

Margaret Joan Mohr-Schroeder, Ph.D.

Assistant Professor – Middle/Secondary Math Education
University of Kentucky
Department of Curriculum and Instruction
<http://www.uky.edu/~mmohr2>

335 Dickey Hall
Lexington, KY 40506-0017
m.mohr@uky.edu
Phone: (859) 257-3073
Fax: (859) 257-1602

ACADEMIC BACKGROUND

Texas A&M University
College Station, TX

Ph.D., August 2006
Curriculum and Instruction with emphases in
Mathematics Education and Educational Research.
Dissertation title: *“An assessment of preservice
teachers’ mathematics knowledge for teaching
middle grades mathematics”* under the direction of
Dr. Gerald O. Kulm, Curtis D. Robert Professor of
Mathematics Education.

Pittsburg State University
Pittsburg, KS

M.S., July 2004
Mathematics.
Research Problem Title: *“Improving student
mathematics anxiety and achievement in
mathematics through teaching with the use of
manipulatives”* under the direction of Dr. Hazel
Coltharp, Professor of Mathematics, and Dr.
Richard Lipka, Professor of Special Services and
Leadership Studies.

Pittsburg State University
Pittsburg, KS

B.S.Ed., December 2002
Mathematics with a minor in Biology.

LICENSING AND CERTIFICATION

- Distance Learning Certification, Center for Distance Learning and Research, 2005—College Station, Texas
- Kansas State Licensed Teacher of Mathematics, grades 7-12, 2003—Topeka, Kansas
- Kansas State Provisional Licensed Teacher of Biology, grades 7-12, 2003—Topeka, Kansas
- Catholic Diocese of Wichita Provisional Teacher’s License, grades K-12, 2003—Wichita, Kansas
- Catholic Diocese of Wichita Teacher—Basic Religion License, grades K-12, 2003—Wichita, Kansas

PROFESSIONAL WORK EXPERIENCE

- 2006-present* Assistant Professor of Middle/Secondary Mathematics Education, **University of Kentucky**, Lexington, KY
- Secondary Mathematics Education Program Director, 2006 – present
 - Mathematics and Science Program Faculty Chair, College of Education, Spring 2007 – present
 - Masters with Initial Certification (MIC) Cohort Leader, 2006 – 07
 - Supervision of Secondary Mathematics Education Student Teachers, 2006 – present
 - Undergraduate, Masters, Rank Change, and Doctoral student advisor, 2006 – present
 - Mathematics Education website development and upkeep, 2006 – present
 - Elementary Education Program Faculty Member, 2008 – present
 - UK Teaching & Learning Studio, 2007 – present
- 2005-2006* Project Supervisor for Middle School Mathematics Project, **Texas A&M University**, College Station, TX
- In addition: Administrative and Research Assistant to Dr. Kulm
- 2006* Teacher Quality Grant, **Texas A&M University**, College Station, TX
- Graduate Research Assistant
 - Middle Grades Teacher Observer
- 2005-2006* Learning Assistant for Student Athlete Center, **Texas A&M University**, College Station, TX
- Summer 2005* Graduate Assistant, Department of Teaching, Learning and Culture, **Texas A&M University**, College Station, TX
- Teaching assistant for **Analysis of Teaching Behavior**, a graduate course and core course for Masters students
 - Research assistant and administrative assistant to Dr. G. Kulm, Curtis D. Robert Professor, Mathematics Education
 - Assisted in developing a NSF grant in Teacher Education
 - Assisted in developing the annual research report for MSMP
- 2004-2005* Graduate Assistant, Department of Teaching, Learning and Culture, **Texas A&M University**, College Station, TX
- Mathematics Education Instructor
- 2003-2004* Adjunct Mathematics Faculty, Department of Mathematics, **Labette Community College**, Parsons, KS
- 2003-2004* Junior High Mathematics Teacher, **St. Marys-Colgan**, Pittsburg, KS

