

## CURRICULUM VITA

Andrea Kay Knapp

aknapp@mapsfoundation.com 309-287-2373

www.mapsfoundation.com

### Education:

- 2007 Ph.D., Mathematics Education, Illinois State University;  
Major Professor: Jeffrey Barrett, Ph.D.  
Thesis: Prompting Mathematics Teacher Development through Dynamic Discourse  
This study documented the ways in which 5-8<sup>th</sup> grade teachers develop mathematical knowledge for teaching as they implement *The Geometer's Sketchpad* while collaborating with a coach.
- 2005 M.S., Mathematics/Elementary & Middle School Mathematics Education, Illinois State University  
Thesis: Is GK-12 Effective for High School Algebra Students?
- 1995 B.S., Mathematics/Teacher Education, Illinois State University
- 1993 A.A.S., Mathematics, Illinois Central College
- Certificates: Teaching Certificate for Secondary Mathematics with Endorsement in Upper Elementary/Junior High Mathematics  
Junior High Science  
WI Department of Public Instruction-Mandated 30 Hours of Professional Development for Teaching Online Courses  
Gifted Education Institute

### Educational Positions:

- 2017-present *Knapp Independent Contractor Services*  
*Founder & Executive Director, The Math for Adults Foundation*  
Incorporated foundation (2016) to expand parent involvement in mathematics. Offered over 30 K-8 Mathematics Professional Learning and Math Nights for schools. Wrote blog for parents and teachers, set up a math library, and saw 2548 unique website visitors from over 700 cities in 40 countries.
- Mathematics Instructor and Assistant, Art of Problem Solving (July 2019-present)* Taught and assisted online mathematics.
- Math Enrichment Instructor, Griffin Christian Academy (Dec 2019-May 2020)* Taught 5th, 6th grade math enrichment courses.
- Mathematics Instructor, The New School, Atlanta, GA (2017-2018)*  
Taught AP Calculus BC (25% online); AP Statistics Ind. Study

- 2018-present *Part-time Mathematics Instructor, Southern Crescent Technical College, Griffin, GA. To supplement Math for Adults (MAPS) Foundation income, taught varied dual enrollment, hybrid, online, and f2f formats. Taught College Algebra, Foundations of Mathematics, and Math Support.*
- 2023-present *Part-time Mathematics Instructor, Gordon State College, Barnesville, Ga Taught Data Analysis, Probability, & Connections for Early Childhood Ed*
- 2010-2016 *Assistant/Associate Professor, The University of Wisconsin-Stevens Point (UWSP), Mathematical Sciences. Engaged in teaching, research, and service. Instructed hybrid and face-to-face mathematics education and mathematics courses. Directed the development of a virtual Math and Parent Partners (eMAPPS) program. Researched collaborative parental involvement in mathematics.*
- 2007-2010: *Lecturer, Department of Mathematics and Science Education, The University of Georgia*  
 Program director, instructor, and advisor for the mathematics education graduate program at the University of Georgia Griffin Campus. Co-director of The UGA Math and Parent Partnerships. Conducted 50 public service presentations, professional development, and recruiting workshops for local schools.
- 2006-2007: *Evaluator, Graduate Teaching Fellows in K-12 Education (GK-12) Partnerships for Research in Science and Mathematics Education (PRISM), Illinois State University*  
 Researched PRISM in terms of student understanding and teacher development, advised PRISM Undergraduate and Graduate Fellows, and presented Fellow training sessions.
- 2004-2006: *Graduate Teaching Fellow, Partnerships for Research in Science and Mathematics Education, Illinois State University*  
 Coached ~40 K-12 teachers at 19 schools; Presented 35 professional development workshops on teaching mathematics and using technology; Wrote grants for teachers.
- 1999-2004: *High School Mathematics Teacher, Normal Community High School, Normal, IL. Taught Trigonometry, Honors Algebra II, Regular Algebra II, Algebra I, Advanced Geometry, Activities in Algebra I, and Elementary Algebra II; Sponsored Key Club, Math Team, and Mu Alpha Theta; Supervised pre-service teachers; Completed two action research projects; Presented 3 staff development workshops*
- 1999: *Mathematics Instructor, Heartland Community College, Normal, IL Taught Fundamentals of Mathematics.*

1996-1997: *Mathematics Instructor, Illinois Central College, East Peoria, IL*  
Taught Intermediate Algebra, Basic Algebra, Concepts of Mathematics, and ACT reviews for area high schools.  
Tutored remedial and collegiate mathematics in the Mathematics Lab

1991-1993: *Mathematics Lab Tutor, Illinois Central College, East Peoria, IL*

**1. Instruction and Continuing Education:**

**a. Courses Taught**

Math 3003 Data Analysis, Probability, and Connections for Early Childhood Education

