

Jonathan Norris Thomas

Assistant Professor of Mathematics Education
University of Kentucky &
The Kentucky Center for Mathematics
Taylor Education Building 105
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jonathan.thomas1@uky.edu

EDUCATION

<p>Ed.D. Curriculum and Instruction Teaching and Learning of School Subjects: Mathematics Education University of Cincinnati, Cincinnati, Ohio Dissertation Title <i>Picture this: An examination of children's quantitative mental imagery</i> Nominated for Garvin Dissertation Award</p>	2010
<p>M. Ed. Educational Leadership Summa cum Laude University of Cincinnati, Cincinnati, Ohio</p>	2006
<p>B. A. Elementary Education Cum Laude University of Kentucky Lexington, Kentucky Area of Concentration: <i>Mathematics</i></p>	2003

PROFESSIONAL EMPLOYMENT

<p>Assistant Professor of Mathematics Education Department of STEM Education College of Education University of Kentucky</p>	2015-present
<p>Associate Professor of Mathematics Education Department of Teacher Education College of Education and Human Services Northern Kentucky University</p>	Promoted with Tenure April, 2015
<p>Assistant Professor of Mathematics Education Department of Teacher Education College of Education and Human Services Northern Kentucky University</p>	2010 – 2015

Associate Faculty Member The Kentucky Center for Mathematics Northern Kentucky University	Aug 2010 – Present
Assistant Director of Diagnostic Intervention Programs The Kentucky Center for Mathematics Northern Kentucky University	Jul. 2007 – May 2010
Evaluation Coordinator The Kentucky Center for Mathematics Northern Kentucky University	Jan. 2007 – Jun. 2007
Graduate Assistant Evaluation Services Center & Center for Access and Transition University of Cincinnati	Sep. 2006 – Dec. 2006
Mathematics Intervention Teacher Phoenix Community Learning Center Cincinnati, OH	Jun. 2006 – Aug. 2006
Mathematics Intervention Teacher Marva Collins Preparatory School Cincinnati, OH	Aug. 2005 – May 2006
Infantry Paratrooper 82 nd Airborne Division United States Army Ft. Bragg, NC	May 1994 – Aug. 1997

POST-SECONDARY TEACHING AND ADVISING

TEACHING**University of Kentucky**

SEM 706 Research in STEM Education

Primary Instructor

SEM 337 Teaching Mathematics in Elementary Schools

Primary Instructor

Northern Kentucky UniversityEDG 699 Diagnostic Interventions in Primary Mathematics (*Independent Study*)

Primary Instructor

EDG 659 Diagnostic Interventions in Primary Mathematics

Primary Instructor

EDG 658 Assessment Techniques in P-12 Mathematics

Primary Instructor

EDU 567 Mathematics and Science Explorations Grades PreK-3rd

Co-Instructor

EDU 493 Elementary Student Teaching

University Supervisor

EDU 392 Elementary Field Experience
 University Supervisor
 EDU 306 Teaching Elementary School Mathematics
 Primary Instructor

University of Cincinnati

42 MATH 091 Elementary Algebra I
 Graduate Teaching Assistant
 42 MATH 092 Elementary Algebra II
 Graduate Teaching Assistant

ADVISING

Doctoral Students

David Dueber (in progress). Committee Chair, Ph.D. STEM Education

University of Kentucky

Pamela Hart (in progress). Committee Chair, Ph.D. STEM Education

University of Kentucky

Dawn Hood (in progress). Committee Member, Ph.D. STEM Education

University of Kentucky

Catherine Lawless (in progress). Committee Member, Ph.D. Educational Leadership

University of Kentucky

Masters Students

Amy Chalk. (2011). Committee Member, M.Ed. Mathematics Education

University of Cincinnati

PUBLICATIONS AND PRESENTATIONS

* denotes international publications

PEER-REVIEWED PUBLICATIONS

Thomas, J. (in press). Talking with our hands: The role of gesture in mathematics teaching and learning. *Teaching Children Mathematics*.

Thomas, J., Jong, C., Fisher, M.H., & Schack, E.O. (in press). Noticing and Knowledge: Exploring Theoretical Connections between Professional Noticing and Mathematical Knowledge for Teaching. *The Mathematics Educator*.

***Thomas, J.** & Harkness, S.S. (2016). Patterns of Non-verbal Social Interaction within Intensive Mathematics Intervention Contexts. *Mathematics Education Research Journal*, 28, 277-302.

