

GAY A. RAGAN, Ph.D.

Professor Mathematics Department Missouri State University

PROFESSIONAL PREPARATION

Degrees:

- 2000 Ph.D. University of Missouri-Columbia. Curriculum and Instruction, Mathematics Education emphasis.
- 1993 M.S.Ed. Southwest Missouri State University. Secondary Education, Mathematics Education emphasis.
- 1989 B.S. Southwest Missouri State University. Biology and Chemistry emphasis

Certificates:

- 1995 grades 7-12 Missouri Teaching Certificate in Biology, Chemistry, and Mathematics
- 1993 grades 7-12 Arkansas Teaching Certificate in Biology, Chemistry, and Mathematics

AWARDS, RECOGNITIONS & ADMISSIONS

Awards:

- College of Education College Award for Educational Excellence in Service (Fall 2004)
- College of Education College Award for Educational Excellence in Research (Fall 2003)
- College of Education College Award for Educational Excellence in Teaching (Fall 2002)

Recognitions:

- Graduate College Outstanding Graduate Student Mentor Nominee (Spring 2003)

Admissions:

- Graduate Faculty Status (Fall 2001)
- Professional Education Unit admission (Spring 2001)

TEACHING

Higher Education Experience:

- 2011-present Professor, Mathematics Department, Missouri State University, Springfield, Missouri.
Courses taught: MTH 320: Foundations of Numbers and Operations for Teachers
MTH 360: Foundations of Geometry and Measurement for Teachers
MTH 410: Teaching and Learning of Mathematics II, with Practicum
MTH 460: College Geometry
MTH 798: Research (Seminar)
MTH 799: Topics (Thesis)
- 2006-2010 Associate Professor, Mathematics Department, Missouri State University, Springfield, Missouri.
Courses taught: MTH 130*: Contemporary Mathematics (3 contact hours)
(*taught as Supplemental Instruction section Fall 2009, 2010)
MTH 320: Foundations of Mathematics for Teachers (4 contact hours)
MTH 460: College Geometry (3 contact hours)
- 2005 Tenured Assistant Professor, Mathematics Department, Missouri State University, Springfield, Missouri.
Courses taught: MTH 145: Contemporary Mathematics
MTH 320: Foundations of Mathematics for Teachers
MTH 460: College Geometry
- 2001-2005 Assistant Professor, School of Teacher Education, Southwest Missouri State University,

Springfield, Missouri.

Courses taught: SFR 396: Student Assessment and Evaluation

SFR 690: Introduction to Educational Research (taught concurrently as EAD 695 in fall semester 2001; taught through ITV in fall semester 2004)

ELE 615: Advanced Theory and Practice in the Teaching of Mathematics (*taught through ITV in fall semester 2001)

Preservice student teacher supervisor for middle school mathematics (spring semester 2005)

1999 Graduate Instructor, Department of Curriculum and Instruction, University of Missouri, Columbia, Missouri. Course taught: ED 351: An Introduction to the Teaching of Middle School and Secondary Mathematics.

1994-1995 Mathematics Instructor (Adjunct), Drury College-Branson Campus, Springfield, Missouri.

1993-1995 Mathematics Instructor, North Arkansas Community/Technical College, Harrison, Arkansas.

Public School experience:

1998-1999 Mathematics Teacher, Gentry Middle School, Columbia, Missouri.

1995-1998 Mathematics Teacher, Hickman High School, Columbia, Missouri.

Other experience:

1998-2000 Pre-Service Student Teacher Supervisor, Middle School and High School Mathematics Education majors, University of Missouri, Columbia, Missouri.

1994-1995 Junior High and Senior High Mathematics Tutor, Upward Bound Program, University of Arkansas, Fayetteville, Arkansas.

1991-1993 Instructional Support Staff, Mathematics tutor and mathematics curricula designer, North Arkansas Community College, Harrison, Arkansas.

SCHOLARSHIP

Works

Harbaugh, A. P., Killion, K., & Ragan, G. (in progress). Cuisenaire Rods to Number Lines: Multiplication and Division of Fractions.

Sullivan, P., Harbaugh, A. P., Killion, K., & Ragan, G. (in progress). Division by zero: A more meaningful explanation.

Publications:

International-level Refereed Journals:

Goodwin, D. R., Arthaud, T. A., Ragan, G. A., & George, S. M. (August 2005). Valuing the promise, wrestling with the process: The impact of ITV on teaching and learning in higher education. *Educational Action Research*, 2(13), 237-258.

National-level Refereed Journals:

Crain, S. J., Ragan, G. A., & Ragan, K. P. (Summer 2007). Comparison of Features and Benefits of Finance Websites and Their Potential Applications in Various Finance Courses. *Journal of Financial Education*, 33, 73-79.

Crain, S. J., Goodwin, D. R., Herd, P., Ragan, G. A., & Ragan, K. P. (Spring 2006). University

Finance Faculty in the Middle School Classroom: Using a Portfolio Management Project to Integrate Teaching, Research, and Service. *Advances in Financial Education*, 4, 56-72.