Fall 2023 100% online-2 sections

M1012, M0090 Foundations of Mathematics & accompanying Math Support

Summer 2018 (10 UG & 3) 50% online

Spring 2019 (24 UG) Foundations only, 50% online

Fall 2019 50% online

Spring 2020 50% online

Fall 2021 100% online

Fall 2022 100% online

Spring 2023 100% online- 2 sections 1012, 1 section 0090

Summer 2023 100% online-1012 only

Fall 2023 100% online-3 sections 1012,1 section 0090

M1111, M0090 College Algebra & accompanying Math Support

Spring 2018 (21 UG & 16 UG) 50% online

Summer 2018 (25 UG) 50% online

Spring 2019 (26 UG & 22 UG-Support) 50% online

Summer 2019 College Algebra only f2f

Fall 2019 f2f College Algebra online f2f dual enrollment

Spring 2020 50% online

Summer 2020 College Algebra only 100% online

Fall 2020 College Algebra only- 2 sections 100% online

Spring 2021 100% online

Summer 2021 College Algebra only-2 sections 100% online

Fall 2021 College Algebra only 100% online

Spring 2022 100% online

Summer 2022-2 sections College Algebra only 100% online

Fall 2022 100% online

Spring 2023 100% online

M1103 Quantitative Skills & Reasoning

Spring 2019 (25 UG) 50% online

Fall 2019 50% online

Spring 2020 50% online

Fall 2020 100% online

Spring 2021 100% online

Fall 2021 100% online

Spring 2022 100% online

- AP Calculus BC - Covered content in the traditional Calculus I, II sequence  
2017-2018 school year (7 students) 25% online
- AP Statistics- Independent Study  
2017-2018 school year (1 student)
- Continuing Education-UGA Math and Parent Partners  
Co-instructed 13 2-hr sessions for over 200 parents, teachers, and children over the course of the 2016-2017 school year.
- Math Ed 390/790 *Math and Parent Partners Internship I* (1-3 hours)  
Course involved exploring mathematical knowledge for teaching fractions, decimals and percents concepts at the K-8 level, with concepts related to planning for and implementing parental involvement in mathematics.  
Spring 2014 (1 G) ~50% online  
Fall 2015 (5 UG) 75% online
- Math Ed 399 Math and Parent Partners Internship II (1 hr)  
Course was a mentorship of a student in coordinating a Math and Parent Partners minicourse in her school district (Antigo, WI).  
Fall 2015 (1 UG) 75% online
- Math 111 *Applied Calculus* (4 hours)  
Course focused on algebra review, the derivative, definite and indefinite integrals, and applications.  
Fall 2015 (35 UG) 50% online
- Math/Math Ed 359 *Teaching Middle School Mathematics I* (4 hours)  
Course focused on content and pedagogy for teaching middle school mathematics with an emphasis on teaching through problem solving.  
Fall 2014 (13 UG) Hybrid-50% online
- Math Ed 229 *Teaching Elementary Mathematics I* (1 hour)  
Course focused on the pedagogical content knowledge needed for teaching Number and Operations in elementary mathematics.  
Fall 2011 (24 UG)  
Fall 2013 (7 UG) Hybrid-62.5% online  
Fall 2014 (24 UG) Hybrid-50% online  
Fall 2015 (15 UG) Hybrid- 60% online
- Math Ed 339 *Teaching Elementary Mathematics II* (1 hour)  
Course focused on methods for teaching Geometry and Measurement in the elementary grades.  
Fall 2013 (10 UG) Hybrid- 62.5% online  
Fall 2014 (16 UG) Hybrid-50% online  
Fall 2015 (15 UG) Hybrid – 60% online
- Math 112 *Basic Trigonometry and Applications* (2 hours)  
Introduction to trigonometry and applications to surveying, navigation, and indirect measurement.  
Fall 2013 (32 UG) Hybrid-50%
- Math/Math Ed 345 *Teaching Elementary Mathematics III* (4 hours)  
Course included content and methods for teaching fractions, decimals, percents, data analysis, and probability in the elementary grades. Three practicum experiences were integrated.

- Fall 2013 (24 UG) Hybrid-25% online  
 Fall 2013 (19 UG)  
 Spring 2014 (27 UG) Hybrid-25% online
- Math Ed 334 *Technology Tools for Mathematics Teachers* (4 hours)  
 Course immersed preservice teachers in technology for mathematics education such as *The Geometer's Sketchpad*, *Tinkerplots*, Graphing Calculators, CBR's, CBL's, and virtual manipulatives. Related research and mathematical topics were integrated throughout. Hybrid course offered WI Department of Public Instruction (DPI)-mandated *Certificate for 30 Hours of Professional Development for Teaching Online Courses*.  
 Spring 2011 (28 UG)  
 Spring 2012 (19 UG)  
 Spring 2013 (18 UG) Hybrid-50% online  
 Spring 2014 (16 UG) Hybrid-50% online  
 Spring 2015 (16 UG) Hybrid-50% online  
 Spring 2016 (22 UG) Hybrid-75% online
- Math 118 *Precalculus Algebra* (4 hours)  
 Topics included linear, quadratic, power, exponential, and logarithmic functions with a focus on applications and graphing calculator technology.  
 Fall 2012 (31 UG) Hybrid-50% online  
 Spring 2013 (25 UG) Hybrid-50% online  
 Spring 2014 (22 UG) Hybrid-50% online
- Math/Math Ed 338 *Teaching Elementary Mathematics II* (4 hours)  
 Course included Geometry and Measurement content and methods for elementary teachers. Geometer's Sketchpad was integrated into learning activities. Three practicum experiences were enacted.  
 Spring 2012 (46 UG)  
 Fall 2012 (53 UG)  
 Spring 2013 (10 UG)-Hybrid 25% online  
 Spring 2015 (17 UG) -Hybrid 25% online  
 Spring 2016 (43 UG)-Hybrid 25% online
- Math/Math Ed 228 *Teaching Elementary Mathematics I* (4 hours)  
 Course included Number and Operations content and methods for elementary teachers. Cognitively Guided Instruction was a focus. The course incorporated 3 practicum experiences.  
 Fall 2010 (53 UG)  
 Spring 2011 (50 UG)  
 Fall 2011 (51 UG)  
 Fall 2015 (24 UG)-Hybrid 25% online
- Math 100 *College Algebra* (3 hours)  
 Course focused on linear, quadratic, absolute value, cubic, exponential, and logarithmic functions. Rational exponents and solving equations were also a focus.  
 Fall 2010 (26 UG)  
 Fall 2011 (23 UG)  
 Summer 2014 (17 UG) online except for final exam