Thomas, J., Fisher, M.H., Jong, C., Schack, E.O., Krause, L., Kasten, S. (2015). Professional Noticing: Learning to teach responsively. *Mathematics Teaching in the Middle School*, 21, 238-243.

Lane, C.P., Harkness, S.S., & **Thomas, J.** (2015). Multiple ways to persevere: Liar's bingo. *Ohio Journal of School Mathematics*, 72, 23-28.

- Thomas, J.**, Fisher, M., Eisenhardt, S., Schack, E., Tassell, J., & Yoder, M. (2015). Professional Noticing: A framework for responsive mathematics teaching. *Teaching Children Mathematics, 21*, 295-303.
- Miracle-Meiman, B. & **Thomas, J.** (2014). Making a mathematical symphony: Emphasis on relational thinking and connections. *Ohio Journal of School Mathematics, 70*, 11-15.
- Fisher, M., Schack, E., **Thomas, J.**, Jong, C., Eisenhardt, S., Yoder, M., & Tassell, J. (2014). Examining the Relationship Between Preservice Elementary Teachers' Attitudes Toward Mathematics and Professional Noticing Capacities. In J. Cai & J. Middleton (eds.) *Research Trends in Mathematics Teacher Education*. (pp. 219-237). New York: Springer. **(Peer-Reviewed Monograph Chapter)**.
- Eisenhardt, S., Fisher, M., **Thomas, J.**, Schack, E., Tassell, J., & Yoder, M. (2014). Is it counting or is it adding? *Teaching Children Mathematics, 20*, 498-507.
- *Schack, E., Fisher, M., **Thomas, J.**, Eisenhardt, S., Tassell, J., & Yoder, M., (2013). Preservice teachers professional noticing of children's early numeracy. *Journal of Mathematics Teacher Education, 16*, 379-397.
- Lane, C., **Thomas, J.**, & Harkness, S.S. (2013). What is the Whole in Cornhole? Introducing and Capitalizing upon Disequilibrium with Fraction Operations. *Ohio Journal of School Mathematics, 67*, 33-41.
- ***Thomas, J.** & Harkness, S. S. (2013). Implications for intervention: Categorizing the quantitative mental imagery of children. *Mathematics Education Research Journal, 25*, 231-256.
- *Harkness, S.S., **Thomas, J.**, Lane, C., & Cooper, A. (2013). Lesson Study: Allowing "What Is the Whole?" to Usurp "Where Is the Reciprocal?" *Far East Journal of Mathematics Education, 10*, 1-30.
- Thomas, J.** & Tabor, P.D. (2012). Developing Quantitative Mental Imagery. *Teaching Children Mathematics, 19*, 174-183. **[NCTM Linking Research and Practice Outstanding Publication Award]**
- Burrows, A., **Thomas, J.**, Dole, D., Suess, R., & Woods, A. (2012). Riding the wave: Action researchers reflect on the ebb and flow of research engagement. *Education Action Research, 20*, 291-312.
- Eisenhardt, S. & **Thomas, J.** (2012). The Mathematical Power of a Dynamic Professional Development Initiative: A Case Study. *Journal of Mathematics Education Leadership, 14*, 28-36.
- Thomas, J.**, Tabor, P. D., & Wright, R. J. (2010). Three aspects of first-graders' number knowledge: Observations and instructional implications. *Teaching Children Mathematics, 16*, 299-308.

Harkness, S. S. & **Thomas, J.** (2008). Multiplication as original sin: The Implications of Using a Case to Help Preservice Teachers Understand Invented Algorithms. *Journal of Mathematical Behavior*, 27, 128-137.

INVITED PUBLICATIONS

Thomas, J. (in press). The Ascendance of Noticing: Connections, Challenges, and Questions. In Schack, E.O., Fisher, M.H., & Wilhelm, J. (eds.) *Research Trends in Mathematics Teacher Education*. New York: Springer. [Monograph Chapter]

Schroeder, M.M. & **Thomas, J.** (Eds.). (2015). *Proceedings from the School Science and Mathematics Association Annual Conference*. SSMA.

Schack, E.O., Fisher, M.H., & **Thomas, J.** (2015). Multiple perspectives of teacher noticing: An emerging area of research. *Journal for Research in Mathematics Education*, 46, 371-375. [Book Review]

Thomas, J. (2015). Finding common ground. *School Science and Mathematics Journal*, 115, 1-3. [Editorial]

Thomas, J. (2012). Towards meaningful mathematical fluency. *School Science and Mathematics Journal*, 112, 327-329. [Editorial]

PEER-REVIEWED PUBLICATIONS IN CONFERENCE PROCEEDINGS

Thomas, J., Jackson, C., & Kasten, S. (2015). Teachers' perceptions of mathematics standards: A comparison of PSSM and CCSSM. *Psychology of Mathematics Education – North America Annual Conference*. East Lansing, MI.