- Pettijohn, J.B., Ragan, K.P., & Ragan, G.A. (Spring 2004). Project e-Biz: An Alternative Assessment Project Designed to Familiarize Introduction to Business Students with Online Business and Economic Resources. *Business, Education and Technology Journal*, 1-10.
- Ragan, G. A. & Ragan, K. P. (Spring 2004). Effective course design using stated course objectives and learning outcome statements. *Journal of Financial Education*, 30, 18-27.
- Pettijohn, J. B., Ragan, G. A., & Ragan, K. P. (Summer 2003). e-FM: A project for the introductory financial management course designed to involve students with online financial information and analytical tools. *Journal of Economics and Finance Education*, 2(1), 11-17.
- Pettijohn, J. B., Ragan, G. A., & Ragan, K. P. (March/April 2003). On-line investment analysis and portfolio management: Using learning outcome statements to design projects that familiarize students with online investment analysis and portfolio management tools. *Journal of Education for Business*, 78(4), 185-190.
- Glasgow, R., Ragan, G. A., Fields, W., Reys, R. E., & Wasman, D.G. (2000). The decimal dilemma. *Teaching Children Mathematics*, 7(2), 89-93.
- Bay, J. M., & Ragan, G. A. (2000). Improving students' mathematical communication and connections using the classic game of "telephone." *Mathematics Teaching in the Middle School*, 5(8), 486-489.

State-level Refereed Journals:

- Ragan, G. A., Herd, P., & Burgess, M. (Spring 2006). Understanding mathematics through literature. *The Missouri Reader*, 30(2), 60-66.
- Ragan, G. A., Taylor, P. M., Hodits, J., & Helmreich, M. (Spring 2006). Teachers helping teachers: Words of wisdom from beginning teachers. *Illinois Mathematics Teacher*.
- Pendergrass, A., Ragan, G. A., & Goodwin, D. (2002). Teacher research in action: The transitional process from the MMAT to the MAP. *The Transescent, The Journal of the Missouri Middle School Association*, 26(4), 23-26.
- Goodwin, D. & Ragan, G. A. (2002). Teacher research: Turning on the light. *The Transescent, The Journal of the Missouri Middle School Association*, 27(1), 7-11.

Book Chapters:

- Reys, R. E., Glasgow, R., Ragan, G. A., & Simms, K. (2001). Doctoral programs in mathematics education: A status report. In R.E. Reys & J. Kilpatrick (Eds.), *College Board of the Mathematical Sciences Issues in Mathematics Education: One field, many paths: United States doctoral programs in mathematics education*, 9, 19-40. Providence, RI: American Mathematical Society.
- Ragan, G. A. (2001). My doctoral program in mathematics education-A graduate

student's perspective. In R.E. Reys & J. Kilpatrick (Eds.), *College Board of the Mathematical Sciences Issues in Mathematics Education: One field, many paths: United States doctoral programs in mathematics education*, 9, 145-149. Providence, RI: American Mathematical Society.

Conference Proceedings:

Pettijohn, J. B., Ragan, K. P., & Ragan, G. A. (January 2007). E-Biz online: An alternative assessment assignment designed to acquaint business students with web-based business and economic resources. *The International Academy of Business and Public Administration disciplines Conference Proceedings*, ISSN #547-4836.

Textbook:

Killion, K., Paul, C., Plymate, L., Campbell, L., Ashley, D., Ragan, G., & Harbaugh, A. (2013, 3rd edition). *Foundations of Mathematics for Teachers: Laboratory Activities Incorporating Technology and Manipulatives*. Kendall Hunt: Dubuque, IA

Invited Works:

Ragan, G. A. (2003). Lines of communication regarding calculators: Open or closed? *The Golden Rectangle*, 9(1), 5.

(The following are a series of 6 mini-biographies or related works published in a mathematics encyclopedia for high school students).

Ragan, G. A. (2002). Julia Morgan. In B. M. Brandenberger, Jr., (Ed.), *Mathematics, volume 2*. New York: Macmillan Reference USA.

Ragan, G. A. (2002). Maria Mitchell. In B. M. Brandenberger, Jr., (Ed.), *Mathematics, volume 2*. New York: Macmillan Reference USA.

Chavez, O. & Ragan, G. A. (2002). Fractals. In B. M. Brandenberger, Jr., (Ed.), *Mathematics, volume 3*. New York: Macmillan Reference USA.

Ragan, G. A. & Chavez, O. (2002). Benoit Mandelbrot. In B. M. Brandenberger, Jr., (Ed.), *Mathematics, volume 3*. New York: Macmillan Reference USA.

Ragan, G. A. (2002). Julia Robinson. In B. M. Brandenberger, Jr., (Ed.), *Mathematics, volume 3*. New York: Macmillan Reference USA.

Ragan, G. A. (2002). Mary Fairfax Somerville. In B. M. Brandenberger, Jr., (Ed.), *Mathematics, volume 3*. New York: Macmillan Reference USA.

Other Scholarly Works:

Ragan, G. A. (2000). *Teachers' perceptions and practices regarding the use of calculators in one district over a twenty-year period*. Unpublished doctoral dissertation, University of Missouri-Columbia.

Ragan, G. A. (1993). *A study of two instructional modes used within the developmental program of North Arkansas Community College*. Unpublished seminar paper, Southwest Missouri State University, Springfield, Missouri.