- EMAT 6410 *Mathematical Learning in PreK-Grade 5* (3 hours)  
 Course was designed for participants to become familiar with theories on how PreK-8 children come to learn mathematics and on how PreK-8 children should be taught. Emphasis was placed on the history of learning theories such as behaviorism and constructivism which underlie various teaching methods practiced in the U.S. today.  
 Summer 2008 (18G)  
 Fall 2008 (14G)  
 Spring 2010 (23G)
- EMAT 7320 *Teaching Algebra in the Middle School* (3 hours)  
 Course focused on content, methods, technology, and curricula appropriate for middle grades. Particular attention was paid to implementing the NCTM algebra and process standards while developing a leadership disposition with respect to algebra instruction.  
 Spring 2010 (13G)
- EMAT 6200 *Technology in Teaching Elementary Mathematics* (3 hours)  
 Course emphasized the NCTM Technology Principle and National Education Technology Standards while integrating the NCTM and Georgia Geometry and Measurement content and process standards. Attention was given to curricular materials, manipulatives, and technologies, such as *The Geometer's Sketchpad (GSP)* and virtual manipulatives, that support the standards-based teaching of PreK-5 geometry and measurement in a diverse environment.  
 Summer 2009 (16G)
- EMAT 7290 *Teaching Geometry and Measurement in the Middle School* (3 hours)  
 Course emphasized the NCTM Technology Principle and National Education Technology Standards while integrating the NCTM and Georgia Geometry and Measurement 6<sup>th</sup>-8<sup>th</sup> grade content and process standards. Attention was given to curricular materials, manipulatives, and technologies, such as GSP, calculator based rangers, and calculator based laboratories, that support the standards-based teaching of middle grades geometry and measurement in a diverse environment.  
 Summer 2009 (16G)
- EMAT 7280 *Teaching Number Systems in the Middle School* (3 hours)  
 Course focused on content, methods, and curricula for middle grades mathematics instruction. Particular attention was paid to implementing the NCTM Number and Operations and process standards.  
 Spring 2009 (18G)
- EMAT 7650 *Applied Project in Mathematics Education* (3 hours)  
 Course guided students through data collection, analysis, and write-up of action research projects. Students then presented action research projects for review by a panel of faculty members as a graduation requirement. The final goal for the course was to provide students with tools and appreciation for lifelong learning about teaching.  
 Spring 2009 (5G)  
 Summer 2009 (1G)

- Summer 2010 (13 G)
- EMAT 6990 *Research Seminar in Mathematics Education* (3 hours)  
 Course familiarized participants with seminal research in mathematics education and engaged them in critiquing and locating research that would be useful in their profession. Furthermore, the course introduced action research as a form of professional development and engaged participants in developing an action research proposal. Finally, the course provided tools and appreciation for lifelong learning and leadership in teaching.  
 Fall 2008 (18G)  
 Fall 2009 (14G)  
 Summer 2010 (1G)
- EMAT 6600 *Problem Solving in Mathematics* (3 hours)  
 Course engaged participants in solving non-standard problems to improve their own problem-solving and problem-posing abilities. Course goals included building new mathematical knowledge, building self confidence in mathematical reasoning, and using technology.  
 Summer 2008 (14G)
- EMAT 6420 *Mathematics Methods for Early Childhood Education* (3 hours)  
 Course focused on content, methods, and curricula for PreK through 5<sup>th</sup> grade mathematics instruction. Particular attention was paid to implementing the NCTM Number and Operations and process standards. Spreadsheets and graphing calculator technology were introduced as well.  
 Spring 2008 (14G)
- EMAT 7010 *Teaching Mathematics in the Elementary School* (3 hours)  
 Course focused on content, methods, and curricula appropriate for PreK through 5<sup>th</sup> grade instruction of algebra. Particular attention was paid to implementing the NCTM algebra and process standards while developing a leadership disposition in with respect to algebra instruction.  
 Spring 2008 (18G)  
 Summer 2010 (20G)
- EMAT 6000 *Special Problems in Mathematics Education* (2 hours)  
*Issues in Early Childhood Mathematics Education*  
 Course focused on professional development issues for PreK through 5<sup>th</sup> grade instructors of mathematics.  
 Spring 2008 (2G)  
 Fall 2008 (7G)  
 Spring 2011 (1G)
- MATH 070 *Fundamentals of Mathematics* (Heartland Community College 3 hours)  
 Course focused on basic operations with whole numbers, fractions, decimals, signed numbers, solving equations, and problem solving.  
 Spring 1999 (~15UG)
- MATH 110 *Concepts of Mathematics* (Illinois Central College 3 hours)  
 Course focused on a survey of mathematics including algebra and discrete mathematics content.  
 Summer 1997 (~15UG)

- MAT 108 *Intermediate Algebra* (Illinois Central College 3 hours)  
Course focused on intermediate algebra concepts such as factoring and graphing polynomial functions. Graphing calculator technology used.  
Spring 1997 (~15UG)
- MAT 104 *Elementary Algebra* (Illinois Central College 5 hours)  
Course focused on concepts such as solving equations and graphing.  
Fall 1996 (~15 UG)
- K-12th Grade *Mathematics* (Griffin, GA; Stevens Point, WI 2007-present)  
Courses taught from *Investigations in Number Data and Space* (1998), *Connected Mathematics 2*, and *Core Plus* curricula. Also taught using *Cognitively Guided Instruction*
- PreAlgebra 1, PreAlgebra 2, Introductory Algebra A, Introductory Algebra B  
numerous sections at The Art of Problem Solving 100% online

**b. Advising Responsibilities**

Advised 59 M.Ed/Ed.S. students. (UGA)  
Advised/advisor to 11 B.S. Students (UWSP)

**c. Recruiting Responsibilities** (University of Georgia)

Recruited one cohort of elementary teachers and one cohort of middle school teachers to study mathematics education at the graduate level. Also recruited students to take courses towards the P-5 Elementary Mathematics Endorsement.

