

Eliza Dargan (Berry) Gallagher

School Address

Department of Engineering and Science Education
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235 East Queen Street
Pendleton, SC 29670
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EDUCATION

Doctor of Philosophy, Engineering and Science Education
Clemson University, Clemson, SC August 2016
DISSERTATION - On Becoming a Mathematics Graduate Student Teacher
Under the direction of Dr. Geoffrey Potvin and Dr. Lisa Benson

ABD, Mathematics
North Carolina State University, Raleigh, NC August 1998
DISSERTATION - Linearly Compact Topological Rings
Under the direction of Dr. Jo-Ann Cohen
Qualifying exams passed: abstract algebra, linear and Lie algebras, topology

Master of Science, Mathematics
North Carolina State University, Raleigh, NC December 1994
THESIS - p -adic Numbers
Under the direction of Dr. Jo-Ann Cohen

Bachelor of Science, Mathematics
North Carolina State University, Raleigh, NC May 1992
summa cum laude

PROFESSIONAL EXPERIENCE

Clemson University, Department of Engineering and Science Education Clemson, SC
Joint appointment to Department of Mathematical Sciences
Joint appointment to Department of Education & Human Development
Assistant Professor August 2016 – current

Clemson University, Department of Mathematical Sciences Clemson, SC
Coordinator of Undergraduate Studies August 2015 – August 2016
Lecturer August 2013 – August 2016
Visiting Lecturer August 2008 – August 2013

Montessori School of Anderson, Middle and High School Program Anderson, SC
High School Curriculum Director August 2006 – December 2007
Lead Mathematics Teacher August 2005 – December 2007

California State University, Department of Mathematics and Statistics Chico, CA
Associate Professor of Mathematics and Mathematics Education August 2004 – May 2006
Assistant Professor of Mathematics and Mathematics Education August 1998 – August 2004

North Carolina State University, Mathematics Department
Graduate Teaching Assistant
Graduate Research Fellow

Raleigh, NC
August 1994 – May 1998
August 1993 – August 1994

Raleigh School of Ballet, Inc.
Administrative Director
Administrative Assistant

Raleigh, NC
August 1989 – August 1993
August 1987 – August 1989

CONSULTING

McGraw-Hill Higher Education
Subject Matter Expert

Burr Ridge, IL
April 2015 – current

- Reviewing and revising current online course offerings in precalculus.
- Developing new content items for online course offerings in precalculus.

Digital Faculty Consultant

March 2013 – current

- Outreach to institutions considering course revision to incorporate digital learning products.
- Support to faculty members during pilot implementations of course redesign using digital learning products.
- Partial list of client institutions: Arizona State University, University of California-Davis, Florida State University, Virginia Commonwealth University, University of Arizona, University of North Carolina at Chapel Hill, University of Utah, Mississippi State University, University of Mississippi, University of Massachusetts, Georgia State University, Central Florida University.

WestEd

Saint Louis, MO

National Assessment of Educational Progress (NAEP) Judgmental Standards Setting 2011

- Set national cut scores for college entrance.
- Item-ordering for alignment with SAT and ACT mathematics subscores.
- One of sixteen mathematics faculty members identified through national selection process.

Instruction and Management Credentialing Program

Chico, CA

Mathematics Instruction for Bilingual Education 1999

- Delivered workshop series on mathematics instruction in elementary grades bilingual education.
- Each four-hour workshop included bilingual (English and Spanish) instructional materials and implementation strategies.
- Each four-hour workshop was delivered bilingually, two hours each in English and Spanish.

Butte County Office of Education

Oroville, CA

Project NETWorks 1999

- Delivered two full-day workshops for secondary mathematics student teachers.
- Delivered two full-day workshops for middle-grades mathematics student teachers.

MiniCorps

Chico, CA

Student Teacher Boot Camp 1999

- Delivered one full-day workshop for secondary mathematics student teachers.
- Delivered one full-day mathematics workshop for elementary grades student teachers.