Presentations Conducted:

National-Level:

- Ragan, G. A. & Ragan, K. P. (September 2009). "Influences on Financial Literacy – What the NAEP Data Indicates." Paper presentation at the Financial Education Association Annual Meeting, Ft. Lauderdale, Florida.
- Ragan, G. A. & Ragan, K. P. (September 2009). "Using the National Assessment of Educational Progress (NAEP) Data Explorer to Conduct Personal Finance Education Research." Workshop presentation at the Financial Education Association Annual Meeting, Ft. Lauderdale, Florida.
- Pettijohn, J. B., Ragan, K. P., & Ragan, G. A. (May 2008). "E-Biz online: An alternative assessment assignment designed to acquaint business students with web-based business and economic resources." Paper presented at The International Academy of Business and Public Administration Disciplines annual conference, Dallas, Texas.
- Crain, S. J., Goodwin, D., Herd, P., Ragan, G. A., & Ragan, K. P. (April 2005). "Finance Faculty in the Middle School Classroom: Using a Portfolio Management Project to Integrate Teaching, Research, and Service." Paper presentation at the Financial Education Association annual meeting, Orlando, Florida.
- Crain, S., Goodwin, D., Ragan, G., Herd, P., & Ragan, K. (April 2004). "The stock market project: A collaboration." Presentation at the National Council of Teachers of Mathematics 82nd Annual Meeting, Philadelphia, PA.
- Goodwin, D., & Ragan, G. (April 2004). "The deeper relation of subject matter knowledge and motivation to teach in pre-service math teachers." Presentation at the National Council of Supervisors of Mathematics 36th Annual Conference, Philadelphia, PA.
- Pettijohn, J. B., Ragan, G. A., & Ragan, K. P. (October 2003). "Using Learning Outcome Statements to Design Projects that Familiarize Students with Online Investment Analysis and Portfolio Management Tools." Paper presented at the annual meeting of the Financial Management Association (FMA), Denver, Colorado.
- Ragan, G. A., Pettijohn, J. B., & Ragan, K. P. (April 2003). "e-FM: A project for the introductory financial management course designed to involve students with online financial information and analytical tools." Paper presented at the annual meeting of the Financial Education Association (FEA), Orlando, FL.
- Whitenack, J. W., Knipping, N., Kim, O. K., & Ragan, G. (April 2001). "The dialectical role of purposeful play, emerging mathematical practices, and instructional design theory." Paper presented at the annual meeting of the American Educational Research Association (AERA), Seattle, WA.
- Reys, B.J. & Ragan, G. A. (April 2001). "Principles and Standards for School Mathematics (PSSM): Messages regarding curriculum and curriculum materials." Presentation at the National Council of Supervisors of Mathematics annual meeting, Orlando, Florida.
- Ragan, G. A. (April 2001). "The top 10 factors effecting calculator use in one school district." Poster session presentation at the National Council of Supervisors of Mathematics annual meeting, Orlando, Florida.

Taylor, P. M., & Ragan, G. A. (April 2000). "The hit & run model of mathematics teacher preparation." Presentation at the National Council of Teachers of Mathematics annual meeting, Chicago, IL.

Ragan, G. A., & Glasgow, R. (October 2000). "Doctoral Programs in Mathematics Education in the United States." Presentation at the Twenty-Second Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA XXII), Tucson, Arizona.

Reys, R. E., Glasgow, R., & Ragan, G. A. (April 1999). "What should be included in doctoral programs in mathematics education for mathematics supervisors?" Presentation at the National Council of Supervisors of Mathematics annual meeting, San Francisco, California.

Regional-Level:

Ragan, G. A., Goodman, T., & Campbell, L. (March 2010). "Striving for and Struggling to Become a MSP Model Project: Suggestions from Lessons Learned during MSP Evaluation." Presentation at the Mathematics and Science Partnership Regional Meeting, New Orleans, LA.

Goodwin, D., Witz, K., Thomas, J., & Ragan, G. (March 2004). "Investigating pre-service secondary mathematics teachers' deeper relation to teaching and mathematics subject matter." Research Round Table at the Fourth Annual Qualitative Research Conference: Border Crossings in Research. University of Missouri-St. Louis.

State-Level:

Ragan, G. A. (December 2009). "Highlights of Year 1 and Year 2 of the Middle and Secondary Grades Mathematics Leadership Academy Project." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.

Killion, K. & Ragan, G. A. (December 2009). "Modeling Fraction Operations." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.

Killion, K. & Ragan, G. A. (February 2009). "Estimation and Mental Arithmetic (500 Horsepower at 100 MPH)". Presentation at Interface A (grades k-6) annual meeting, sponsored by the Department of Elementary and Secondary Education in cooperation with the University of Missouri Conference Office, Osage Beach, Missouri.

Killion, K., & Ragan, G. A. (December 2008). "Developing Number Fluency through Estimation and Mental Arithmetic". Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.

Killion, K. & Ragan, G. A. (February 2008). "The Power of Number Fluency". Presentation at Interface A (grades k-6) annual meeting, sponsored by the Department of Elementary and Secondary Education in cooperation with the University of Missouri Conference Office, Osage Beach, Missouri.

Killion, K., & Ragan, G. A. (December 2007). "Number Sense Strategies-Even a Caveman Can Use Them". Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.