- 2003-2004 Graduate Assistant, Department of Mathematics, Mathematics, **Pittsburg State University**, Pittsburg, KS
- Mathematics Instructor
- 2002-2004 Substitute Teacher, Secondary Mathematics, **St. Marys-Colgan**, Pittsburg, KS
- 2000-2002 Mathematics Tutor, **Pittsburg State University**, Pittsburg, KS

PUBLICATIONS

+indicates work with student(s)

- Mohr, M. (2008). Preservice teachers' mathematics knowledge for teaching middle grades. In G. Kulm (Ed.), *Teacher Knowledge and Practice in Middle Grades Mathematics* (pp. 19-44). Rotterdam, The Netherlands: Sense.
- +McCrary, N. E., Henry, L. A., Mohr, M. J., Almasi, J. F., Perry, K. H., Shake, M. C., Grow, L. P., & Mason, J. A. (2008). Conceptualizing a technology-infused problem-based studio model for teacher education and professional development. In M. E. Auer, G. de Salvador Ferreira, & A. Pester (Eds.), *Proceedings of the International Conference on Interactive Computer Aided Blended Learning*. Florianopolis, Brazil: International Association of Online Engineering.
- Lee, Y., Mohr, M., & Lowry, K. J. (2006). Helping parents and communities reimagine accountability. In K. Sloan (Ed.), *Holding schools accountable: A handbook for educators and parents* (pp. 121-139). Westport, CT: Greenwood Publishing Group.
- Mohr, M. J. (2006). Mathematics knowledge for teaching. *School Science and Mathematics Journal*, 106, 219.
- Mohr, M. J. (2006). Performance assessment at the high school level. In D. L. Smith and L. J. Smith (Eds.), *Restructuring high schools: Searching for solutions*. College Station, TX: Mid America Training and Development.
- Smith, D. L., Ezrailson, C. M., Binks, E., Delzer, L., Mohr, M. J., Warren, C. (2006). 'Connected Teacher' professional development module II: Can reading strategies help improve 8th grade students' TAKS mathematics performance? Austin, TX: Texas Education Agency.
- Mohr, M. (2003). Reading teachers – Option D: Analyze scores. *American Careers: Teaching Guide*, 10, 17, 36. *Invited publication*.

MANUSCRIPTS SUBMITTED

+indicates work with student(s)

+Schroeder, D. C., & Mohr-Schroeder, M. J. *A look at attitude and achievement as a result of self-regulated learning in Algebra I*. Submitted to *Journal for Educational Research*.

MANUSCRIPTS IN PREPARATION

+ indicates work with student(s)

+Binks, E., Mohr-Schroeder, M. J., Smith, D. L., Smith, L., & Schroeder, D. C. (in preparation). Using research-based literacy strategies to improve mathematics achievement in the middle grades.

Mohr-Schroeder, M. J. (in preparation). Calculating effect sizes from previous research in mathematics education. Planned submission to *Journal for Research in Mathematics Education*.

Mohr-Schroeder, M. J. (in preparation). The property of commutativity of addition.

+Mohr-Schroeder, M. J., Goldsby, D., Kulm, G., Schroeder, D. C., & Eli, J. A. (in preparation). A comparison of elementary and middle grades preservice teachers' mathematics knowledge for teaching.

Mohr-Schroeder, M. J. (in preparation). To FOIL or not to FOIL.

PRESENTATIONS

+ indicates work with student(s)

International:

+McCrary, N. E., Henry, L. A., Mohr, M. J., Almasi, J. F., Perry, K. H., Shake, M. C., Grow, L. P., & Mason, J. A. (2008, November). *Conceptualizing a technology-infused problem-based studio model for teacher education and professional development*. Paper presented at the annual international meeting of the Interactive Computer Aided Blended Learning, Florianopolis, Brazil.

National:

+Eli, J. R., & Mohr, M. J. (2009, April). *An Exploratory Study of Prospective Middle Grades Teachers' Mathematical Connections While Completing Tasks in Geometry*. Paper to be presented at the annual meeting of the American Educational Research Association, San Diego, CA.