COMPUTER AND SOFTWARE SKILLS

Adobe Acrobat, Adobe Photoshop, ALEKS, Blackboard, HTML Markup, Internet Native Banner, JMP, LaTeX, Maple, Mathematica, MATLAB, Microsoft Office Suite, Adobe Muse, MyMathLab, R, RQDA, Quicken, WEAVE

CERTIFICATIONS

Responsible Conduct of Research Certification

Collaborative Institutional Training Initiative www.citiprogram.org
Certification number 18874093

Conflict of Interest Certification

valid through February 28, 2020

Collaborative Institutional Training Initiative www.citiprogram.org
Certification number 18873857

Principal Investigator Certification

valid through September 30, 2018

Certified through Clemson University Office of Sponsored Programs

Group 1 Human Subjects Certification

valid through February 8, 2018

Collaborative Institutional Training Initiative www.citiprogram.org
Certification number 13703372

First Dahn Black Belt

received April 2016

Kuk Sool Won Association
International Identification Number A-21541

HONORS AND AWARDS

Best Paper, Mathematics Division

June 2016

2016 American Society of Engineering Education Annual Conference and Exhibition
"The Use of Case Studies in Preparing First-Year Mathematics Graduate Teaching Assistants"

Difference Makers Project

Fall 2012

Clemson University, Clemson, SC
Recognition as a faculty member or mentor who has made a positive difference to on-campus students

Football Program Faculty Appreciation Dinner

Spring 2012

Clemson University, Clemson, SC
Invited by two separate football players enrolled in my mathematics courses

Outstanding Service to Graduate Students

Spring 2011

Department of Mathematical Sciences, Clemson University, Clemson, SC
For excellence in mentoring graduate teaching assistants

Recognition of Excellence

2006

Praxis II: Mathematics Content Knowledge
Educational Testing Service

<i>Recognition of Excellence</i> Praxis II: Principles of Teaching and Learning, Grades 7 – 12 Educational Testing Service	2006
<i>Presidential Visiting Scholar</i> Trinity University, San Antonio, TX Cross-disciplinary series of talks for mathematics, mathematics education, and teacher preparation programs	Spring 2002
<i>Honorary Service Award</i> Chico Unified School District, Chico, CA For development of mathematics instructional partnerships with area schools	May 2001
<i>Winton-Rose Award</i> Mathematics Department, North Carolina State University, Raleigh, NC For outstanding graduate research in mathematics	Spring 1997
<i>Preparing the Professoriate Teaching Award</i> North Carolina State University, Raleigh, NC University-wide graduate teaching award	Spring 1996
<i>Maltbie Award</i> Mathematics Department, North Carolina State University, Raleigh, NC Top teaching award for graduate students in mathematics	May 1995
<i>University Outstanding Graduate Teaching Award</i> North Carolina State University, Raleigh, NC Top university award for graduate student teaching	May 1995
<i>Graduate School Merit Fellowship</i> North Carolina State University, Raleigh, NC One-year, non-renewable research fellowship on the basis of outstanding potential for research	1993 – 1994
<i>Honorable Mention</i> National Science Foundation Graduate School Fellowship Program	Spring 1994

PUBLICATIONS

Refereed Journal Publications

- (under review) Gallagher, E., “A Fallacy-Based Course in Statistical and Probabilistic Reasoning for K – 8 Teachers,” submitted to *Mathematics Teacher Educator*
- Cohen, J. and Berry, E., “Linearly Compact Rings Having a Simple Group of Units,” *Communications in Algebra*, **28**, 2131-2140 (2000).

Refereed Conference Proceedings

- Gallagher, E., Benson, L. and Potvin, G. “The Use of Classroom Case Studies in Preparing First-Year Mathematics Graduate Teaching Assistants,” *Proceedings of the 2016 American Society of Engineering Education Annual Conference and Exposition*, New Orleans, LA (June 2016). Named **Best Paper in the Mathematics Division**.
- Gallagher, C. and Gallagher, E., “Have You Talked to a Child About Statistics Recently? Interviews, Statistics, and Teacher Preparation,” *Proceedings of the 4th Hawaii International Conference on Statistics and Related Fields*, Honolulu, HI (June 2003).

- Lawson, J. and Berry, E., “Two-part testing in first-year calculus,” *Project Kaleidoscope (P-KAL) Roundtable on the Future: Assessment in the Service of Student Learning*, Durham, NC (2002). www.pkal.org/documents/EssayonAssessmentTwoPartTesting.cfm

Research Reports

- Berry, E., Harger, R., Hessinger, S., and Okten, G., “Average Complexity of Buchberger’s Completion Algorithm,” Claremont Colleges, *Report of the Mathematics Modeling Workshop for Graduate Students*, National Science Foundation (June 1994).