- Ragan, G. A., & Herd, P. (December 2006). "Integrating Children's Literature into the Teaching of Mathematics." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Killion, K., & Ragan, G. A. (February 2006). "Developing Number Fluency: Number Sense, Estimation, Mental Arithmetic." Presentation at Interface A (grades k-6) annual meeting, sponsored by the Department of Elementary and Secondary Education in cooperation with the University of Missouri Conference Office, Osage Beach, Missouri.
- Ashley, D. & Ragan, G. (December 2005). "The Impact of Professional Development on Teachers' Beliefs." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Herd, P., & Ragan, G. A. (December 2005). "Mathematical Applications in an On-Line Investment Portfolio." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Killion, K. & Ragan, G. (December 2005). "Calculator or Not a Calculator: Preservice and Inservice Teachers' Beliefs." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Ragan, G., Herd, P., Ragan, K., Crain, S., Goodwin, D., Long, S., & Barber, L. (March 2005). "The Stock Market Project." Presentation at the Missouri Middle School Association Annual Conference, Lake Ozark, Missouri.
- Ragan, G., Herd, P., Ragan, K., Crain, S., & Goodwin, D. (December 2004). "The Stock Market project." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Ragan, G. A., Herd, P. M., & Goodwin, D. (February 2004). "The Stock Market Project." Presentation at Interface B (grades 7-12) annual meeting, sponsored by the Department of Elementary and Secondary Education in cooperation with the University of Missouri Conference Office, Osage Beach, Missouri.
- Killion, K., Paul, C., & Ragan, G. A. (December 2003). "Enhancing MAP Scores and the Mathematical Culture of Two Small, Rural School Districts." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Ragan, G. A., Herd, P., Ragan, K. P., Goodwin, D. R., & Crain, S. (December 2003). "The Stock Market Project." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Shivler, S., Herd, P., & Ragan, G. A. (December 2002). "Using Children's Literature to Make Connections: The Reading, 'Riting, and 'Rithmetic (R3) Project." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Ragan, G. A. (December 2002). "Opening the Lines of Communication Regarding Calculators." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.

- Darby, M., Ragan, G. A., & Ragan, K. P. (July 2002). "Employers' Expectations of High School Graduates Computer Skills." Presentation at the 2002 Missouri Association for Career and Technical Education & Missouri Business Education Association Summer Conference, Springfield, Missouri.
- Pendergrass, A., & Ragan, G. A. (February 2002). "Teachers' Practices and Perceptions Regarding the Transition from the MMAT to the MAP." Presentation at Interface A (grades k-6) annual meeting, sponsored by the Department of Elementary and Secondary Education in cooperation with the University of Missouri Conference Office, Osage Beach, Missouri.
- Pendergrass, A., & Ragan, G. A. (February 2002). "Teachers' Practices and Perceptions Regarding the Transition from the MMAT to the MAP." Presentation at Interface B (grades 7-12) annual meeting, sponsored by the Department of Elementary and Secondary Education in cooperation with the University of Missouri Conference Office, Osage Beach, Missouri.
- Ragan, G. A., & Conrad, K. (December 2001). "Lines of communication regarding calculators: Open or closed?" Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.
- Ragan, G.A. (December 2000). "Factors influencing calculator use in one Missouri school district." Presentation at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri.

Grant Reports Written:

- Goodman, T., Campbell, L.N., & Ragan, G. A. (November 2010). *Year 3 Report for the Department of Education Mathematics-Science Partnerships Grant: Missouri Secondary Grades Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.*
- Goodman, T., Campbell, L.N., & Ragan, G. A. (November 2010). *Year 3 Report for the Department of Education Mathematics-Science Partnerships Grant: Missouri Middle Grades Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.*
- Goodman, T., Campbell, L.N., & Ragan, G. A. (February 2010). *Year 2 Report for the Department of Education Mathematics-Science Partnerships Grant: Missouri Secondary Grades Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.*
- Goodman, T., Campbell, L.N., & Ragan, G. A. (February 2010). *Year 2 Report for the Department of Education Mathematics-Science Partnerships Grant: Missouri Middle Grades Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.*
- Goodman, T., Campbell, L.N., & Ragan, G. A. (January 2009). *Year 1 Report for the Department of Education Mathematics-Science Partnerships Grant: Missouri Secondary Grades Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.*
- Goodman, T., Campbell, L.N., & Ragan, G. A. (January 2009). *Year 1 Report for the*

Department of Education Mathematics-Science Partnerships Grant: Missouri Middle Grades Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.

Goodman, T., Campbell, L.N., & Ragan, G. A. (November 2007). *Final Report for the Department of Education Mathematics-Science Partnerships Grant: Missouri Elementary Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.*

Goodman, T., Campbell, L.N., & Ragan, G. A. (November 2006). *Final Report (Year 2) for the Department of Education Mathematics-Science Partnerships Grant: Missouri Elementary Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.*

Goodman, T., Campbell, L.N., & Ragan, G. A. (August 2005). *Final Report (Year 1) for the Department of Education Mathematics-Science Partnerships Grant: Missouri Elementary Mathematics Leadership Academy. Submitted to the Departments of Education, Washington, DC and Jefferson City, MO.*

Killion, K., Paul, C, & Ragan, G. A. (June 2004). *Final Report for the Cycle-1 DHE Improving Teacher Quality Grant: Improving Student Mathematics Achievement in Two Small, Rural Ozarks Districts. Submitted to the Department of Higher Education, Jefferson City, Missouri.*

Other Grant Activity:

Evaluator. Missouri Middle School Mathematics Leadership Project.

Award: \$500,000.00 (Year 3) from U.S. Department of Education through Missouri Department of Elementary and Secondary Education. (January 2010 – November 2010).

Evaluator. Missouri Secondary Mathematics Leadership Project.

Award: \$ 500,000.00 (Year 3) from U.S. Department of Education through Missouri Department of Elementary and Secondary Education. (January 2010 –November 2010).