+Eli, J. R., & Mohr, M. J. (2009, April). *Prospective Middle Grades Teachers' Mathematical Connections in Geometry*. Poster to be presented at the annual meeting of the National Council of Teachers of Mathematics, Washington, D.C.

Perry, K. H., & Mohr, M. J. (2009, February). *Conceptualizing a collaborative model for elementary teacher education*. Thematic Session, Conceptualizing the studio model for teacher education: An integrated approach. Paper to be presented at the annual meeting of The Association of Teacher Educators, Dallas, TX.

Perry, K. H., & Mohr, M. J. (2008, December). *Conceptualizing a collaborative model for elementary teacher education*. Alternative session, UK Teaching & Learning Studio: A model for innovative teacher preparation. Paper to be presented at the annual meeting of the National Reading Conference, Orlando, FL.

+Williams, C., Gifford, K., Mohr, M. J., & Osborn, J. (2008, June). *UK – NOYCE: New Opportunities Yielding Classroom Excellence*. Poster presented at the annual meeting of the National Science Foundation Robert Noyce Fellowship Program, Washington, D.C.

+Schroeder, D. C., Mohr, M. J., Stevens, J. T., Ma, X., Tyler, K., & Millman, R. (2008, March). *A look at attitude and achievement as a result of self-regulated learning in Algebra I*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

+Schroeder, D. C., & Mohr, M. J. (2007, November). *A look at attitude and achievement as a result of self-regulated learning in the Algebra I classroom*. Paper presented at the annual meeting of the School Science and Mathematics Association, Indianapolis, IN.

+Mohr, M. J., Binks, E., Smith, D. L., Smith, L., & Schroeder, D. C. (2007, April). *Using research-based literacy strategies to improve mathematics achievement in the middle grades*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

+Schroeder, D. C., Mohr, M. J., Goldsby, D., & Eli, J. A. (2007, March). *An assessment of mathematics knowledge for teaching: Comparing elementary and middle grades preservice teachers*. Poster presented at the annual meeting of the National Council of Teachers of Mathematics, Atlanta, GA.

Mohr, M. J., & Kulm, G. (2006, October). *An assessment of middle grades preservice teachers' mathematics knowledge for teaching*. Paper presented at the annual meeting of the School Science and Mathematics Association, Missoula, MT.

Mohr, M. J. (2005, November). *Teaching problem solving to preservice middle school mathematics and science teachers*. Paper presented at the annual meeting of the School Science and Mathematics Association, Fort Worth, TX.

Local, State, and Regional:

- Mohr, M. J. (2006, September). *Using research-based literacy strategies to improve mathematics achievement*. Paper presented at the annual meeting of the Kentucky Council of Teachers of Mathematics, Georgetown, KY.
- Mohr, M. J., Binks, E., Shaw, B., & Smith, D. L. (2006, February). *Using research-based literacy strategies to improve mathematics achievement in the middle grades*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.
- Mohr, M. J., Binks, E., & Shaw, B., & Smith, D. L. (2006, January). *Using research-based literacy strategies to improve mathematics achievement in the middle grades*. Poster session presented at the annual meeting of the Educational Research Exchange, College Station, TX.
- Mohr, M. J. (2006, January). *Calculating effect sizes from previous research in mathematics education*. Poster session presented at the annual meeting of the Educational Research Exchange, College Station, TX.
- Mohr, M. J. (2005, March). *The property of commutativity of addition*. Paper presented at the annual meeting of the Student Research Week, College Station, TX. *Presentation received 1st place.*

EXTERNAL FUNDING

Funded:

