers. \$20,000. (2007-2009).

Missouri Department of Higher Education. "Kansas City Geoscience and Mathematics Advancement Partnership (KC-GeoMAP)." I represented the School of Education and was responsible for all aspects of the grant that related to mathematics and to classroom implementation. The PI for this grant was Jimmy Adegoke; I was one of four co-PIs. Implementation of the grant occurred in 2006 and 2007. \$113,567.

Ewing Marion Kauffman Foundation. Grant to support the Kansas City Area Teachers of Mathematics' annual math contest. I was the PI. The final report was submitted in 2006. \$5,000.

Ewing Marion Kauffman Foundation. Grant to support the Missouri Council of Teachers of Mathematics as it presented Missouri Mathematics Grade Level Expectations to area mathematics teachers. I was the PI. The final report was submitted in 2006. \$4950.

Missouri Council of Teachers of Mathematics. This grant was a partnership between MCTM (the state organization) and the university. UMKC provided office space and partial salary for an executive secretary. The grant lasted three years, and I was liaison to the funding agencies and supervisor of the executive secretary. Total funding was \$75,000. (2001-2003).

Metropolitan Council on Child Care. "Early Childhood Student Academic Support" pilot project. This grant provided tutoring support in writing and mathematics to pre-service teachers enrolled in UMKC's Early Childhood Education Program. Sue Vartuli was the PI, and I was co-PI. The final report for this grant was submitted in 2002. \$5,000.

NSF - Teacher Planning Grant - Math Initiative. "Increasing the Capacity at the Fort." The grant worked with middle school teachers in the Fort Osage (MO) School District on professional development in mathematics education. I became a co-PI on this grant in August 1999, its last year of implementation, when I joined Vena Long and Cynthia Clawson. The final report for this grant was submitted in 2000. Amount of grant: \$49,853.

University of Missouri - Mission Enhancement Grant. "Doctoral Program Collaboration in Mathematics Education." I worked with Robert Reys in planning for the grant, which resulted in a yearly stipend of \$12,000 to UMKC to recruit and support a new doctoral student in mathematics education. Total amount of grant: \$58,000 paid in recurring funds. (1999, 2000).

Not Funded

- 2017 National Science Foundation. "Interdisciplinary Applied Mathematics Program to Increase Enrollment, Retention and Success of Freshmen Transferring STEM Fields." Proposal written by Majid Bani-Yaghoub. I would have been Co-PI. \$299,931.00. Not selected by UMKC to go forward.
- 2016 National Science Foundation. "CARS FOR STEM: College Algebra Re-Conception Strategies for STEM." Proposal written by Majid Bani-Yaghoub. I will be Co-PI. \$354,942.
- 2014 Institute of Education Sciences. "Kinesthetic Mathematics Learning in Virtual environments." Proposal was written with Erdem Demiroz. I would have been PI. \$688,835.00.
- 2014 Interdisciplinary Intercampus Research Program. "Kinesthetic Mathematics: Gesture Based Mathematics Education in 3-D Virtual Environments." Proposal was written with Erdem Demiroz. I would have been PI.
- 2005 United States Department of Education. "RESPONSE: Revising Educational Services and Providing Opportunities to Nurture Students of Color in Education." Proposal was written with Eddie Smith. I would have been PI. \$200,000.
- 2003 National Science Foundation. "SMORE: Science and Mathematics Offering Rigorous Education to students in the Kansas City, Missouri, School District in partnership with the University of Missouri-Kansas City." This was a revised submission based on a 2001 proposal with the same name. I was lead writer and would have been PI. \$23,000,000.
- 2001 National Science Foundation. "SMORE: Science and Mathematics Offering Rigorous Education to students in the Kansas City, Missouri, School District in partnership with the University of Missouri-Kansas City." I was lead writer and would have been PI. \$18,000,000.
- 2001 School of Education. "Teacher Education Preliminary Writing Project." Proposal was written with Marian Simmons. I would have been PI. \$1,000.
- 2001 School of Education. "Mathematics Resource Center." I wrote the proposal and would have been PI. \$220,000.