Schack, E. O., Fisher, M. H., Jong, C. & **Thomas, J.** (2015). Flowcharts to evaluate responses to video-based professional noticing assessments. *Psychology of Mathematics Education – North America Annual Conference*. East Lansing, MI.

Schack, E., Fisher, M., **Thomas, J.**, & Eisenhardt, S. (2013). Learning to professionally notice: Pre-service elementary teachers attitudes towards mathematics in context. *Psychology of Mathematics Education – North America Annual Conference*. Chicago, IL.

Fisher, M., Schack, E., **Thomas, J.**, Eisenhardt, S., Yoder, M., & Tassell, J. (2012). The stages of early arithmetic learning: A context for learning to professionally notice. *Psychology of Mathematics Education – North America Annual Conference*. Kalamazoo, MI.

Eisenhardt, S., Fisher, M., Schack, E., Tassell, J., & **Thomas, J.** (2011). Noticing Numeracy Now (N^3): A collaborative research project to develop preservice teachers' abilities to professionally notice children's mathematical thinking. *Research Council on Mathematics Learning Annual Conference*. Cincinnati, OH.

PUBLICATIONS IN PREPARATION, REVIEW, OR REVISION

Thomas, J. & Harknes, S.S. (in review). Tethering Towards Number: Coordinating Cognitive Variability and Stage-oriented Development in Children's Arithmetic Thinking. *Journal of Numerical Cognition*.

Fisher, M. H., **Thomas, J.**, Jong, C., Schack, E. O., Tassell, J. (in review). Interpreting the Interrelationships of PSET Professional Noticing, Mathematics Knowledge for Teaching, and Attitudes towards Mathematics. *Mathematics Education Research Journal*.

Thomas, J., Dueber, D., Fisher, M.H., Jong, C., & Schack, E.O. (in review). Putting a practice into practice: examining teachers' perceptions of professional noticing. *Journal of Mathematics Teacher Education*.

PEER-REVIEWED NATIONAL & INTERNATIONAL PRESENTATIONS

Fisher, M.H., Schack, E.O., Thomas, J., & Jong, C. (July. 2016). Changes in pre-service teachers' attitudes toward mathematics: Differences in traditional and online approaches. *International Congress on Mathematics Education (ICME)*. Hamburg, Germany.

Fisher, M.H., Jong, C., **Thomas, J.** & Schack, E.O. (Feb. 2016). Implementing an online professional noticing module and its effects on attitudes towards mathematics. *Association of Mathematics Teacher Educators (AMTE)*. Irvine, CA.

Thomas, J., Jong, C., Schack, E.O., Fisher, M.H., Wilhelm, J., & Stockero, S. (Nov. 2015). Teacher noticing: A hidden skill of teaching. *Psychology of Mathematics Education – North America Group Conference*. East Lansing, MI. **(Working Group)**

Jong, C., Schack, E.O., **Thomas, J.**, & Fisher, M.H. (Apr. 2015). Flowcharts to assess professional noticing: Methods for coding open-ended responses. *National Council of Teachers of Mathematics Research Conference*. Boston, MA.

Thomas, J., Fisher, M.H., Schack, E.O., & Tassell, J. (Feb. 2015). Trajectory-based measures of professional noticing capacities. *Association of Mathematics Teacher Educators (AMTE)*. Orlando, FL.

Fisher, M.H., Schack, E.O., Wilhelm, J., **Thomas, J.**, & McNall-Krall, R. (Jul. 2014). Teacher noticing: A hidden skill of teaching. *Psychology of Mathematics Education – International Group Conference*. Vancouver, BC. **(Working Group)**

Fisher, M. H., **Thomas, J.**, Eisenhardt, S., Schack, E. O., Jong, C., & Tassell, J. (Apr. 2014). Correlating professional noticing and mathematics knowledge for teaching. *National Council of Teachers of Mathematics Research Conference*. New Orleans, LA. **(Paper Presentation)**

Schack, E. O., Eisenhard, S., Fisher, M. H., Jong, C., Tassell, J., & **Thomas, J.** (Apr. 2014). An instructional model to develop preservice teachers' professional noticing skills. *National Council of Teachers of Mathematics Research Conference*. New Orleans, LA.