Other Publications

- Berry, E. and Lawson, J., “Writing Mathematics,” (Fall 1996) freely available online through the Mathematical Association of America, www.maa.org/programs/faculty-and-departments/curriculum-department-guidelines-recommendations/cupm/illustrative-resources/develop-mathematical-thinking

PROFESSIONAL PRESENTATIONS

Conference Presentations

- Gallagher, E., “‘I Teach’ Versus ‘I Am a Teacher’: The Role of Identity in Graduate Student Professional Development,” 2017 Joint Mathematical Meetings, 20-minute **invited** presentation within the AMS Special Session on Teaching Assistant Development Programs: Why and How?, Atlanta, GA (January 2018). (Upcoming)
- Patel-Desai, K., **Gallagher, E.**, Dancz, C., Plumblee, J., and Watson, C., “To Work or Not To Work? Understanding How Natural Work Habits Can Help or Hurt Students in Self-Paced Courses,” 2017 Joint Mathematical Meetings, 15-minute **refereed** session within the MAA Session on Innovative Strategies to Inspire & Prepare Potential STEM Majors Who Are Not Yet Ready for Calculus, Atlanta, GA (January 2018). (Upcoming)
- Gallagher, E., “The Use of Classroom Case Studies in Preparing First-Year Mathematics Graduate Teaching Assistants,” 2016 American Society of Engineering Education Annual Conference and Exposition, 20-minute **refereed** session, New Orleans, LA (June 2016).
- Gallagher, E., “Four+ Years Out On Precalculus Course Redesign at Clemson University,” American Mathematical Association of Two-Year Colleges (AMATYC) 41st annual national conference, 90-minute **sponsored** session, New Orleans, LA (November 2015).
- Gallagher, E., “From Misery to Mastery: Transforming Precalculus at Clemson,” Tennessee Mathematical Association of Two-Year Colleges (TMATYC) 14th annual meeting, 50-minute **invited** session, Gallatin, TN (March 2015).
- Gallagher, E., “From Misery to Mastery: Restructuring Precalculus at Clemson University,” Mathematical Association of America sectional meeting, 50-minute **sponsored** session, Rock Hill, SC (March 2013).
- Fisher, W. and Gallagher, E., “Preparing Secondary Mathematics Teacher Leaders,” National Council of Supervisors of Mathematics national meeting, 60-minute **refereed** session, San Antonio, TX (April 2003).
- Fisher, W. and Gallagher, E., “Changing the Percentages: Developing Proportional Reasoning,” California Mathematics Council – North, 60-minute **invited** session, Monterey, CA (December 2002).
- Berry, E., “Learning and Teaching: Secondary Mathematics,” Face-to-Face Mathematics Educators’ Retreat, 90-minute **invited** session, Asilomar, CA (April 2002).

- Fisher, W. and Gallagher, E., “Changing the Percentages: Developing Proportional Reasoning,” National Council of Teachers of Mathematics national meeting, 90-minute **refereed** workshop, Las Vegas, NV (April 2002).
- Fisher, W. and Berry, E., “The Chico Mathematics Project ... and More!,” Mount Lassen Mathematics Council annual meeting, 60-minute **invited** session, Redding, CA (October 2001).
- Cushing, K., Kerrins, J., Berry, E., Steumpfig, D., Stemen, M., and Keegan, M., “How Would I Know Good Teaching if I Saw It?” Center for Excellence in Learning and Teaching (CELT) Conference, 90-minute **refereed** workshop, Chico, CA (September 2001).
- Fisher, W. and Berry, E., “Preparing Mathematics Teacher Leaders,” National Council of Teachers of Mathematics national meeting, 60-minute **refereed** session, Orlando, FL (April 2001).
- Berry, E., Fisher, W., and Artzt, A., “Cohort Models for the Preparation of Secondary Mathematics Teachers,” Association of Mathematics Teacher Educators national meeting, 60-minute **refereed** session, Costa Mesa, CA (January 2001).
- Fisher, W., and Berry, E., “Coming Attractions,” Mount Lassen Mathematics Council annual meeting, 60-minute **invited** session, Chico, CA (October 2000).
- Fisher, W., and Berry, E., “Aligning Secondary Teacher Preparation Programs to Standards 2000,” National Council of Teachers of Mathematics national meeting, **refereed** poster session, Chicago, IL (April 2000).
- Berry, E., and Mavis, M., “Preparing Your Students for the Entry-Level Mathematics Test,” Mount Lassen Mathematics Council annual meeting, 60-minute **invited** session, Redding, CA (October 1999).
- Berry, E., “I’ve Got a Secret,” Mount Lassen Mathematics Council annual meeting, 60-minute **invited** session, Redding, CA (October 1999).
- Berry, E. and Callahan, R., “Mathematics for Preservice Elementary Teachers,” Center for Excellence in Learning and Teaching (CELT) Conference, 60-minute **refereed** session, Chico, CA (September 1999).
- Berry, E., “All triangles are isosceles: an introduction to the p -adics,” Mount Lassen Mathematics Council annual meeting, 60-minute **refereed** session, Chico, CA (October 1998).
- Lawson, J. and Berry, E., “Two-part testing in first-year calculus courses,” Mathematical Association of America Southeastern Sectional Meeting, 20-minute **contributed** session, San Marcos, TX (March 1998).
- Berry, E., “Involutions in a linearly compact ring,” American Mathematical Society national meeting, 10-minute **contributed** session, Baltimore, MD (January 1998).
- Berry, E., “Locally bounded field topologies,” Mathematical Sciences Research Institute Julia Robinson Celebration of Women in Mathematics Conference, **refereed** poster session, Berkeley, CA (July 1996).