Submitted

Reviewed

- 2002 National Science Foundation Teacher Enhancement Program.

2001 Arkansas Department of Higher Education Teacher Quality Enhancement, Teacher Preparation Grant.

Other Research and Curriculum Development Activities

- 2001-2003 Missouri Mathematics Academy Master Consultant
One of a group that planned and presented a three-week professional development initiative for middle school mathematics teachers across the state of Missouri.
- 2002, 2011 Test writer for Kansas City Area Teachers of Mathematics
- 2000 Missouri Mathematics Frameworks Revision Committee
Revised and edited Missouri mathematics frameworks for both middle school and high school levels to reflect new national standards and current expectations on state assessment (MAP). This was a committee sponsored by the Missouri Department of Elementary and Secondary Education.
- 1991-1999 Changing Attitudes Toward Mathematics
Doctoral dissertation research on the use of recreational mathematics to change attitudes toward mathematics in low-ability students.
- 1995-1996 Number Sense Research Advisory Committee
International committee to extend research on number sense.
- 1995-1996 Planning committee for televised delivery of summer school programming to high school students through UMKC.
- 1995 College of Education Mathematics Education Discipline Committee, University of Missouri-Columbia
Committee advising the university on its revision of undergraduate training in education.
- 1994-1996 EXTRA (Enhancing the Teacher's Role in Assessment)
Participant in assessment grant funded through NSF and investigated at UMKC.
- 1993-1896 Missouri Standards, Frameworks, and Assessments
Served on four statewide committees advising the Department of Elementary and Secondary Education and making recommendations related to the Outstanding Schools Act.
- 1989-1992 Use of Graphing Calculators
Unfunded research on use of graphing calculators at the middle school and high

school levels.

- 1989-1990 Use of Calculators in Missouri Schools
Research on prevalence of calculator availability and usage in classrooms across the state of Missouri at all levels of instruction, K-12.
- 1989 Joint Japanese-United States Conference on Computational Alternatives for the
 Twenty-First Century
International conference on mental computation, estimation, and number sense.
Co-authored a paper on mental math presented at that conference and published in the conference monograph.
- 1976-1996 Hickman Mills C-1 School District Mathematics Curriculum
Lead person in the School District's mathematics curriculum process. During these years we developed a scope and sequence, wrote objectives for each of our middle school and high school mathematics courses, and reviewed and revised curriculum and instruction on a regular basis. Chaired a committee to align curriculum with the new Missouri mathematics frameworks.

Professional Associations

National

National Council of Teachers of Mathematics (1984-present)
Educational Materials Committee (2009-2012)
Co-Chair, Local Arrangements Committee for the Central Regional Conference (2005-2007)
Member, Volunteer Committee for Central Regional (2017-2018)
Program Committee for National Annual Conference (2003-2005)
Program Committee for Central Regional Conference (1997)
Official Delegate to National Delegate Assembly (1999-2011, 2018)
Publicity Chair for Central Regional Conference (1995-1996)

National Council of Supervisors of Mathematics (1996-present)
Mathematical Association of America (1989-present)
Association of Mathematics Teacher Educators (2002-present)
National Association for Gifted Children (1984-2003)
Association for Supervision and Curriculum Development (1994-2003)
American Association of University Women (1993-2003)
Pi Lambda Theta (1989-2011)
Phi Delta Kappa (2002-2011)
Kappa Delta Pi (1992-2001)
TODOS: Mathematics for All (2008-present)
Benjamin Banneker Mathematics Association (2011-2016)
Reviewer: *Mathematics Teacher*
Reviewer: *Mathematics Teaching in the Middle School*
Reviewer: *Teaching Children Mathematics*
Reviewer: Proposals for the 2015 National Council of Teachers of Mathematics Research Conference
Reviewer: Article for Inderscience to be published in *International Journal of Learning and Change*
Reviewer: Proposals for the 2014 National Council of Teachers of mathematics Research Conference