**d. Tutoring Responsibilities** (Illinois Central College)

Tutored remedial mathematics through differential equations.

**Professional Growth and Scholarship:**

**e. Publications**

- Knapp, A.K., Landers, R., Liang, S., & Jefferson, V. (2017). We all as a family are graduating tonight: A case for Mathematical Knowledge for Parental Involvement. *Educational Studies in Mathematics* 95(1) 79-95. DOI 10.1007/s10649-016-9741-4.
- Knapp, A.K., Barrett, J., & Moore, C. (2016) Prompting teacher geometric reasoning through coaching in a dynamic geometry software context. *School Science and Mathematics*. 326-337. DOI: 10.1111/ssm.12184
- Knapp, A. K., Jefferson, V., & Landers, R. (2013). Learning together. *Teaching Children Mathematics*,19(7) 432-439.
- Knapp, A. K. & Moore, C. J. (Fall 2011) Factoring frenzy. *Wisconsin Teacher of Mathematics*, 63(3).
- Knapp, A. K., Bomer, M. & Moore, C. J. (2011). *Lesson study as a learning environment for coaches of mathematics teachers*. In L. Hart, A. Alston, & A. Murata (Eds.) *Learning Together: Lesson Study Research and Practice in Mathematics Education*. Springer.



### Refereed Research Papers Presented and Published in Conference Proceedings

- Knapp, A.K., Landers, R., & Liang, S. (2016). How does parental attitude toward mathematics impact student achievement? In M. Wood, E. Turner, M. Civil & J. Eli (Eds.). *Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. (pp. 1107-1110), Tucson, AZ: The University of Arizona.
- Knapp, A.K. & Landers, R. (2012). Prompting mathematical knowledge for teaching through parent teacher learning communities. In L. Van Zoest, J. Lo, & J. Kratky (Eds.) *Proceedings of the 34<sup>th</sup> annual meeting of the North American chapter of the International Group for the Psychology of Mathematics Education*, Kalamazoo, MI: Western Michigan University.
- Knapp, A. K. (2009). Prompting mathematics coach development of mathematical knowledge for teaching. In S. Swarns, D. Stinson, & S. Lemons-Smith (Eds.) *Proceedings of the 31<sup>st</sup> annual meeting of the North American chapter of the International Group for the Psychology of Mathematics Education* (pp. 1092-1099), Atlanta, GA: Georgia State University.
- Knapp, A. K., Bomer, M., & Moore, C. J. (2008). Lesson study as a learning environment for mathematics coaches. In O. Figueras, J. Cortina, S. Allatore, T. Rojano, & A. Sepulveda (Eds.) *Proceedings of the 32<sup>st</sup> Conference of the International Group for the Psychology of Mathematics Education*. Morelia, Mexico: Cinvestav-UMSNH.
- Knapp, A. K., Barrett, J. E., & Kaufmann, M. L. (2007). Prompting mathematics teacher knowledge development using dynamic geometry software. In T. Lamberg & L. Wiest (Eds.) *Proceedings of the 29<sup>th</sup> annual meeting of the North American chapter of the International Group for the Psychology of Mathematics Education* (pp. 1098-1105), State Line (Lake Tahoe), NV: University of Nevada, Reno.

### Bulletins or Reports

- Knapp, A.K. (2017) *University System of Georgia STEM Grant Final Report (Mathematics)*. Unpublished. The University of Georgia.
- Knapp, A.K. & Cain, A. (2017) *Math and parent partners 2016-2017 report*. Unpublished. Math for Adults Foundation.
- Knapp, A.K. (2016). *Math and parent partners internal evaluation 2006-2016*. Unpublished Internal Evaluator Report. University of Wisconsin-Stevens Point.
- Knapp, A. K. (2007). *Mathematics and science teachers' and fellows' development of pedagogical content knowledge: 2006-2007 Partnerships for Research in Science and Mathematics Education (PRISM)*. Unpublished Annual Evaluator Report. Illinois State University.

### **f. Grants & Fundraising (over \$265,000):**

Math for Adults Foundation Funding:

- Knapp, A.K. (2023). *Fall Math Night Thrivent Financial* \$250
- Knapp, A.K. (2023). Rock Springs Church \$800
- Knapp, A.K. (2022). *Summer Virtual Math Enrichment Night Thrivent Financial* \$250
- Knapp, A.K. (2021). *Virtual Math Night Thrivent Financial* \$250
- Knapp, A.K. (2019). *Math Night Service Learning Thrivent Financial* \$250

Knapp, A.K. (2018). *Community Math Night* Thrivent Financial \$250  
Knapp, A.K. (2018). *Summer Math Night* Thrivent Financial \$250  
Knapp, A.K. (2018). First National Bank of Griffin \$100  
Knapp, A.K. (2017). James R. Dutton Attorney at Law \$100  
Knapp, A.K. (2017). Byron Brock Insurance \$100  
Knapp, A.K. Various funding from individuals solicited and provided.