Evaluator. Missouri Middle School Mathematics Leadership Project.

Award: \$500,000.00 (Year 2) from U.S. Department of Education through Missouri Department of Elementary and Secondary Education. (January 2009 – December 2009).

Evaluator. Missouri Secondary Mathematics Leadership Project.

Award: \$ 500,000.00 (Year 2) from U.S. Department of Education through Missouri Department of Elementary and Secondary Education. (January 2009 –December 2009).

Recipient. An In-depth Investigation of a Professional Development Model for Elementary Teachers of Mathematics (LEMMA Project), Sabbatical Funded. (Spring 2009).

Evaluator. Missouri Middle School Mathematics Leadership Project.

Award: \$500,000.00 (Year 1) from U.S. Department of Education through Missouri Department of Elementary and Secondary Education. (January 2008 – December 2008).

Evaluator. Missouri Secondary Mathematics Leadership Project.

Award: \$ 500,000.00 (Year 1) from U.S. Department of Education through Missouri Department of Elementary and Secondary Education. (January 2008 –December 2008).

Evaluator. Missouri Elementary Mathematics Leadership Project. Project Investigators, Dr. Terry Goodman, Mathematics Department, Central Missouri State University, Warrensburg, MO and Dr. Larry Campbell, Mathematics Department, Southwest Missouri State University, Springfield, Missouri. Award: \$2.4 million (Year 1) from U.S. Department of Education through Missouri Department of Elementary and Secondary Education. (August 2004 – September 2007).

Project Investigator. The Stock Market Project, Funded by SMSU Faculty Research Grant and College of Education. Award: \$8200.00 (2004-2005).

Evaluator. Improving Student Mathematics Achievement in Two Small, Rural Ozark Districts, CBHE Improving Teacher Quality State Grant, Project Investigators, Drs. Kurt Killion and Clyde Paul, Mathematics Department, Southwest Missouri State University, Springfield, Missouri. Award: \$134,666.00 (Summer 2003 – Summer 2004).

Co-Investigator. ST3 Technology Collaboration Mini-Award. Award: \$2500.00. (Spring 2003; Spring 2004).

Recipient. Opening the Lines of Communication Regarding Calculators Project, Summer Faculty Fellowship. Award: \$5,000.00. (Summer 2003).

Principal Investigator, Reading, 'Riting, & 'Rithmetic (R³) Project, Funding for Results Grant awarded by Southwest Missouri State University. The goals of this project are to provide teachers with an understanding of how to incorporate children's literature into the teaching and learning of mathematics in grades PreK-8. Award: \$2500.00 (Spring semester, 2002 & 2003).

Principal Investigator, Elementary Teachers Teaching for Understanding (ET²U) Project, Funding for Results Grant awarded by Southwest Missouri State University. The goals of this project were to help elementary teachers gain a better understanding of mathematics themselves and to help them become reflective practitioners. Award: \$3950.00 (Fall 2001).

Mathematics Curricula Consultant, Ozark Rural Systemic Initiative (ORSI) Developmental Grant. Awarded to the Southwest Center on Education Excellence by the National Science Foundation to provide the mechanism for activities to share the vision and begin the planning of a regional mathematics (and science) reform effort. (2000-2001)

Mathematics Curricula Consultant Grant awarded to the Southwest Center for Education Excellence. from the Missouri Department of Elementary and Secondary Education to continue the momentum of the ORSI Developmental Grant and to increase the participation of teachers from approximately 40 school districts in investigating mathematics reform efforts. (Fall, 2001).

Graduate Student Reviewer, Eisenhower Professional Development Grant Competition (Cycle XVI), Missouri, Coordinating Board for Higher Education, Jefferson City, Missouri. I was a graduate student working with Barbara Reys, a member of the review panel, to review grants requesting funds for professional development activities in mathematics, science, and reading for K-12 teachers. (Winter semester, 1999)

Graduate Student Co-Writer, Incentives for School Excellence Grant, Higbee School District, Higbee, Missouri. I helped teachers from the Higbee School District write an incentive grant proposal. Funding from the grant was to establish a Mathematics and Science Resource Laboratory of manipulative materials and technology for use in instruction. (Winter semester, 1999).

Graduate Student Writer, University of Missouri Research Board Grant, Columbia, Missouri. Under the direction of Dr. Barbara Reys, I applied for a research board grant to support the investigation of the role of calculators in Missouri schools. (Fall, 1999)

Graduate Assistant, Show-Me Project, University of Missouri Department of Curriculum and Instruction, Mathematics Education Program. This project was a national effort to disseminate information about standards-based middle school mathematics curricula. Responsibilities included participating in planning sessions and national conferences, monitoring requests received by the Show-Me Center, coordinating and maintaining the Pertinent Publications feature of the Show-Me Center website (<http://www.showmecenter.missouri.edu>), and conducting workshops/presentations regarding the five standards-based middle school curricula. This project was funded by the National Science Foundation under the direction of Dr. Barbara Reys. (1998-2000)

Graduate Assistant, Doctoral Programs in Mathematics Education Project, University of Missouri Department of Curriculum and Instruction, Mathematics Education. Responsibilities included participation throughout the entire research project (design, data collection, data analysis, and reporting) and coordinating the national conference. This project was funded by the National Science Foundation under the direction of Dr. Robert Reys. (1998-2000)

Graduate Assistant, Schools for Thought Research Project, University of Missouri. Under the direction of Dr. Helen Osana, I participated in a research project designed to examine the social construction of knowledge within a “Schools for Thought” environment. The qualitative research design entailed conducting detailed observational analyses of students as they interacted with each other and their teachers in small group and whole class settings in various classrooms at a “Schools for Thought” site. (Winter semester, 1999)

Grant Proposal Not Funded:

Co-Project Investigator. OPTIMISM: Ozarks Partnership for Improvement in Science and Mathematics, MSP-START Partnerships Grant Proposal submitted to National Science Foundation March 2008. Requested Amount of Funding: \$300,000.00, Proposed Duration of Grant: 24 months.