State

Missouri Council of Teachers of Mathematics (1981-present)
Member, Awards Committee (2013-present)
Parliamentarian (2007-2013)
President (2001-2003)
President-Elect (1999-2001)
Program Chair, Annual Conference (2000, 2001, 2005)

Secretary (1998-1999)
Vice President, Secondary (1996-1998)
Executive Board (1996-2005, 2007-2013)
Chair, Ad Hoc Committee for Evaluation (1996-1998)
Chair, Membership Panel (2004-2005)
Co-Chair, Drive-In Conferences (2005-2006)

Gifted Association of Missouri (1983-2014)
Board of Directors (1989-2003)
Chair, Research Standing Committee (1998-2003)
Chair, Lending Library Standing Committee (1999-2003)
Chair, Books to Publish Task Force (1989-1998)
Faculty member, three-day conference for New Teachers of the Gifted (yearly 1986-1997)

Missouri Mathematics Association for the Advancement of Teacher Training (MAT)² (1996-present)

Missouri Council of Supervisors of Mathematics (2006-present)
President (2014-2016)
President-Elect (2012-2014)
Secretary (2006-2012)
Membership Chair (2010-2012)

Local

Kansas City Area Teachers of Mathematics (1995-present)
President (1999-2001, 2005-2007)
President-Elect (1997-1999)
NCTM Representative (2001-2004, 2009-present)
Conference Chair (2003-present)
Program Committee (1999-present)
Membership Chair (2008-present)
Newsletter Editor (1999-2001)

University of Missouri-Kansas City Committees and Leadership

System

Proposal reviewer for University of Missouri Review Board (UMRB) 2014, 2015, 2017

Campus

Graduate Council (2013-2015 and 2016)

2005 Reading/Literacy Tenure Track Faculty Position

Search Committee Member

2017-18 Sosland Endowed Chair for Teacher Education
2015 Continuing Education Office Support Staff IV
2014 Urban PK-12 Educational Leadership Instructor
2013 Assistant Dean for Student Services and Enrollment Management
2013 Language and Literacy Instructor
2012 Urban Education Research Center Director
2010 Field Placement Coordinator
2009-11 Special Education Tenure Track Faculty Position
2005-08 Mathematics Education Tenure Track Faculty Position
2005 Early Childhood Clinical Faculty Position
2003 Instructional Technology Tenure Track Faculty Position

Hugh Zimmer Award Committee (2014-present)
Teacher Education Coordinating Council (2002-present)
Secondary Committee for the Teacher Education Coordinating Council (2002-present)
Elementary Committee for the Teacher Education Coordinating Council (2002-2005)
Mathematics Education Program Coordinator (2000-present)
Director, Alternative Certification Program (2007-2010)
CBase Study Committee (2012)
Space Committee (2010-2016)
Workload Committee (2010, 2018)
Assessment Committee (2009-2011, 2015-2016)
Facilitator, School of Education Open Conversation with Students (2008)
Institute for Urban Education Design Team (2003-2005)
Space Committee (2005)
Enrollment Management Committee (2004)
Education Specialist Degree Revisions Committee (2005-2008)
Admissions Committee (2007-2008)
Appeals and Continuation Committee (2003-2007)
Committee on Tutoring Programs and Career Counseling (2000-2002)
Kansas City Teaching Fellows Committee (2001-2003)
Ad Hoc Workload Committee for School of Education (2001-2002)
Portfolio Committee (2004)
Field Experience Committee (2001-2002)
Internship Planning Committee (1999-2000)
NBPTS (National Board Professional Teaching Standards) Master's Program Planning Committee (1999-2000)
Elementary Program Planning Committee (1999)
Mentoring Committee (1998)
Goals 2000 Committee (1998)
Orientation Committee (1997-1999)