Knapp, A.K. & Moore, C.J. (2017). Math for adults partnering for success through learning communities with children. Chick-fil-A Foundation True Inspiration Award (declined)

#### Math and Parent Partners Funding:

Knapp, A.K. & Klawitter, T. (2015). University of Wisconsin Credit Union \$2000 for YMCA Minicourse to be offered Spring 2016  
Knapp, A.K. (2015). Stevens Point Area School District, WI \$6000  
Knapp, A.K. (2015). University of Wisconsin-Stevens Point Mathematical Sciences \$12,000 Director's Assistant  
Knapp, A.K. (2015). Antigo Schools, Antigo, WI \$6000  
Knapp, A.K. (2015). Marshfield Schools, Marshfield, WI \$12,000  
Knapp, A.K. (2015). University of Wisconsin Credit Union \$350 for YMCA Minicourse  
Knapp, A.K. Landers, R., & Hellweg, J. (2014). *Math and Parent Partners: A Mathematical Sciences and Continuing Education Collaborative Outreach Project*. University of Wisconsin-Stevens Point Mathematical Sciences \$85,500  
Knapp, A.K. (2014). Wausau School District, Wausau, WI \$6000  
Landers, R., Knapp, A.K., & Cain, A., (2014). Griffin-Spalding County School District \$10,000  
Knapp, A.K., Landers, R., & Cain, A. (2014). *eMAPPS Development* The University of Arizona MAPPS Center \$6000  
Landers, R., Knapp, A.K., & Cain, A. (2013). *eMAPPS*. The University of Georgia, Design, Learning, & Technology \$6000  
Knapp, A.K., Landers, R., & Cain, A. (2013). *Virtual MAPPS*. The University of Arizona MAPPS Center \$6000  
Cain, A., Landers, R., & Knapp, A.K. (2013). Griffin-Spalding County School District \$6000  
Knapp, A. K. & Cain, A. (2011). Griffin-Spalding County School District \$4000  
Knapp, A. K. (2010). *Math and Parent Partners: Parental Development of Mathematical Knowledge for Teaching*. College of Letters & Science Faculty & Program Development Grant, University of Wisconsin-Stevens Point \$2000  
Knapp, A. K. (2010). *Math and Parent Partners Research: Parental Development of Mathematical Knowledge for Teaching*. Math and Parent Partners, The University of Arizona \$2500  
Knapp, A. K. & Cain, A. (2010). The College of Agriculture and Environmental Sciences \$4000  
Knapp, A. K. & Cain, A. (2009). The College of Agriculture and Environmental Sciences \$4000

- Knapp, A. K. & Cain, A. (2009). Griffin-Spalding County School District. \$30,000
- Knapp, A. K., Cain, S. A., Jordan, J., Jones, C. (2008). *University of Georgia Math and Parent Partnership: A collaborative approach to poverty mitigation through education*. Office of the Vice President for Public Service and Outreach, The University of Georgia. \$29,867
- Arkin, G., Cain, A., Knapp, A. K. (2008). Griffin-Spalding County School District. \$30,000
- Knapp, A. K., & Cain, S. A. (2008). The Griffin-Spalding County Education Foundation. \$1000
- Cain, S. A., & Knapp, A. K. (2008). The College of Agriculture and Environmental Sciences \$4000
- Knapp, A. K., Landers, R., Gay, D., Branch, R., & Civil, M. (2014). *Access for Parental Involvement and Adult Education in Mathematics: Broad Implementation of the Math and Parent Partners (MAPPs) Program* Proposal submitted to NSF November, 2014 \$ 2,996,223 (declined)
- Cook, P. (2011). UW Lab Modernization. University of Wisconsin-Stevens Point. I assisted in writing this grant, which made available calculator and data collection technology for the mathematics department. \$67,648
- Knapp, A. K., Gay, D. & Schumacher (2010). *Engaging Title I parents in math learning as a catalyst to impact student learning and the mathematics culture of schools*. Proposal submitted to NSF January, 2010 \$2,690,356 (declined)
- Knapp, A. K. (2005). *The Geometer's Sketchpad Software for Saint Mary's School-Pontiac*. Caterpillar Foundation, National Science Foundation Matching Funds \$500
- Knapp, A. K. (2005). *The Geometer's Sketchpad Software for Kingsley Jr. High*. Beyond the Books Grant, Community Unit School District #5, NSF Matching Funds \$2000
- Knapp, A. K. (2005). *The Geometer's Sketchpad Software for Chiddix Junior High*. Heart of Illinois/CEFCU Kids Count Grant, NSF Matching Funds \$2000
- Foster, H. J., & Knapp, A. K. (2002). *CBR's and CBL's for Normal Community High School*. Bright Schoolutions Grant from Illinois Power, NSF Matching Funds \$2000
- Knapp, A. K. (2003). *Tech Prep Funding for Activities in Algebra I*. Normal Community High School. \$200

**g. Recognitions and Outstanding Achievements**

City of Griffin, GA Proclamation, 8/2010  
Ada Belle Clark Welsh Scholarship, 4/2005  
Ora Bretall Scholarship, 4/2005  
Illinois Council of Teachers of Mathematics Illinois Promising New Teacher of Mathematics Award, 10/2004  
ISU Math Dept. Outstanding Senior Math Education Major Award, 5/1995  
ISU Math Department Senior Scholastic Achievement Award, 5/1995

**h. Areas of Research**

Teacher and student development of geometric reasoning through dynamic geometry software, Collaborative teacher development of mathematical knowledge for teaching through coaching and lesson study, Parental involvement in mathematics, Parent-teacher learning communities, evaluation and expansion of MAPPS program.

**Other Conference Presentations**

\*\* Denotes invited presentations.