Eisenhardt, S., Fisher, M., Schack, E., Tassell, J., **Thomas, J.**, & Yoder, M., (Apr. 2013). The Impact of a Professional Noticing Numeracy Module on Elementary Pre-service Teachers' Attitudes Toward Mathematics. *American Educational Research Association*. San Francisco, CA. **(Paper Presentation)**

Thomas, J, Schack, E., Fisher, M., Eisenhardt, S., Yoder, M., & Tassell, J. (Apr. 2012). Noticing Numeracy Now: Preservice teachers' ability to attend to children's mathematical thinking. *American Educational Research Association*. Vancouver, BC.
(**Paper Presentation**)

Fisher, M., **Thomas, J**, & Schack, E. (Feb. 2012). Noticing Numeracy Now (N³): Developing preservice teachers' professional noticing of children's mathematical thinking. *Association of Mathematics Teacher Educators (AMTE)*; Ft. Worth, TX.

Thomas, J, Schack, E., Fisher, M., Eisenhardt, S., Tassell, J., & Yoder, M. (Apr. 2011). Noticing Numeracy Now (N³): A Collaborative Effort to Bolster Preservice Teachers' Professional Noticing of Students' Mathematics. *National Math Recovery Conference*; Louisville, KY

Tabor, P. D. & **Thomas, J**. (Apr. 2009). Climbing out of the box: Enhancing commercial intervention products. *National Math Recovery Conference*; Minneapolis, MN.

PEER-REVIEWED STATE OR REGIONAL PRESENTATIONS

Lane, C., **Thomas, J.**, & Harkness, S. S. (Mar. 2014). Nurturing mathematical behavior with Liar's Bingo. *Kentucky Center for Mathematics Conference*. Lexington, KY.

Schack, E.O., Fisher, M., & **Thomas, J**. (Nov. 2013). Look before you leap: Using children's thinking to target instruction. *National Council of Teachers of Mathematics (NCTM – regional meeting)*; Louisville, KY.

Kasten, S., Austin, C., Jackson, C., Noblitt, B., & **Thomas, J**. (Feb. 2013). Preservice Teacher Preparation [Working Group]. *Kentucky Center for Mathematics Conference*. Lexington, KY.

Lane, C., Harkness, S.S., & **Thomas, J**. (Nov. 2012). Pictures and portions: Understanding fractions through contexts and representations. *National Council of Teachers of Mathematics (NCTM – regional meeting)*; Chicago, IL.

Fisher, M., **Thomas, J**, & Eisenhardt, S. (Feb. 2012). Noticing Numeracy Now (N³): Focusing on children's mathematical thinking. *3rd Annual University of Kentucky STEM Symposium*; Lexington, KY.

Fisher, M., **Thomas, J**, & Schack, E. (Oct. 2011). Noticing Numeracy Now (N³): Focusing on children's mathematical thinking. *National Council of Teachers of Mathematics (NCTM – regional meeting)*; St. Louis, MO.

Thomas, J., Tassell, J., & Eisenhardt, S. (Oct. 2011). Noticing Numeracy Now (N³). *Kentucky Council for Teachers of Mathematics (KCTM)*; Bowling Green, KY.

Fisher, M., **Thomas, J**, Schack, E., & Yoder, M. (May 2011). Noticing Numeracy Now (N³): A collaborative research project to develop preservice teachers' professional noticing. *2nd Annual STEM Symposium – University of Kentucky*; Lexington, KY.