Doctoral Students – Degrees Conferred

Chair

- 2016 Demiroz, Erdem. (Unpublished Dissertation). The Mathematics Emporium: Infusion of Instructional Technology into College Level Mathematics and Psychosocial Factors of Learning. (2016).
- 2014 Roy, Kathleen. (Unpublished Dissertation). Impact of Mathematics Content Course Sequence on CBASE and PRAXIS II Scores of Elementary Teacher Candidates. (2014).
- 2013 Jarrah, Adeb M. (Unpublished Dissertation). Investigation of Jordanian Pre-Service Teachers’ Beliefs about Learning and Teaching of Mathematics. (2013).
- 2012 Brown, Mark. (Unpublished Dissertation). The Effectiveness of Redesigning College Algebra with a Heavy Focus on Instructional Technology. (2012).
- Riggs, Robert. (Unpublished Dissertation). The Role of Tribal Elder in Teaching Calculus through an Ethnomathematical Lens. (2012).
- Rossiter, Robert. (Unpublished Dissertation). The Effects of Math Recovery on the Low-Performing Mathematics Student. (2012).
- Erickson, Elizabeth. (Unpublished Dissertation). Mathematical Problem-Solving Styles in the Education of Deaf and Hard-of-Hearing Individuals. (2012).
- 2011 McCoy, Ann. (Unpublished Dissertation). Specialized Mathematical Content Knowledge of Pre-service Elementary Teachers: The Effect of Mathematics Teacher Efficacy. (2011).
- Sweeden, Renee. (Unpublished Dissertation). Developing an Understanding of Cultural Aspects and Beliefs of Latino/a Families Experiencing the American Educational System. (2011).
- 2010 Smith, Eddie L. (Unpublished Dissertation). Determinants of Success in Higher Education Mathematics for Kindergarten, Elementary, and Middle School Pre-Service Teachers. (2010).
- 2009 Wall, Jennifer. (Unpublished Dissertation). Alternatively Certified and Traditionally Certified Secondary School Mathematics Teachers’ Student Success on the Missouri Assessment Program. (2009).

- Kim, JeonYeon. (Unpublished Dissertation). Investigation of Korean Pre-Service Teachers' Beliefs about Mathematics: Challenges and Implications for Effective Teacher Education. (2009).
- 2007 Haehl, Martha. (Unpublished Dissertation). Placement Test Scores and Demographics Predicting Grades in Basic Math and Introductory Algebra at an Urban/Suburban Community College. (2007).
- 2006 Childs, Karla. (Unpublished Dissertation). The Relationship Between Graduate Teaching Assistant Instructor Expertise and Algebra Performance of College Students. (2006).
- 2005 Lang, Dennis. (Unpublished Dissertation). Faculty Perceptions, Attitudes, and Experiences with Academic Integrity at a Small, Private, Technological University. (2005).
- Brookby, Sylvie. (Unpublished Dissertation). Academic Self-Efficacy and Social Self-Concept of Mathematically Gifted High School Students in a Summer Residential Program. (2005).

Co-Chair

- 2017 McGinnis, Emily. (Unpublished Dissertation). Music Education Professors' Beliefs Regarding Essential Musical, Academic, and Emotional Skills in Undergraduate Music Education. (2017)
- 2016 Menning, Melissa. (Unpublished Dissertation). Cohomology of Finite Modules over Short Gorenstein Rings. (2016).
- 2016 Edelman, Philip B. (Unpublished Dissertation). Cooperating Music Teachers' Opinions Regarding the Importance of Selected Traits as Predictors of Successful Student Teaching Experiences. (2016).
- 2015 Sena-Moore, Kimberly. (Unpublished Dissertation).
- 2014 Wilson, Jermaine. (Unpublished Dissertation). Invictus Minds: A Critical Heuristic Case Study of Giftedness in the African-American Male. (2014).
- 2013 Keown, Daniel. (Unpublished Dissertation). The Effects of Projected Films on Singers' Expressivity in Choral Performance. (2013).
- 2012 Martisko, Leah. (Unpublished Dissertation). Elementary Teachers' Perceptions of

Experiences with Culturally Responsive Pedagogy and Diverse Students' Achievement. (2012).