Symposia and Colloquia

- Gallagher, E., “Five Years Out on Precalculus Redesign at Clemson,” Arizona State University, Phoenix, AZ (March 2016).
- Gallagher, E., “All triangles are isosceles: an introduction to the p -adics,” Clemson University Math Club, Clemson, SC (October 2015).
- Gallagher, E., “Four Years Out: Redesigning Precalculus at Clemson,” Cuyahoga Community College, Cleveland, OH (March 2015).
- Gallagher, E., “Four Years Out: Redesigning Precalculus at Clemson,” San Diego State University Mathematics Colloquium Series, San Diego, CA (March 2015).
- Berry, E., “All triangles are isosceles: an introduction to the p -adics,” Trinity University Majors Seminar, San Antonio, TX (January 2002).

- Berry, E., “Okay, so now we’ve got ’em ... what do we do with ’em? Implementing state and national standards in the mathematics classroom,” Trinity University Joint Mathematics – Education Colloquium Series, San Antonio, TX (January 2002).
- Berry, E., “Alien Mathematics,” Trinity University Elementary Mathematics Colloquium Series, San Antonio, TX (January 2002).
- Berry, E. and Early, K., “What Math Does MathLinks Link?” CSU-Chico Mathematics Education Seminar Series, Chico, CA (October 2001).
- Berry, E. and Fisher, W., “What’s the Difference Between Project MATH and the Math Project?” CSU-Chico Mathematics Education Seminar Series, Chico, CA (October 2001).
- Berry, E., “All triangles are isosceles: an introduction to the p -adics,” CSU-Chico Math Club, Chico, CA (May 2000).
- Berry, E., “Compact and Linearly Compact Topological Rings,” CSU-Chico Mathematics Colloquium, Chico, CA (April 2000).
- Berry, E., “All triangles are isosceles: an introduction to the p -adics,” High Point University Mathematics Series, High Point, NC (March 1998).
- Berry, E., “Linearly compact topological rings,” North Carolina State University Algebra Seminar, Raleigh, NC (March 1997).
- Berry, E., “All triangles are isosceles: an introduction to the p -adics,” Davidson College Mathematics Colloquium Series, Davidson, NC (October 1996).

Focus Groups and Panel Sessions

- “Precalculus Strategies Focus Group,” American Mathematical Association of Two-Year Colleges (AMATYC) 41st annual national meeting, presenter and panelist, two-hour session, New Orleans, LA (November 2015).
- “Placement and Preparation for Learning Focus Group,” American Mathematical Association of Two-Year Colleges (AMATYC) 41st annual national meeting, presenter and panelist, two-hour session, New Orleans, LA (November 2015).
- “Recruitment, selection, and leadership development of secondary mathematics teachers,” California Mathematics Project Directors’ Meeting, panel organizer and panelist, two-hour session, San Diego, CA (February 2002).