Knapp (2021, September). *Virtual Math Nights: Empowering Parents in the Mathematics Community*. NCTM Annual Meeting & Exposition, Atlanta, GA. [Conference cancelled due to COVID.]

Knapp (2017, May). *University System of Georgia STEM Initiative: K-12 Lesson Study Collaboration*. STEM Summit, Middle Georgia State University, Macon, GA

Knapp (2017, March). *University System of Georgia STEM Institute: Graduate Fellows in K-12 Education*. The University of Georgia, Athens, GA.

Zhang, J., Liang, S., Knapp, A., Wang, X. (2016). Parental involvement and mathematics development – A cross racial and ethnicity study based on longitudinal hierarchical linear modeling. *Chinese American Educational Research and Development Association*.

Zhang, J., Liang, S., Wang, X. & Knapp, A. (2016, April). Parental involvement and mathematics development – How to effectively measure student’s achievement via longitudinal growth modelling: A case study of parental involvement in Chinese American families. *Teacher education symposium & 3rd annual international conference on East-West Reciprocal Learning in Education*, Chongqing China.

Knapp, A.K. (2015, July). *Preparing to Teach Mathematics with Technology through Tinkerplots: Data Analysis for K-8*. Conference on Research and Innovation in Teaching Mathematics with Technology, LaCrosse, WI.

Knapp, A.K., Liang, S., & Klawitter, T.(2015, May). *eMAPPS is born: Math and Parent Partners goes virtual*. Wisconsin Mathematics Council, Green Lake, WI.

Knapp, A.K. (2014, May). *Teaching online mathematics and mathematics education*. Wisconsin Mathematics Council, Green Lake, WI.

Knapp, A.K. (2013, May). *Parents and teachers learning together: A collaborative professional development model*. Wisconsin Mathematics Council, Green Lake, WI.

Knapp, A. K. (2012, November). *Math + parents = success in school*. Regional conference of the National Council of Teachers of Mathematics, Chicago, IL.

- Knapp, A.K. (2012, May). Math and parent partners: Parents and teachers learning together. Wisconsin Mathematics Council Annual Conference, Green Lake, WI.
- Knapp, A. K., & Schumacher, M. (2011, May). *Math + parents = success in school*. Wisconsin Mathematics Council Annual Conference, Green Lake, WI.
- Knapp, A. K., & Beasley, K. (2009, October). *Proving pythagoras*. Georgia Council of Teachers of Mathematics, Eatonton, GA.
- Knapp, A. K., Cain, A. & Gold, E. (2009, October). *The University of Georgia Math and Parent Partnership: A community collaboration*. Child and Family Policy Conference, Athens, GA (conference cancelled).
- Knapp, A. K., & Gold, E. (2009, September). *The University of Georgia Math and Parent Partnership: A collaborative approach to poverty mitigation through education*. Poster presented at The National Outreach Scholarship Conference, Athens, GA.
- Knapp, A. K. (2009, March). *GK-12 discussion and instrument sharing: Surveys, interviews, focus groups, reflection journals*. Presentation as part of Evaluation Discussion Group at the NSF Graduate Teaching Fellows in K-12 Education (GK-12) Annual Meeting. Washington, D.C.
- Knapp, A. K., & Moore, C. J. (2008, September). The effects of collaborative coaching in a dynamic geometry environment. *Partnership for Reform in Science and Mathematics conference, "Accepting the STEM Challenge"*. Atlanta, GA.
- Knapp, A. K., & Walesby, S. (2006, September). *Activities in Algebra: Is GK-12 effective for high school algebra students?* Presentation at the regional conference of the National Council of Teachers of Mathematics, Chicago, IL.
- \*\*Bomer, M., & Knapp, A. (2006, February). *Activities for improving basic facts*. Heart of Illinois Teachers of Mathematics Mini-Conference, Peoria, IL.
- \*\*Knapp, A. K., & Douangchampa, U. (2006, February). *Geometry activities for 4<sup>th</sup>-8<sup>th</sup> grade*. Heart of Illinois Teachers of Mathematics Mini-Conference, Peoria, IL.
- Knapp, A. K., & Douangchampa, U. (2005, October). *Forensics, probability, and percents*. Illinois Council of Teachers of Mathematics, Annual Conference, Peoria, IL.
- \*\*Knapp, A. K. (2005, February). *Activities in algebra: General math transformed*. Heart of Illinois Teachers of Mathematics Mini-Conference, Peoria, IL.
- Plantholt, M., Knapp, A. K., Matejka, L., Narciso, L., Ladewski, E., & McLear, R. (2004, October). *Graduate student partnerships with teachers*. Illinois Council of Teachers of Mathematics, Annual Conference, Peoria, IL.
- Knapp, A. K. (2004, October). *Activities in algebra: General math transformed*. Illinois Council of Teachers of Mathematics, Annual Conference, Peoria, IL.
- \*\*Foster, H. J., & Knapp, A. K. (2004, February). Calculator based rangers. Heart of Illinois Teachers of Mathematics Mini-Conference, Peoria, IL. (Knapp, 25%)
- Foster, H. J., & Knapp, A. K. (2003, October). *Here it comes, there it goes: Using CBRs and pendulums to graph sinusoidal functions*. Illinois Council of Teachers of Mathematics, Annual Conference, Chicago, IL.
- Knapp, A. K., & Gibbens, B. (2003, April). *Bridging the gap with college algebra*. Connections Conference, St. Charles, IL.

**i. Other Presentations and Workshops**

\*\* Denotes invited presentations.

Knapp, A.K. (2023). *Fall Math Night*. Anne Street Elementary School. Griffin, GA.