- Schack, E., **Thomas, J.**, Fisher, M., Eisenhardt, S., Tassell, J., Yoder, M., & Higgins, P. (Feb. 2011). Noticing Numeracy Now (N^3): A collaborative research project to develop preservice teachers' abilities to professionally notice children's mathematical thinking. *Kentucky Center for Mathematics Conference*; Lexington, KY
- Thomas, J.**, Eisenhardt, S., & Tassell, J. (Nov. 2010). Noticing Numeracy Now (N^3): A collaborative research project to develop preservice teachers' ability to professionally notice children's mathematical thinking. *Appalachian Association of Mathematics Teacher Educators (AAMTE) Annual Conference*; Williamsburg, KY.
- Thomas, J.** (Oct. 2010). Picture this: Exploring the quantitative mental imagery of children. *National Council of Teachers of Mathematics (NCTM – regional meeting)*; Denver, CO.
- Eisenhardt, S. & **Thomas, J.** (Feb. 2010). Capturing the mathematical moment: Using preservice teacher created video as a tool for developing understanding of numeracy. *Kentucky Center for Mathematics Conference*; Frankfort, KY.
- Harkness, S. S., Lane, C., & **Thomas, J.**, (Feb. 2010). Pictures and portions: Leveraging contexts and representations to buttress understandings of fractions. *Kentucky Center for Mathematics Conference*; Frankfort, KY.
- Thomas, J** & Harkness, S.S. (Nov. 2009). Multiplication as original sin: Algorithms and attitudes in the elementary classroom. *Ohio Council for Teachers of Mathematics Annual Conference (OCTM)*; Cincinnati, OH.
- Stallworth, J., Chalk, A., Cohen, M., Harkness, S.S., Lane, C., & **Thomas, J.** (Nov. 2009). Condos and contexts: Making sense of division with fractions. *Ohio Council for Teachers of Mathematics Annual Conference (OCTM)*; Cincinnati, OH.
- Thomas, J.** (Oct. 2009). Develop + mental - mathematics: Conceptual place value and problem strings. *Kentucky Council for Teachers of Mathematics Annual Conference (KCTM)*; Paris, KY.
- Thomas, J.** & Bristol, L. (Mar. 2009). KCM progress points project. *Kentucky Center for Mathematics Conference*; Louisville, KY.
- Gabbard, A., Eisenhardt, S., Smiddy, J., & **Thomas, J.** (Mar. 2008). Pathways to numeracy for every child every day. *Kentucky Teaching and Learning Conference*; Louisville, KY.
- Harkness, S.S. & **Thomas, J.** (Mar. 2008). X-Mania: A valuable place for place value. *Kentucky Teaching and Learning Conference*; Louisville, KY.
- Thomas, J.** (Oct. 2008). Picture this: Mental imagery and early mathematics. *Kentucky Council for Teachers of Mathematics Annual Conference (KCTM)*; Louisville, KY.
- Thomas, J.** (Oct. 2007). Conceptual place value: Research, resources, and challenges to understanding. *Kentucky Council for Teachers of Mathematics Annual Conference (KCTM)*; Lexington, KY.

INVITED NATIONAL PRESENTATIONS

- Thomas, J.** (May. 2014). Bridging distances: Connecting classroom and intervention mathematics instruction. *U.S. Math Recovery Conference*. Autin, TX. (**Keynote Speaker**).
- Gibbons, L. K., Jackson, K., Johnson, H. L., & **Thomas, J.** [*listed alphabetically*] (Apr. 2014). Perspectives on linking research and practice: Thoughts from the field. *National Council of Teachers of Mathematics Research Conference*. New Orleans, LA.
- Thomas, J.** (Nov. 2013). Noticing Numeracy Now: Pre-service elementary teachers' capacity to professionally notice children's mathematical thinking. *School Science and Mathematics Association Annual Conference*; San Antonio, TX. (**Early Career Scholar Award Presentation**)
- Eisenhardt, S., Fisher, M., Schack, E.O., Tassell, J., **Thomas, J.**, & Yoder, M. (Jan. 2013). Measuring Professional Noticing: Rubric Development and Calibration. *Association of Mathematics Teacher Educators (AMTE) – Service Teaching and Research (STaR) Seminar*; Orlando, FL. (**Poster Presentation**)
- Thomas, J.**, Wu, H.S., Alberti, S., & Sawchuck, S. (May, 2012). Professional Demands of the Common Core State Standards for Mathematics. Participant in the *Education Week* electronic panel discussion.
- Schroeder, C., **Thomas, J.**, Hunter, S., & Bristol, L. (Feb. 2012). Supporting classroom educators in integrating the mathematics standards. *Architecture for Implementing the Common Core Standards: Strategies, Partnerships, and Progress*; Louisville, KY.
- Steffe, L. P., **Thomas, J.**, & Kinsey, K. (Apr. 2010). Early numeracy workshop for Math Recovery teachers. *National Math Recovery Conference*; Albuquerque, NM.
- Kinsey, K. & **Thomas, J.** (Apr. 2010). Counting: It's harder than it looks. *National Math Recovery Conference*; Albuquerque, NM.