SERVICE

Presentations:

State-Level:

Ragan, G. A., & Herd, P. (October 2003). “Using Children’s Literature to Make Connections between Reading, Writing, and Arithmetic.” Presentation at the Learning Disabilities Association annual meeting, Branson, Missouri.

Ferguson, D. & Ragan, G. A. (March 2003). “Implementing a Standards-Based Mathematics Curriculum.” Presentation at the annual Missouri Pre-Service Mathematics Teacher Leadership Conference, Springfield, Missouri.

Regional-Level:

Glasgow, R. & Ragan, G. A. (October 2001). “Show-Me the Math: The Modeling Middle School Mathematics Project & The Show-Me Project.” Secondary Mathematics Conference hosted by the Department of Mathematics at Missouri Southern State

College; Co-sponsored by the MOKAN Regional Affiliate Group of the National Council of Teachers of Mathematics and the Pittsburg State University Department of Mathematics, Joplin, Missouri.

University-Level:

Plymate, L., Killion, K., Ragan, G., & Ashley, D. (June 2005). "The Mathematical Dumbing of America." Presentation at the Little Red Schoolhouse Summer Conference, Southwest Missouri State University, Springfield, Missouri.

Ragan, G. A., Herd, P., Ragan, K. P., Goodwin, D. R., & Crain, S. (January 2004). "Successful Collaborations between Greenwood and Other SMSU Faculty." Presentation at the Showcase on Teaching, Southwest Missouri State University, Springfield, Missouri.

Ragan, G. A. & Ragan, K. P. (November 2002). "Examples of Successful SoTL at SMSU." Fall 2002 Campus Conversations. Southwest Missouri State University, Springfield, Missouri.

Ragan, G. A. (November 2002). "Assessment and Evaluation in Education." Presentation for the English Language Institute Academic Lecture Series, Southwest Missouri State University, Springfield, Missouri.

Workshops (Regional- and Community-Level):

Ragan, G. A. & Ragan, K. P. (August 2002). "Showcase on Teaching." Southwest Missouri State University, Springfield, Missouri.

Ragan, G. A. (February 2001). "Show-Me the Math! Ideas for hosting a Math Fair." Presentation at the Southwest Missouri Mathematics Pre-service Teacher Organization ((SM)²TO) monthly meeting, SMSU Mathematics Department, Springfield, Missouri.

Ragan, G. A. (September 2002) "Show-Me the Math! Standards-Based Middle Grades Mathematics Curricula: Session 1." Workshop for the Southwest Center for Educational Excellence, Miller High School, Miller, Missouri.

Glasgow, R. & Ragan, G. A. (March 2002). "Show-Me the Math! Standards-Based Middle Grades Mathematics Curricula." Workshop at Willard Middle School, Willard, Missouri.

Ragan, G. A., Eichelberger, S., Massey, P., & Bandy, J. (January 2002) "Show-Me the Math! Standards-Based Middle Grades Mathematics Curricula: Session 3." Workshop at the Southwest Center for Educational Excellence, Webb City, Missouri.

Ragan, G. A. (January 2002) "Thinking Outside of the Box: Standards-based Middle School Mathematics" Session 3. Workshop at the Southwest Center for Educational Excellence, Webb City, Missouri.

Ragan, G. A. (November 2001) "Show-Me the Math! Standards-Based Middle Grades Mathematics Curricula: Session 2." Workshop at the Southwest Center for Educational Excellence, Webb City, Missouri.

Ragan, G. A. (November 2001) "Thinking Outside of the Box: Standards-based Middle School Mathematics" Session 2. Workshop at the Southwest Center for Educational Excellence, Webb City, Missouri.

Ragan, G. A. (September 2001) “Show-Me the Math! Standards-Based Middle Grades Mathematics Curricula: Session 1.” Workshop at the Southwest Center for Educational Excellence, Webb City, Missouri.

Ragan, G. A. (September 2001) “Thinking Outside of the Box: Standards-based Middle School Mathematics” Session 1. Workshop at the Southwest Center for Educational Excellence, Webb City, Missouri.

Ragan, G. A. (August 2001) “Changes, Challenges, Charges, and Considerations in Mathematics Education.” Presentation for Springfield Public Schools Secondary Mathematics Staff Development Day, Springfield, Missouri.

Ragan, G. A., Tetley, L., & Eichelberger, S. (February 2001). “Show-Me the Math! Standards-Based Middle Grades Mathematics Curricula: Session 3.” Workshop at the Southwest Center for Educational Excellence, Webb City, Missouri.

Missouri State University Committees:

University-Level:

Associate Professor Rank Representative for Faculty Senate. 2009-2011.