SPONSORED WORK

Externally Funded Programs, Total Awarded: \$1,557,221

- PI, “Montessori School of Anderson High School Construction,” planning and development grant, Nord Foundation, \$50,000 (2006 – 2007).
- PI, “Children’s Probabilistic and Statistical Thinking,” CSU Office of the Chancellor, \$5,000 (2004).
- PI, “MathLinks,” State of California Precollegiate Academic Development Fund
 - \$38,140 (2002 – 2003)
 - \$40,360 (2001 – 2002)
 - \$40,280 (2000 – 2001)
 - \$40,280 (1999 – 2000)

- co-PI, “Project MATH (Mathematics And Teaching on the Horizon),” Department of Education Fund for the Improvement of Post-Secondary Education (FIPSE), \$252,030 (1999 – 2003).
<http://fipsedatabase.ed.gov/fipse/grantshow.cfm?grantNumber=P116D990273>
- co-PI, “Chico Mathematics Project,” State of California.
 - \$149,000 (2002 – 2003)
 - \$170,000 (2001 – 2002)
 - \$160,000 (2000 – 2001)
 - \$138,200 (1999 – 2000)
- co-PI, “Professional Development Institutes,” State of California.
 - \$100,500 (2002 – 2003)
 - \$200,500 (2001 – 2002)
 - \$70,000 (2000 – 2001)
- PI, “Examination of the California High School Exit Exam,” State of California, \$10,000 (2001 – 2002).
- co-PI, “Best Practices in the Preparation of Preservice Mathematics Teachers,” State of California, \$10,000 (2001 – 2002).
- co-PI, “Mathematics Instructional Partnerships,” State of California, \$10,000 (2001 – 2002).
- PI, “Website Development for the Chico Mathematics Project” State of California, \$5,000 (2001 – 2002).
- co-PI, “Academic Preparation Initiative,” State of California, \$67,431 (2000 – 2001).
- PI, Calculator Workshop Grant, Texas Instruments, \$500 (1999).

Internally Funded Programs, Total Awarded: \$9,190

- PI, “Teaching Mathematics at Clemson University,” Creative Inquiry Program, Clemson University.
 - \$1,500 (2015 – 2016)
 - \$1,200 (2014 – 2015)
- PI, “Conference in Statistics Education,” planning grant, California State University Faculty Development Program, \$5,000 (2004).
- Travel grant, California State University Center for Excellence in Teaching and Learning, \$300 (1998).
- Travel grant, California State University College of Natural Sciences Development Fund, \$390 (1998).
- PI, “Linearly compact topological rings,” Graduate Student Research Grant, North Carolina State University Mathematics Department, \$800 (Summer 1994).

Externally Funded Programs Pending: \$492,438

- PI, “Teacher Identity Formation among MAthematics Graduate Students (TIFMaGS),” submitted to the National Science Foundation Division of Education and Human Resources: Core Research program, \$492,438 for a 36-month project to develop a reliable and valid instrument for measuring teacher identity among mathematics graduate students. Submitted September 8, 2016. 100% allocation.

GRADUATE STUDENTS

Doctoral Students – Primary Advisor

Aubrie Pfirman, Engineering and Science Education
Clemson University, Clemson, SC anticipated May 2018
DISSERTATION: Factors influencing persistence to the Ph.D. among students of color in science

Khushikumari Pate-Desai, Engineering and Science Education
Clemson University, Clemson, SC anticipated May 2019
DISSERTATION: To Be Determined

Staci Johnson, Engineering and Science Education
Clemson University, Clemson, SC anticipated May 2020
DISSERTATION: To Be Determined
Current Employment: Asst. Professor of Biology, Southern Wesleyan University, Central, SC

Tony Nguyen, Engineering and Science Education
Clemson University, Clemson, SC anticipated May 2020
DISSERTATION: To Be Determined
Current Employment: Lecturer in Mathematics, Clemson University, Clemson, SC

TEACHING

Course Taught: Clemson University

- ESED 9910, Dissertation Research and Writing, F16
- MATH 1020, Introduction to Mathematical Analysis, S09, F09
- MATH 1030, Elementary Functions, F08, S10, S11, S12
- MATH 1050, Precalculus, F08, F09, S10, F10, S11, F11, S12, F12, S13, F14, S15, F15
- MATH 1060, Calculus of One Variable I, S09
- MATH 3080, College Geometry, S14, S15, S16
- MATH 4080, Analysis and Exploration of Secondary Mathematics, F14, F15, F16
- MATH 4820, Undergraduate Research, S16, F16
- MATH 4910, Independent Study, S16
- MATH 4920, Professional Development, S16, Sum16
- MATH 4990, Creative Inquiry in Mathematics, F14, S15, F15, S16