INVITED STATE OR REGIONAL PRESENTATIONS

- Gabbard, A., Hill, R., **Thomas, J.**, & McCallum, W.G. (Mar. 2015). Implementing the Common Core: A panel discussion. *Kentucky Center for Mathematics Conference*. Lexington, KY.
- Thomas, J.** (Oct. 2014). Common ground: Traditions, themes, and theories to unite mathematics educators. *Purdue University-Calumet 33rd Annual Conference on the Improvement of Mathematics Teaching*. (**Keynote Presenter**).
- Thomas, J.** (Mar. 2014). Professional Noticing: Expanding the lens. *Kentucky Center for Mathematics Conference*. Lexington, KY. (**Featured Presenter**).
- Thomas, J.** (Jun. 2013). Consensus: Finding an effective vision for mathematics intervention. *Instructional Support Leadership Network / Kentucky Leadership Academy Joint Summer Conference*. Lexington, KY.

- Thomas, J.** (Jun. 2013). Common ground: Building consensus around key ideas for effective mathematics teaching and learning. *Kentucky Educational Development Corporation Annual Mathematics Conference*. Ashland, KY. (**Keynote Presenter**).
- Thomas, J.** (Feb. 2013). Bridging distances: Connecting classroom and intervention mathematics instruction. *Kentucky Center for Mathematics Conference*. Lexington, KY. (**Featured Presenter**).
- Thomas, J.** (Jun. 2012). Mathematics under the Microscope: Professional noticing to support teacher growth. *First People's Center for Education Annual Summit*; Sheridan, WY.
- Thomas, J.** (Feb. 2012). Achieving mathematical fluency: Tipping the iceberg. *3rd Annual University of Kentucky STEM Symposium*; Lexington, KY.
- Thomas, J.** (Nov. 2011). Response to Intervention. *Center for Integrated Natural Sciences and Mathematics (CINSAM) Elementary Alliance meeting*; Crestview Hills, KY.
- Thomas, J.** (Oct. 2011). Structuring Number. *Center for Integrated Natural Sciences and Mathematics (CINSAM) Elementary Alliance meeting*; Highland Heights, KY.
- Thomas, J. & Yoder, M.** (Jun. 2011). Noticing Numeracy Now. *Committee for Mathematics Achievement*; Frankfort, KY.

EXTERNALLY FUNDED ACTIVITY

National Science Foundation

In Review

Principal Investigator

\$207,384

Education Human Resources Core Research (ECR)

Project Title: Collaborative Research: Project Helping Understanding Growing (HUG)

Mathematics

Project Abstract: This project proposes to study the development of responsive teaching practices (i.e., professional noticing) among early-childhood educators within play-based classroom contexts. Specifically, this project will be organized around developing a system of measures and professional learning experiences to comprehensively examine the development of a complex practice from multiple vantage points.

National Science Foundation

Funded 2014 - 2017

Principal Investigator

\$499,813

Improving Undergraduate STEM Education (IUSE)

Project Title: Collaborative Research-Project TECHNO

Project Abstract: Build upon previously funded NSF research (Collaborative Research: Noticing Numeracy Now) to develop technologically-centered learning modules for use in online teacher preparation contexts that will positively affect preservice teachers' capacity to professionally notice and respond appropriately to children's mathematical thinking along learning trajectories in numeracy and early-algebra.

Kentucky Department of Education **Funded 2014-2016**
Faculty Associate & Proposal Co-Author
\$320,000

Mathematics and Science Partnership (MSP)

Project Title: Kentucky Numeracy Project - Intensive

Project Abstract: In order to address the needs of the partner schools for improving students' mathematics proficiency the KNPI (Kentucky Numeracy Project Intensive) will provide a rigorous, extended professional learning experience designed to improve primary teachers' pedagogical content knowledge to advance students' foundational number knowledge

Kentucky Department of Education **Funded 2013-2015**
Faculty Associate & Proposal Co-Author
\$335,000

Mathematics and Science Partnership (MSP)

Project Title: Mathematics Response to Intervention Network

Project Abstract: In order to address the needs of the partner schools for improving students' mathematics proficiency the Mathematics Response to Intervention Network will provide a rigorous, extended professional learning experience designed to improve mathematics intervention teachers' understanding of responsive instructional practices organized at promoting fluency among struggling learners.

Kentucky Department of Education **Funded 2013-2014**
External Evaluator & Proposal Co-Author
\$200,000

Project Title: Examining Effective Response-to-Intervention

Project Abstract: To grow teachers' understanding of early numeracy development and their abilities for establishing in students strong foundations for fluently adding and subtracting, in support of the KDE's statewide initiatives to develop highly effective teaching and learning in Kentucky classrooms that will lead to the success of all Kentucky students.