Professional Education Unit Mathematics Education Program Representative. 2006-2008; Spring 2011)

Professional Education Unit Subcommittee for Admissions, Procedures and Retention. Chair (2006-2008)

Professional Education Unit Subcommittee for Program Review. Member (2001-2002); Chair (2002-2005)

Funding for Results Grant Review Committee. (2002-2005); Chair (2004-2005)

University Bookstore Advisory Board committee member. (2002-2005).

University Faculty Evaluation Committee (2003 – 2004).

Graduate Council Ad-Hoc Committee for Faculty Credit. (Spring 2003).

College-Level:

CNAS Scholastic Appeals Committee Departmental Representative (2006)

NCATE Unit Standards Task Force #4: Standard V, Faculty Performances and Development & Standard VI, Governance and Resource. (2001-2003)

eMINTS Evaluation Research Project Consultant. (2002)

Department-Level:

Contemporary Mathematics Committee (MTH 145/130). (2005-2010; Chair 2011)

Math Education Committee (MTH 320, 343, 360, 377, 409, 410, 479, 493, 492, 610) (2005-present)

Course Evaluation Review Committee (2004-2005)

Duane G. Meyer Library School of Teacher Representative. (2004- 2005).

Seminar Paper Advisor for Jennifer Gladbach, Mathematics Department. (2003 - 2005)

Thesis Committee Chair for Marissa Wolfe, Mathematics Department. (2005).

Thesis Committee Member for Janelle McBroom (2004-2005)

Thesis Committee Member for Mary Brockman (2004-2005)

Thesis Committee Member for Linda Grisgby (2004-2005)

School of Teacher Education Elementary Education Search Committee. (2003-2004)

School of Teacher Education Director Search Committee. (2002- 2003)

Thesis Committee Member for Julia Young. (2004)

Thesis Committee Member for Zach McMains. (2003)

Thesis Committee Member for Angela Vanderen. (2003)

Thesis Committee Member for Kayla Lewis. (2002)

Thesis Committee Member for Amber Daniels. (2002)

School of Teacher Education Secondary Education Search Committee. (2001- 2002)

School of Teacher Education Departmental Director Search Committee. (2002).

School of Teacher Education (STE) Position Announcements Writing Committee. (Summer 2001)

Other Professional-, Public Education, and Community-Level Service Activities:

Evaluator. I was invited to be the evaluator of the Missouri Council of Teachers Annual Conference beginning in 2010.

Reviewer. Board of Program Reviewers for the National Council for Accreditation of Teacher Education. (2009-present)

Test Proctor. I volunteered to proctor mathematics examinations for the SMSU Pummill Math Relays, hosted by the SMSU mathematics department, for area high school mathematics students (Spring 2010).

Missouri Council of Teachers of Mathematics (MCTM) State-Level Middle Grades Mathematics Contest. Graded mathematics examinations. Springfield, Missouri. (2008; 2010).

Substitute Professor. I instructed two weeks of class sessions for Dr. Vera Stanojevic in MTH 130 (Fall 2008).

Committee Member. Wanda Gray Elementary Principal's Site Council (2009-2010).

Volunteer. Friends of Springfield-Greene County Libraries (2009-present).

Volunteer. Gray-T Reader Program for Wanda Gray Elementary School (2007-present).

Referee. As an invited referee, I evaluate manuscripts submitted to the *Mathematics Teaching in the Middle Grade*, A journal of the National Council of Teachers of Mathematics. (2000-present)

Reviewer. As an invited reviewer, I evaluate manuscripts submitted to *The Transescent*, The Journal of the Missouri Middle School Association. (2002-2006)

Faculty Representative. I was invited to serve as a faculty representative on the University Child Care Center's (UCCC) Board of Directors. (2002-2009)

Writing Team Lead Member. Missouri Council of Teachers of Mathematics Elementary and Middle School Mathematics Contest. (2005-2008).

Volunteer. I fulfill monthly responsibilities in the Alter Guild at St. James' Episcopal Church, Springfield, Missouri. (2002-2010)

Volunteer. I participate in mission projects for the community through Wesley United Methodist Church, Springfield, Missouri. (2008-present)

Faculty Representative. I volunteered to be a mathematics department representative at the Majors Fair to talk with college students interested in pursuing a career in teaching. (Fall 2005)

STE Faculty Representative on Interview Team. Presidential Scholarship Interview Day. (February 2001; 2004).

Group Leader. Leader of CASTL Faculty Network Group. (Fall 2003).

Volunteer. Faculty volunteer at the SMSU Curriculum Library Scholastic Book Fair. (2004).

STE Faculty Representative. Representative for the department, along with Dr. Fred Groves, at the annual September 11th Remembrance Tree Planting Ceremony. (September 2003).

Contributor. I was invited to contribute an article to the LDA of the Ozarks Newsletter. (May 2003).

Faculty Judge. As an invited faculty judge, I evaluated graduate student research presentations at the 10th Annual Graduate Interdisciplinary Research Forum (April 2003).

Regional Associate. I was invited to serve as a regional associate for the Show-Me Project that supports the implementation of standards-based middle grades mathematics curricula at the University of Missouri, Columbia, Missouri (2003).

Reviewer. I was invited to review the SMSU Thesis Guidelines and provide feedback for revisions based on the needs of graduate students enrolled in SFR 690. (2002)

Test Proctor. I volunteered to proctor mathematics examinations for the SMSU Pummill Math Relays, hosted by the SMSU mathematics department, for area high school mathematics students (Spring 2002).