- National Science Foundation. ***Geometry Assessments for Secondary Teachers (GAST)***. Total Award Amount: \$3,153,856. Role: Co-PI, Research Associate, and Assessment Item Developer. Primary Investigator, Dr. Bill Bush, University of Louisville. October 2008 – present.
- Project Lead the Way. ***Project Lead the Way***. Total award amount \$25,000. Role: Research Associate. Primary Investigator: Dr. Deb Besser, College of Engineering. 2007 – present.
- National Science Foundation. ***UK-NOYCE: New Opportunities Yielding Classroom Excellence***. Total award amount \$748,625. Role: Primary Investigator. 2007 – present.
- Texas Education Agency (TEA). ***PEICs (PreK thru 16 Educational Improvement Consortia)***. Total award amount not disclosed. Role: Co-Team Leader. Developed a *Connected Teacher* Professional Development Mathematics Module, a self-paced professional development module discussing research-based literacy strategies utilized in the middle grades mathematics classroom in order to increase student achievement. Dr. Dennie L. Smith, Department of Teaching, Learning and Culture, Texas A&M University, Primary Investigator. August 2005.

Interagency Education Research Initiative (IERI), a joint program of the National Science Foundation, the Department of Education, and the National Institute of Child Health and Human Development. **Middle School Mathematics Project (MSMP)**. Total award amount \$5,600,000. Role: Project Supervisor, Teaching Assistant, Research Assistant, and Video Analyst Consultant. In addition I wrote the 2004-2005 Annual Report. Dr. Gerald O. Kulm, Curtis D. Robert Professor, Department of Teaching, Learning and Culture, Texas A&M University, Primary Investigator. 2004 – 2006.

Not Funded:

Council for Post-Secondary Education (Kentucky). **High School STEM-Learning Leadership Teams**. Total Requested: \$150,000. Submitted October 2008. Role: Co-PI. Primary Investigator, Dr. Tricia Browne-Ferrigno.

National Science Foundation. **Mathematics and Science Partnership II**. Total Requested: \$2,250,000. Submitted March 2008. Role: Co-Primary Investigator. Primary Investigator, Dr. Jeff Osborn, Department of Biology, University of Kentucky.

National Science Foundation. **Geometry Assessments for Secondary Teachers (GAST)**. Submitted November 2006. Role: Research Associate and Assessment Item Developer. Primary Investigator, Dr. Bill Bush, University of Louisville.

NMSI. **UTeach**. Submitted April 2007. Role: Curriculum Developer, Research Associate, Advisor, and Course Instructor. Jeff Osborn, Department of Biology, and Rich Millman, Department of Mathematics, University of Kentucky, Co-Primary Investigators.

INTERNAL FUNDING

Funded:

Small Grant Initiative to Internationalize College of Education Programs. **Internationalization of UK Teaching & Learning Studio**. Total Award Amount: \$3936. Role: PI with Dr. Laurie Henry. Spring 2009.

College of Education Research Activity Award Fund. **Conceptualizing a Technology Infused Problem-Based Studio Model for Teacher Education and Professional Development**. Total Award Amount: \$1,200. Role: Co-Author and Presenter at International Conference on Interactive Computer Aided Blended Learning (ICBL), Florianopolis, Brazil. November 2008.

University of Kentucky Career Center. **Family Math Nights**. Total award amount \$500. Role: Co-Primary Investigator. January 2008 – May 2008.

Teaching and Academic Support Center. **Teaching and Technology Supervision Program Grant**. Total award amount \$19,500. Role: Research Associate. Dr. Joan Mazur, Department of Curriculum and Instruction, University of Kentucky, Primary Investigator. 2006 – 2007.

Not Funded:

Small Grant Initiative to Internationalize College of Education Programs. ***Internationalization of UK Teaching & Learning Studio***. Total Requested: \$4,844. Submitted September 2008.
Role: Primary Investigator with Laurie A. Henry.

University of Kentucky. ***Major Research Equipment Initiative: Interactive Classroom System***. Total Requested: \$33,380. Submitted February 2008. Role: Primary Investigator.