Knapp, A.K. (2022). *Summer Virtual Math Enrichment Night*. Southern Crescent Technical College. Griffin, GA.

\*\*Knapp, A.K. (2022). *Thrivent Financial Member Advocacy*. Washington, D.C. Presented about the Math for Adults Foundation in Congressional offices.

Knapp, A.K. (2021). *Virtual Math Night*. Math for Adults Foundation. Griffin, GA.

Knapp, A.K. (2020). *Virtual Math Night*. Math for Adults Foundation. Griffin, GA.

Knapp, A.K. (2019). *Math Night Service Learning*. Southern Crescent Technical College. Griffin, GA.

Knapp, A.K. (2018, November). *Community Math Night*. Griffin First Assembly of God. Griffin, GA.

\*\*Knapp, A.K. (2018, August). *Math Night Training: Fractions, Decimals & Percents I, II*. Jackson County, GA. \*\*

Knapp, A.K. (2018, August). *Math Night Training: Fractions, Decimals & Percents I*. Chattooga County, GA.

Knapp, A.K. (2018, July) *Summer Math Night*. Griffin-Spalding County Library, Griffin, GA

Knapp, A.K. (2018, June) *Summer K-8 PL/Math Night Training: Fractions, Decimals, & Percents I, II*. The New School, Atlanta, GA; The University of Georgia, Griffin, GA.

Knapp, A.K. (2018, April). *Math Night*. The University of Georgia, Griffin, GA.

\*\*Knapp, A.K. (2017, November). *Math Night*. Oakland Elementary, McDonough, GA.

\*\*Knapp, A.K. (2017, November). *Math Night Information Session*. Oakland Elementary, McDonough (Henry County), GA.

\*\*Knapp, A.K. (2017, September). *Math Night Training*. Northwoods Elementary, Roswell (Fulton Co.), GA.

Ovrick, R., Knapp, A.K., & McCrary, M. (2017, March). *Mathematics education collaboration*. The University of Georgia; Math for Adults Foundation, Griffin, GA.

Knapp, A.K. (2017, January). *Parental involvement in mathematics: Impacting student achievement through curriculum and context*. Henry County Schools. McDonough, GA.

Knapp, A.K. (2017, January). *Math for Parents minicourses*. Monroe County Schools. Forsyth, GA.

Knapp, A.K. (2016, December). *Mathematics Education Information Session*. Butts County Schools, Jackson, GA.

Knapp (2016, December). *Math and Parent Partners (MAPPS) 10 Years in Griffin-Spalding County Schools: What we have learned and new directions*. Griffin-Spalding County Schools. Griffin, GA.

Knapp (2016, November). *Math and Parent Partners (MAPPS) 10 Years in Griffin-Spalding County Schools: What we have learned and new directions*. Griffin-Spalding County Schools. Griffin, GA.

Knapp (2016, October). *UGA Griffin Mathematics Education*. The University of Georgia. Griffin, GA.

Knapp (2016, October). *University System of Georgia STEM Initiative: Lesson Study*

*Introduction to 8<sup>th</sup>, 9<sup>th</sup> Grade Mathematics Teachers*. Clarke County School District. Knapp (2016, October). *University System of Georgia STEM Initiative Introduction to Principals*. Clarke County School District.

Knapp (2016, October). *University System of Georgia STEM Initiative Introduction Mathematics Coaches*. Clarke County School District.

\*\*Knapp (2016, April). *Prompting mathematical knowledge for parental involvement*. Special Topics in Mathematics guest speaker. University of Wisconsin-Stevens Point. Attended *The Statistical Education of Teachers*, Brookhill Institute of Mathematics Fourth IHE Conference, Waukesha, WI (December 2015).

Knapp (2014, December). *About MAPPS*. Kiwanis Club. Stevens Point, WI

Knapp (2014, January). *Math and parent partners UWSP pilot*. Stevens Point Area Public Schools Elementary Principals Meeting, Stevens Point, WI.

\*\*Knapp, A. K. (2013, March). *Next steps: MAPPS as professional development. MAPPS Advisory Board presentation*. University of Arizona. Tucson, AZ.

\*\* Knapp, A. K. (2013, March). *Prompting mathematical knowledge for parenting through parent-teacher learning communities*. University of Arizona Colloquium. Tucson, AZ.

Attended UWSP Summer 2012 Curricular Redesign Program (Summer, 2012)

Attended the National Council of Teachers of Mathematics Annual Conference, Indianapolis, Indiana, April 2011.

Attended *Mathematics Proficiency for Every Student: Join Wisconsin's Journey Putting Common Core Standards for Mathematics into Practice*. (January, 2011). Wisconsin Mathematics Council, Wausau, WI.

Jordan, J., & Knapp, A. K. (2010, August). *University of Georgia math and parent partnership study*. University of Georgia Research Foundation/Office of the Vice President for Public Service and Outreach Grant Recipient Presentation Meeting. Athens, GA.

Knapp, A. K. (2010, June). *UGA Math and Parent Partnership*. Higher Education and Black Leadership Conference. The University of Georgia Griffin Campus, Griffin, GA.

Attended Core Common State Standards Symposium (June, 2010). America's Choice, Atlanta, GA.

\*\* Knapp, A. K. (2010, April). *Begin with action*. University of Georgia Hooten Colloquium. Athens, GA.

Knapp, A. K. (2009, August). *University of Georgia Math and Parent Partnership pilot study*. University of Georgia Research Foundation/Office of the Vice President for Public Service and Outreach Grant Recipient Presentation Meeting. Athens, GA.