Consultant. I served as a mathematics education professional on a mathematics retention committee for the Springfield Public Schools (2002)

Interviewer. I was invited to serve as a mathematics educator on a curriculum assistant interview team for the Springfield Public School. (2002)

Volunteer. I am a library volunteer for the Wanda Gray Elementary School. (2003-2005)

Volunteer. I am a parent volunteer for PTA sponsored activities such as the Scholastic Book Fair at the Wanda Gray Elementary School. (2003-2005).

Committee Chair. I chair the committee that organizes and hosts the yearly St. James Episcopal Church Women Christmas bazaar to raise funds for local charities during the holiday season. (2001; 2002; 2005)

Participant. I was invited by the principal investigators of the Connecting Middle School and College Mathematics (CM)² Project to attend an advisory meeting to provide input on the two main components of the project: course materials and development; and recruitment of and improvement of qualifications for middle grades mathematics teachers. (2002)

STE Faculty Representative on Interview Team. Presidential Scholarship Interview Day. (February 2002).

Master Consultant. The Missouri Middle School Mathematics Academy, Missouri Department of Elementary and Secondary Education and Department of Economic Development, Jefferson City, Missouri. As a consultant, I will be responsible for working with mathematics teachers in grades 6-8 in providing content enrichment, modeling exemplary lessons, serving as a mentor and coach, and other activities that focus on improving student achievement. (2001-2002)

Session Presider. I served as a presider for a presenter's session at the Missouri Council of Teachers of Mathematics annual meeting, Columbia, Missouri. (December 2001)

Faculty Representative. I volunteered to be a COE faculty representative at the Majors Fair to talk with college students interested in pursuing a career in teaching. (Fall 2001; 2002)

Substitute Professor. I instructed 3 class sessions for Dr. Larry Campbell in the Course MTH 479: Mathematical Tools and Structures. (Fall 2001).

Textbook Reviewer. I was invited to provide an extensive review of the text, *Helping Children Learn Mathematics* (Reys, Lindquist, Lambdin, Smith, & Suydam, 2001). (Summer 2001)

STE Faculty Representative on Interview Team. Presidential Scholarship Interview Day. (February 2001).

Undergraduate Portfolio Evaluator, University of Missouri, Department of Curriculum and Instruction. I served as a portfolio evaluator of pre-service teachers for the undergraduate mathematics education program. (Spring 2000)

Coordinator of Math Fair for Kids, University of Missouri Mathematics Teachers Organization (UM²TO). I organized a Saturday Math Fair for approximately 150 area fifth grade students with 30 activity booths created by undergraduate students, graduate students, and mathematics education faculty. In previous years, my involvement included hosting mathematical activity booths. (February, 2000)

Graduate Student Member of Search Committee, University of Missouri Department of Curriculum and Instruction. I served on three search committees for the mathematics education program area, chaired by Dr. Robert Reys. (Winter semester 2000)

Missouri Council of Teachers of Mathematics (MCTM) State-Level Middle Grades Mathematics Contest. Proctored and graded mathematics examinations. Columbia, Missouri. (1996-1999).

Professional Memberships:

National-Level:

National Council of Teachers of Mathematics (NCTM)
Association for Mathematics Teacher Educators (AMTE)

State-Level:

Missouri Council of Teachers of Mathematics (MCTM)
Missouri Mathematics Association for the Advancement of Teacher Training (MAT)²

Professional Development Activities:

Participant. *NCATE/NCTM Training Session*. (November 2006).

Participant. *Writing About Mathematics: Essential Skill in Developing Math Proficiency*. (December 2003).

Participant. *New Faculty Network Member, Division of CASTL Program*. (2002- 2003).

Participant. *CASTL Campus conversations on Teaching and Learning*. (Fall 2002).

Participant. *FrontPage Workshop*. Computer Services, SMSU. (September 2002).

Participant. *Missouri Mathematics Leadership Conference*. (April 2002)

Participant. *FrontPage Workshop*. Computer Services, SMSU. (February 2002).

Participant. *CASTL Campus conversations on Teaching and Learning*. (Spring 2002).

Participant. *New Faculty Network Member, Division of CASTL Program*. (2001- 2002).

Participant. *Show-Me Conference*. “Standards-Based Middle School Mathematics Curricula Showcase.” St. Louis, Missouri. (May 2001)

Participant. *FrontPage Workshop*. Computer Services, SMSU. (October 2001).

Participant. *MO-ARK Middle Level Conference*. “Finding Our Strength in Middle Level Education.” (September 2001).

Participant. *CASTL Campus conversations on Teaching and Learning.* (Spring 2001).

Participant. *Peer Mentoring Group.* (Spring 2001).

Participant. *Missouri Mathematics Leadership Conference.* (April 2001)

Participant. *FrontPage Workshop.* Computer Services, SMSU. (February 2001).

Participant. *Showcase on Teaching.* SMSU. (January 2001)

Participant, *National Center for Education Statistics (NCES) Seminar on the National Assessment of Educational Progress (NAEP) Databases,* Washington, D.C. (July/August, 2000)

Participant. *Show-Me Conference.* “Standards-Based Middle School Mathematics Curricula Showcase.” Branson, Missouri. (May 2000)

Participant, Supporting Secondary Standards-Based Mathematics in Missouri Project (S³M²), University of Missouri. (1997-1998)