- 2008 Oyerinde, Sayyid. (Unpublished Dissertation). A Correlational Study of Teacher Efficacy and School Performance in Two Public Middle Schools in a Midwestern State. (2008).

Committee Member

- 2018 Crump, Sara Lyn. (Unpublished Dissertation). A Narrative Inquiry into Experiences of Teaching Reading. (2018)
- 2016 Doss, Justin Allan. (Unpublished Dissertation). Perceived Stress among Public School Music Educators: Stress over Time, Demographic Differences, Common Self-Identified Factors of Stress, and Relationships between Demographic Differences and Emergent Stress Themes. (2016).
- 2014 Welchert, Tammy S. (Unpublished Dissertation). Impact of a First Year Experience Course on STEM Persistence. 2014
- 2007 Rohs, Jovanna. (Unpublished Dissertation). Child Outcomes in Head Start Classrooms: The Impact of Teacher Beliefs and Interactions. (2007).
- Watson, Rodney. (Unpublished Dissertation). The Principal's Voice and No Child Left Behind. (2007).
- 2006 Miller, Angela. (Unpublished Dissertation). Education and Mathematics (Statistics), The Role of the Teacher in Achievement Motivation: Methodological and Statistical Issues. (2006).
- 2005 Waddell, Jennifer. (Unpublished Dissertation). A Qualitative Study of the Influence of Urban Elementary Teaching Experience on Career Decisions of Beginning Teachers. (2005).

IPhD Committees in Progress

Chair

Coltharp, Jean
Cooper, Brett
Copus, Belinda

Demiroz, Erdem
Holden Kraus
William P. Morgan
Omorodion, Alexander
Lee, Kelly
Salmons, Rachelle
Uylukcu, Mehmet

Co-Chair

Isgandarli, Elyar
Dustin Cates
Shawn Cullen

Committee Member

Crump, Sara
Demiroz, Emine
Erdogan, Nabat
Leifer, Nicole
Napoleone, Tara

Honors and Awards

- 2017 Fulbright Specialist (National, 2017-2019)
- 2013 Outstanding Interdisciplinary Faculty Award (Campus)
- 2011 School of Education Mission and Vision Award (Unit)
- 2008 Outstanding Post-Secondary Mathematics Teacher in the State of Missouri (awarded by the Missouri Council of Teachers of Mathematics)
- 2007 Nominated for Interdisciplinary Doctoral Student Council's Outstanding Faculty Member
- 2006 Nominated for Inspirational UMKC Faculty Award
- 2005 Leroy Sachs Award for Outstanding Contributions to Mathematics Education in the State of Missouri
Nominated for Interdisciplinary Doctoral Student Council's Outstanding Faculty Member

Sedalia (MO) Smith-Cotton High School Hall of Fame
Recognized at UMKC's Faculty/Staff Appreciation Luncheon

- 2003 New Faculty Teaching Scholar for University of Missouri System
- 2002 New Faculty Teaching Scholar for University of Missouri System
- 1996 Citation of Merit for Outstanding Achievement and Meritorious Service to Education,
College of Education Alumni Association (University of Missouri-Columbia)
- 1995 Tandy Award for Excellence in Mathematics and Science Teaching (National)
Pi Lambda Theta Award for Outstanding Service in the Field of Education (State)
- 1994 Kansas City Spirit Award (for teaching)
- 1993 Presidential Award for Excellence in Mathematics and Science Teaching (state recipient)
- 1992 Missouri Teacher of the Year – State Finalist
Hickman Mills CSD #1 Teacher of the Year
- 1987 Faculty-Alumni Award, University of Missouri Alumni Association
- 1985 NASA “Teacher in Space” (Missouri finalist)
Regional “Excellence in Teaching” Award