SERVICE**National**

- American Educational Research Association (AERA) Division C Vice President for Graduate Student Award, 2008 – present
- Association for Mathematics Teacher Educators, Mentor Task Force, 2008 – present
- School Science and Mathematics Association (SSMA) Finance Committee, 2008 – present
- American Educational Research Association (AERA) National Conference Proposal Reviewer, 2007-present
- School Science and Mathematics Association (SSMA) Publications Committee, 2005-2008
- School Science and Mathematics Journal (SSMJ) Reviewer, 2006-present
- Internal Editorial/Review Board. (2006). *6th Annual Curriculum & Pedagogy Conference Proceedings: Curriculum for a Progressive, Provocative, Poetic, and Public Pedagogy*. Milam, J., Springgay, S., Carpenter II, B. S., & Sloan, K. (Eds.).

Regional/State/Local

- Kentucky Council of Teachers of Mathematics, Executive Board Member, Fall 2008 - present
- Family Math Nights—Great Schools Initiative, Booker T. Washington Elementary Academy, 2008
- Lexington Humane Society, 2007-present
- Tier 3 Assistance Committee—Mathematics, Jessamine County High Schools, 2007-2008
- Discussant for the University of Kentucky/University of Cincinnati/University of Louisville Collaborative Spring Doctoral Research Conference, University of Kentucky, April 2007
- Intel Central Kentucky Regional Science and Engineering Fair Judge, February 2007, University of Kentucky
- Southwest Educational Research Association (SERA) proposal reviewer, 2004-2006, Texas A&M University
- St. Marys-Colgan Head Women's Cross-country Coach, 2003, St. Marys-Colgan High School

Department/College/University

- Master's Redesign Steering Committee, Math/Science Chair, 2008 – present
- Big Blue Council of Teachers of Mathematics, Sponsor, 2008 – present
- Partnership Institute for Mathematics and Science Education Reform (PIMSER), Pre-Service Teacher Recruitment & Support Programs Co-Coordinator, 2007 –present
- Mathematics Education Search Committee, University of Kentucky, 2006-present
- UK Teaching & Learning Studio Steering Committee, Department of Curriculum and Instruction, University of Kentucky, 2007 – present

- Science Education Search Committee, University of Kentucky, 2007-08
- Scholarship Committee for Kappa Delta Pi, University of Kentucky, 2006-07
- Society for the Promotion of Undergraduate Research (SPUR) invited speaker, January 2007, University of Kentucky
- Co-Chair of Educational Research Exchange, 2005-06, Texas A&M University
- International Student Mentor, 2005-06, Texas A&M University
- Educational Technology (Mathematics and/or Science) Search Committee, 2005-06, Texas A&M University
- Mathematics Tutor for Post-Baccalaureate Program, 2005, Texas A&M University
- Mathematics Tutor for Trigonometry, 2004, Pittsburg State University
- Athletic Fee Council—Graduate student representative, 2003, Pittsburg State University
- University Student Ambassador—Vice-President, 2000-04, Pittsburg State University

PROFESSIONAL DEVELOPMENT EXPERIENCES

Association for Mathematics Teacher Educators Annual Conference. Orlando, FL. February 2009.

T³ International Conference. Chicago, IL. March 2007.

Qualitative Video Data Analyst Training, American Association for the Advancement of Science: Project 2061 and Texas A&M University, Washington, DC. January 2005.

TEACHING EXPERIENCE

Doctoral Courses:

EDC 730: Mathematics Curriculum. University of Kentucky, Lexington, KY, Fall 2007, 3 credit hours. Distance Learning Course taught via Adobe Connect. ACCLAIM Doctoral Program.

EDC 702: Theoretical Foundations of Mathematics Education. University of Kentucky, Lexington, KY, Spring 2007, 3 credit hours

Master's Courses:

EDC 746: Subject Area Instruction in Secondary School: Student Teaching in Mathematics. University of Kentucky, Lexington, KY, Spring 2007, 2008, 2009, 9 credit hours

EDC 631: Mathematics Pedagogy in the Secondary School. University of Kentucky, Lexington, KY, Fall 2006, 2007, 2008, 3 credit hours

EDC 730/777: MIC Cohort Experience: Foundations of Pedagogical Theory and Practice in the Secondary School. University of Kentucky, Lexington, KY, Fall 2006, 6 credit hours

Undergraduate Courses:

University of Kentucky Teaching and Learning Studio Integrated Courses in Elementary Education: Various topics in Cross-Curriculum, Learning Technologies, and Application of Theory and Research. University of Kentucky, Lexington, KY, Fall 2008, Spring 2009.