Courses Taught: California State University, Chico

- MATH 110, Concepts and Structures of Mathematics I, F98, S99, F99, F00, S01
- MATH 111, Concepts and Structures of Mathematics II, S99, F99, S00, S04
- MATH 115, MathLinks Seminar (Primary), F99, S00, F00, S01, F01, S02, F02, S03, S04
- MATH 116, MathLinks Seminar (Intermediate), F99, S00, F00, S01, F01, S02, F02, S03, S04
- MATH 195, Project MATH Seminar, Year 1, F00, S01, F01, S02, F02, S03
- MATH 241, Secondary Math Early Field Experience, F00, S01, F01, S02, F02, S03
- MATH 295, Project MATH Seminar, Year 2, F01, S02, F02, S03
- MATH 310, Patterns and Structures in Mathematics, F99, S04
- MATH 311, Intuitive Foundations of Geometry, S00
- MATH 333, History of Mathematics, S99
- MATH 341, Mathematical Topics for the Credential I, F99, F00
- MATH 342, Mathematical Topics for the Credential II, S00, S01
- MATH 344, Combinatorial Mathematics and Graph Theory, S01

- MATH 401, CMP Institute I, F99, F00, F01, F02
- MATH 405, CMP Institute-SP, Su99, Su00, Su01, Su02, Su03, Su04
- MATH 407, CMP Institute II, S00, S01, S02, S03
- MATH 435, Linear Algebra, F99
- MATH 437, Topology, S99
- MATH 441, Mathematical Topics for the Credential III, F00, S01, S02
- MATH 442, Mathematics and the Teaching of Mathematics, S01, S03
- MATH 449, Modern Algebra, S00
- MATH 640, Topics in Mathematics for Secondary Teachers: Modern Algebra, Su01
- MATH 650, Topics in Mathematics for Secondary Teachers: Probability and Statistics, Su04

Courses Taught: North Carolina State University

- MA 103, Topics in Contemporary Mathematics, F94, S95
- MA 141, Calculus I, F95, S96
- MA141L, Maple Laboratory for Calculus 1, F97, S98
- MA 225, Foundations of Advanced Mathematics, S97

CURRICULUM DEVELOPMENT

Semester-Length Courses

- MATH 4990, Creative Inquiry in Mathematics, Clemson University. Target audience: preservice secondary mathematics majors. Content: pedagogical content knowledge for precalculus, effective implementation of online hybrid instruction, practical experience assisting in precalculus courses at Clemson University.
- MATH 115, MathLinks Seminar (Primary), CSU-Chico. Target audience: preservice elementary teachers. Content: pedagogical content knowledge for grades K – 2 mathematics, assessment of student thinking in K – 2 mathematics, practical experience as in-class K – 2 mathematics tutor at Mathematics Instructional Partnership school.
- MATH 116, MathLinks Seminar (Intermediate), CSU-Chico. Target audience: preservice elementary teachers. Content: pedagogical content knowledge for grades 3 – 5 mathematics, assessment of student thinking in 3 – 5 mathematics, practical experience as in-class 3 – 5 mathematics tutor at Mathematics Instructional Partnership school.
- MATH 195, Project MATH Seminar, Year 1, CSU-Chico. Target audience: freshmen preservice secondary mathematics teachers participating in Project MATH cohort experience. Content: introduction to pedagogy, introduction to assessment, introduction to student strategies in secondary mathematics, introduction to principles and standards of school mathematics, introduction to exemplary secondary mathematics curricula.
- MATH 241, Secondary Math Early Field Experience, CSU-Chico. Target audience: preservice secondary mathematics teachers serving as in-school mathematics tutors at Mathematics Instructional Partnerships schools. Content: mathematical content of partner classrooms, assessment of student thinking, effective tutoring strategies.
- MATH 295, Project MATH Seminar, Year 2, CSU-Chico. Target audience: sophomore preservice secondary mathematics teachers participating in Project MATH cohort experience. Content: continuation of MATH 195.
- MATH 401, Chico Mathematics Project Institute I, CSU-Chico. Target audience: practicing K – 12 teachers of mathematics. Content: state and national standards in school mathematics, algebraic thinking, pedagogical strategies, assessment of student work in algebraic thinking, teacher leadership development.
- MATH 403, Math Project Implementation, CSU-Chico. Target audience: practicing K – 12 teachers of mathematics. Content: continuation of MATH 401, action research in algebraic thinking.