\*\*Kaufmann, M. L., Bommer, M., Knapp, A. K., & Douangchampa, U. (2006, February). *Fence those cows!: Minimizing perimeter*. Illinois Council of Teachers of Mathematics Mathematics Contest Guest Speakers, Illinois Central College, East Peoria, IL.

## **2. General Educational Service**

### **a. Department, College, and University Service**

Math for Adults Foundation Executive Director (2016-present)  
 Central Wisconsin Math and Parent Partners Director (2014, 2015, 2016)  
 Experiential Learning Activity Mentor to 29 students (2014, 2015, 2016)

Hiring Committee (Fall 2014, Fall 2015)  
 Merit Allocation Committee (Spring 2014)  
 Redesigned Math 111, 112, Math 118, Math 100, Math Ed 229, Math Ed 334, Math Ed 339, Math Ed 359, and Math Ed 345 as hybrid courses (2012-2016)  
 Department of Mathematical Sciences Steering Committee (2013-2014, 2015-2016)  
 College of Letters and Science Dean's Faculty Advisory Council (Fall, 2012, Spring 2013, Fall 2013, Spring 2014)  
 CEC committee member (F 2011, F 2012, F 2013, Sp 2014, F 2014, Sp 2015; F 2015; 2016)  
 Assisted with Strategic Planning and Tactical Initiatives for Mathematical Sciences (Spring, 2012)  
 Knapp, A.K. (2012, February). The adventure of teaching mathematics. *University of Wisconsin-Stevens Point Women in Science Day Presentation*.  
 Co-PI with Jonathan Duarte on the study, "The mathematical abilities and confidence of college students to answer linear and quadratic equations." (Fall, 2011)  
 Knapp, A.K. (2011). Chancellor's Installation Poster Session: A Collaborative Approach to Poverty Mitigation Through Education  
 Curriculum development: Developed elementary/middle school section of Math Ed 334. Piloted *Preparing to Teach Mathematics with Technology* materials under development at North Carolina State University (Spring 2011, Spring 2012)  
 Library/Seminar Committee member (2011, 2012, 2013, 2014, 2015)  
 Committee on Undergraduate Teacher Education-Mathematics (CUTEM) member (2010-2016, 2012-2013 Chair, 2014-2015 Chair; 2015-2016 Chair)  
 Knapp, A. K. (2010, November). Who Done It: A Forensic Investigation. University of Wisconsin-Stevens Point STEM Career Day Presentation.  
 Griffin Academic Programs: Represented Mathematics and Science Education in areas of program coordination and recruiting (Fall 2007-Summer 2010)  
 Assisted with M.Ed. Comprehensive Exam Development (Fall 2009)  
 Mathematics Education Pre-session Committee (Summer 2008, Summer 2009)  
 MAT Committee: Served on committee charged with drafting the course of study for the Master of Arts in Teaching in Mathematics Education (Fall 2007)  
 Assisted with M.Ed. portfolio rubric revisions (Fall 2007)  
 MATH 7003 Course Development: Collaborated with instructor to incorporate Georgia Performance Standards Tasks (Fall 2007)  
 Service on 45 examining and reading committees

**b. Community Service and Relations**

WKEU Radio interview-Math for Adults Foundation (July, 2018)  
 WHIE Radio guest-Griffin Campus News  
 Fall 2007-Participated in discussion about economic development of Griffin through new UGA Griffin academic programs.  
 Fall 2008-Participated in discussion about mathematics education programs at UGA Griffin. Secured advertising time.  
 Spring 2009- Participated in discussion about UGA Math and Parent Partnerships  
 Summer 2010-Discussed Math Ed program and action research with graduates  
 Spring 2017-Discussed UGA Griffin and Math for Adults Foundation Mathematics Education programming.



Channel 7 News interview (Fall 2015)

SPARC Spotlight radio guest-MAPPS (Spring 14)

Stevens Point Online Learning Center, Consultant (2010-2012)

University of Georgia Math and Parent Partners, Consultant (2010-2015)

Provided budgetary and programmatic advice for the continuation of the MAPPS outreach to the Griffin-Spalding County School District, Griffin, GA. Directed development of the eMAPPS project.

University of Georgia Math and Parent Partnerships, Co-director. Provided oversight for nine 8-week Minicourses for parents, teachers, and children in the Griffin-Spalding County School District. Also engaged in training, fundraising, and evaluation for the program. (2008-2010)

Metro Math Supervisors Meeting participant. Participated in discussions on implementing the Georgia Performance Standards.

Fall 2007, Gwinnett Co.

Winter 2007, Henry Co.

Spring 2008, Spalding Co.

Fall 2008, Cobb Co.

Winter 2008, Spalding Co.- I hosted at UGA Griffin.

Spring 2009, Douglas Co.

Partners for a Prosperous Griffin Spalding County. Served as chair of the Elementary Education Sub-committee. (2008).

Science Fair Judge. Griffin RESA Regional Science and Engineering Fair. (2/2008)

McLean County Jail Volunteer (2002-2007)

**c. Professional Service**

Reviewer, School Science & Mathematics (2013, 2014, 2016)

Reviewer, Journal of Teacher Education (2013, 2014)

Advisory Board Member-Math and Parent Partners (2013, 2014, 2015)

Reviewer, *Teaching Children Mathematics Journal* (2012)

Reviewer, Conference proceedings for the Annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, 2009, 2010, 2012.

Graduate Student Liaison, Annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Atlanta, 2009.

Session Organizer- *Mentoring New Researchers*

Session Organizer- *The Art of Interviewing*

Session Organizer- *Graduate Student Social*

Equity 2000 Steering Committee (1999-2001)