Center for the Study of Mathematics Curriculum **Funded 2012-2013**
Research Group Member
\$10,260

Project Title: Enactment of Standards Priority Research Agenda

Project Abstract: The focus of this research group is the comparison of teacher selection and use of written curriculum materials in Common Core State Standards for Mathematics (CCSSM) adopting and non-adopting states. We are considering written curriculum materials broadly to include the texts provided to teachers by their districts along with the materials they seek out and choose themselves to implement the standards in their states.

National Science Foundation

Funded 2011-2014**Principal Investigator****\$199,920**Transforming Undergraduate Education in Science,
Technology, Engineering, and Mathematics (TUES) – Type 1*Project Title:* Collaborative Research-Noticing Numeracy Now*Project Abstract:* This project examines the extent to which an innovative learning experience focused on the professional noticing of children's numeracy develops pre-service teachers' capacity to attend, interpret, and respond appropriately to the mathematical thinking of children. Faculty members from seven Kentucky universities (NKU, ECU, WKU, UK, UofL, Morehead State, & Murray State) and the Kentucky Center for Mathematics have designed and implemented a proprietary module, *Noticing Numeracy Now (N3)* based on literature in the areas of professional noticing and early mathematical learning.**SERVICE****COLLEGE AND DEPARTMENT-LEVEL SERVICE**

Committee Chairperson

2015-present*Research Advisory Committee*

College of Education

University of Kentucky

Committee Member

2015-2016*Rules Committee*

College of Education

University of Kentucky

Committee Member

2015-present*Elementary Education Program*

College of Education

University of Kentucky

Program Chairperson

2014-2015*Elementary Education Program*

Department of Teacher Education

Northern Kentucky University

Committee Member

2013-2014*Council for the Accreditation in Educator Preparation**(CAEP) Task Force*

College of Education and Human Services

Northern Kentucky University

Committee Co-Chairperson <i>Faculty Search Committee</i> Mathematics Educator Department of Teacher Education Northern Kentucky University	2013-2014
Committee Member <i>Search Committee</i> Dean College of Education and Human Services Northern Kentucky University	2012-2013
Committee Member <i>Distinguished Scholar Committee</i> College of Education and Human Services Northern Kentucky University	2012-2013
Committee Member <i>Middle Grades Mathematics Intervention</i> Kentucky Center for Mathematics	2011-2012
Committee Member <i>Continuous Assessment Committee</i> College of Education and Human Services Northern Kentucky University	2011-2012
Committee Chairperson <i>Elementary Mathematics Specialist Design Team</i> Department of Teacher Education, Department of Mathematics, & Kentucky Center for Mathematics Northern Kentucky University	2010-2015
Committee Member <i>Elementary Education Program</i> Department of Teacher Education Northern Kentucky University	2010-2015
Committee Member <i>Early Childhood Education Program</i> Department of Teacher Education Northern Kentucky University	2010-2015
Committee Co-Chairperson <i>Faculty Search Committee</i> Technology Educator Department of Teacher Education Northern Kentucky University	Spring, 2012

Committee Member
Peer Evaluation
Dr. Patti Bills
Department of Teacher Education
Northern Kentucky University

Spring, 2015

Committee Member
Peer Evaluation
Dr. Tammie Sherry
Department of Teacher Education
Northern Kentucky University

Spring, 2013

Committee Member
Peer Evaluation
Dr. Bianca Prather-Jones
Department of Teacher Education
Northern Kentucky University

Fall, 2012

Committee Member
Peer Evaluation
Dr. Helene Hart
Department of Teacher Education
Northern Kentucky University

Fall, 2011

Committee Chairperson
Peer Evaluation
Dr. Kevin Besnoy
Department of Teacher Education
Northern Kentucky University

Spring, 2011

Committee Member
Peer Evaluation
Dr. Sarah Kasten
Department of Teacher Education
Northern Kentucky University

Spring, 2011

Committee Member
Peer Evaluation
Dr. Denise Dallmer
Department of Teacher Education
Northern Kentucky University