EDC 337: Teaching Mathematics in the Elementary School. University of Kentucky, Lexington, KY, Fall 2008, 3 credit hours

EDC 421: Survey of Secondary Mathematics Curriculum. University of Kentucky, Lexington, KY, Spring 2007, 3 credit hours

MASC 351: Mathematics Problem Solving. Texas A&M University, College Station, TX, Fall-Spring 2004-2005, 3 credit hours

MASC 450: Integrated Mathematics. Texas A&M University, College Station, TX, Fall 2004, 3 credit hours

MA 1707: Applied Mathematics. Labette Community College, Parsons, KS, Summer 2003 – Summer 2004, 3 credit hours

MA 1719: College Algebra. Labette Community College, Parsons, KS, Summer 2004, 3 credit hours

MA 0811: Foundations of Mathematics. Labette Community College, Parsons, KS, Spring 2004, 3 credit hours

MATH 110: College Algebra with Review. Pittsburg State University, Pittsburg, KS, Spring 2003 – Spring 2004, 5 credit hours

MATH 019: Intermediate Algebra. Pittsburg State University, Pittsburg, KS, Spring 2004, 5 credit hours

High School Courses: Algebra 1, Algebra 2, Geometry, Algebra 3 (Pre-Calculus)

Junior High School Courses: Algebra $\frac{1}{2}$ (Pre-Algebra) and Algebra 1

EDUCATION HONORS

- Educational Leadership Award, College of Education, \$1200, 2006, Texas A&M University
- First place presentation at Student Research Week, \$200, 2005, Texas A&M University
- P.E.O. Scholar Awards Nominee, 2004, Texas A&M University
- Mathematics Education Graduate Assistantship/Scholarship, \$39,000, 2004-2006, Texas A&M University

- Regents Fellowship, \$5000, 2004-2005, Texas A&M University
- Who's Who Among American Women, 2004-2008, Texas A&M University & University of Kentucky
- Mathematics Department Graduate Student Outstanding Teacher Award, 2004, Pittsburg State University
- Mathematics Department Graduate Student Assistantship/Scholarship, Tuition + \$5800, 2003-2004, Pittsburg State University
- Mathematics Department Graduate Student Summer Fellowship, \$1000, 2003, Pittsburg State University
- Kansas Teacher of Promise, 2002, Pittsburg State University

DOCTORAL STUDENTS

- Lingling Ma, Mathematics Education, University of Kentucky. Committee Member. Writing dissertation proposal. Expected graduation: May 2008
- Jennifer Eli, Mathematics Education, University of Kentucky. Co-Chair of Committee. Collecting dissertation data and writing dissertation. Expected graduation: August 2008
- D. Craig Schroeder, Ph.D. (August 2007). "A look at attitude and achievement as a result of self-regulated learning in the algebra I classroom." Education Sciences: Mathematics Education. University of Kentucky. Co-Chair of Committee. Currently at Jessie Clark Middle School and part time instructor at the University of Kentucky.

MEMBERSHIPS

- Big Blue Council of Teachers of Mathematics
- National Council of Teachers of Mathematics
- Association of Mathematics Teacher Educators
- School Science and Mathematics Association
- American Educational Research Association
- Kappa Mu Epsilon
- Kappa Delta Pi
- Kentucky Council of Teachers of Mathematics

OTHER HONORS

- Outstanding Senior Athlete Award, cross-country and track, 2004, Pittsburg State University
- Academic All-MIAA, cross-country and track, 2000, 2003, 2004, Pittsburg State University
- MIAA Commissioner's Academic Excellence Award, cross-country and track, 2000, 2001, 2002, 2003, 2004, Pittsburg State University
- Outstanding Student Ambassador, 2003, Pittsburg State University