Fall, 2010

UNIVERSITY-LEVEL SERVICE

Board Member
Institutional Review
Northern Kentucky University

2014 – 2015

Committee Member Planning Committee <i>Meet, Greet, and Grab a Seat Conference</i> Northern Kentucky University	2013-2014
Committee Member <i>Search Committee</i> Executive Director Center for Integrated Natural Sciences and Mathematics (CINSAM) Northern Kentucky University	2012-2013
Faculty Advisor <i>Elementary Education Alliance</i> Center for Integrated Natural Sciences and Mathematics (CINSAM) Northern Kentucky University	2011-2014
Faculty Participant <i>Professor Panel for New Students</i> September 19, 2011 Residence Life RA Coordinator: Aaron Howell	2011
Faculty Participant <i>Professor Panel for New Students</i> March 30, 2011 Residence Life RA Coordinator: Aaron Howell	2011
Presenter – Fall Event <i>Early Childhood Education Alliance</i> Center for Integrated Natural Sciences and Mathematics (CINSAM) Northern Kentucky University	2010
SERVICE TO DISCIPLINE AND PROFESSIONAL COMMUNITY	
Board of Directors <i>U.S. Math Recovery Council</i>	2015 - present
Proposal Review Panelist <i>National Science Foundation</i>	Spring, 2015
Associate Editor <i>School Science and Mathematics Journal</i> Publisher: Wiley-Blackwell	2011-present
Committee Member Publications Committee <i>School Science and Mathematics Association</i>	2014 - present

Facilitator <i>Professional Noticing of Children's Mathematical Thinking</i> Professional Development Sessions (5) Erlanger/Elsmere Independent Schools	Spring, 2014
Session Leader <i>Mathematics & Entrepreneurship</i> Norse Think Tank Institute for Talent Development & Gifted Studies Northern Kentucky University	Summer, 2013
Facilitator <i>Conceptual Fraction Construction</i> Lesson Modeling Session Kelly Elementary School Boone County Schools	Spring, 2013
Professional Source <i>Education Week</i> Article Title: "Concerns Abound over Teachers' Preparedness for Standards"	Spring, 2012
Professional Source <i>Education Week</i> Article Title: "Common Core brings K12 and Higher Education Together"	Spring, 2012
Professional Source <i>Education Week</i> Article Title: "Kentucky: Building a Bumpy Road from K12 through College"	Spring, 2012
Facilitator <i>Mathematics Response to Intervention</i> Professional Development Session River Ridge Elementary School Kenton County Schools	2011-2012
Project Team Member <i>Response to Intervention: Collaborating to Make a Difference</i> Refereed Symposium National Council of Teachers of Mathematics (NCTM) & Council for Exceptional Children (CEC)	2011-2012
Facilitator <i>Professional Noticing for Mathematics Intervention</i> Professional Development Session Ockerman Elementary School Boone County Schools	Spring, 2011

Lead Facilitator <i>Pre-service Teacher Preparation (PTP) Collaborative</i> Kentucky Center for Mathematics	2009-present
Committee Member <i>Mathematics Education Research Collaborative (MERC)</i> Kentucky Association of Colleges of Teacher Education	2009-2010
Committee Member <i>K-12 Common Core Standards Workgroup.</i> Kentucky Department of Education	2009-2010
Co-Facilitator <i>PRIME Mathematics Intervention Teacher Leadership Group</i> Kentucky Center for Mathematics	2008-2009
Referee <i>Ohio Journal of School Mathematics.</i> Ohio Council of Teachers of Mathematics (OCTM)	2008-present
Referee <i>Mathematics Teaching in the Middle School.</i> National Council of Teachers of Mathematics (NCTM)	2015-present
Referee <i>Teaching Children Mathematics.</i> National Council of Teachers of Mathematics (NCTM)	2009-present
Referee <i>Mathematics Education Research Journal</i> Mathematics Education Research Group – Australasia (MERGA)	2013-present
Referee <i>Journal for Research in Mathematics Education</i> National Council of Teachers of Mathematics (NCTM)	2016-present
Referee National Council of Teachers of Mathematics (NCTM) Research Conference	2016-present

AWARDS & HONORS

Outstanding Publication Award Linking Research to Practice <i>National Council of Teachers of Mathematics</i>	2014
Outstanding Early Career Scholar Award <i>School Science and Mathematics Association</i>	2013

Academic Impact Senior Survey <i>Office of Student Affairs</i> Northern Kentucky University †	2009, 2012, 2013, 2014
Excellence in Teaching Award <i>Delta Gamma Fraternity</i> Northern Kentucky University	2013
Service Teaching and Research (STaR) Summer Fellowship for Rising Early-Career Mathematics Educators <i>National Science Foundation & The Park City Mathematics Institute</i>	2012
Faculty Excellence in Teaching Award (<i>Nominee</i>) <i>College of Education and Human Services</i> Northern Kentucky University	2012

† *The Northern Kentucky University Academic Impact Senior Survey is administered to all undergraduate senior students and asks these individuals to identify a single faculty member who had the greatest positive impact on their academic experience. The Office of Student Affairs notifies faculty members of such mentions the following semester.*