- MATH 405, Chico Mathematics Project Institute II, CSU-Chico. Target audience: practicing K – 12 teachers of mathematics. Content: state and national standards in school mathematics for geometry and measurement, pedagogical strategies, assessment of student work in geometry and measurement, teacher leadership development.
- MATH 407, Math Project Implementation II, CSU-Chico. Target audience: practicing K – 12 teachers of mathematics. Content: continuation of MATH 401, action research in geometry and measurement.
- MATH 640, Topics in Mathematics for Secondary Teachers: Modern Algebra, CSU-Chico. Target audience: practicing secondary mathematics enrolled in Master of Arts in Teaching program. Content: groups, rings, and fields with an emphasis on historical development of quadratic and cubic formulas, Galois theory as it connects to quintic equations and inability to produce a quintic formula.
- MATH 650, Topics in Mathematics for Secondary Teachers: Probability and Statistics, CSU-Chico. Target audience: practicing middle grades and secondary mathematics teachers enrolled in the Master of Arts in Teaching program. Content: probabilistic and statistical fallacies, combinatorial techniques, probability axioms, random variables, expected value, discrete and continuous distributions, conditional probability, prior and posterior probabilities, law of large numbers, central limit theorem, variance, analysis of student thinking in probability and statistics.

Short Courses and Institutes

- “Math Secrets: Introduction to Cryptography,” Clemson University Summer Science Program, one-week institute for rising 9th-12th graders (Summer 2009).
- “Most Powerful Force: Exploration of Exponentials,” Clemson University Summer Science Program, one-week institute for rising 9th-12th graders (Summer 2009).
- “Math Chat,” component of CSUC-Pleasant Valley High School Academic Preparation Initiative Partnership, weekly seminar series for secondary mathematics teachers and university mathematics faculty, (2000 – 2002)
- “Number Sense Strand of California Mathematics Framework (Grades K – 3),” 1-week summer institute for practicing elementary grades teachers (June 2001)
- “Teacher Leadership Academy: Proportional Reasoning,” 1-week summer institute for practicing teachers in grades 4 – 8 (June 2001)
- “Number Sense Strand of California Mathematics Framework (Grades 4 – 6),” 1-week summer institute for practicing elementary grades teachers (June 2001)
- “Algebra I Professional Development Institute,” 1-week summer institute for practicing middle grades and secondary mathematics teachers (June 2001)
- “Teacher Leadership Academy: Algebraic Thinking,” two weekend retreats each semester and 1-week summer institute for practicing teachers grades K – 12 (July 1999 – June 2000)
- “Patterns, Functions, and Algebra for Middle School Teachers,” 1-week summer institute for practicing middle grades mathematics teachers (Summer 2000).
- “Towards SAM (Supplementary Authorization in Mathematics),” 1-week summer institute as part of an alternate pathways to teaching program (July 1999)

Workshops

- Cox, C. and Gallagher, E., “Jumpstarting Your Success in Mathematics at Clemson,” one-hour session for incoming freshmen, Clemson, SC (August 2015).
- Gallagher, E. and Rosecrance, R., “Proposal Working Session: Internal and External Funding,” Workshop Series for New Faculty Members, California State University-Chico, two-hour workshop, Chico, CA (February 2003).
- Berry, E. and Daley, C., “Surviving the first year,” Workshop Series for New Faculty Members, California State University-Chico, two-hour workshop, Chico, CA (September 2002).

- Berry, E. and Tombaugh, D., “Funding Opportunities Through the Internet: Using SPIN/SMARTS,” Research Mentoring Program for New Faculty Members, California State University-Chico, two-hour workshop, Chico, CA (October 2001).

SERVICE

Service to the Profession

- California Mathematics Project Directors Council, Site Co-Director. STATEWIDE: California (1999 – 2004).
- Secondary Mathematics Teacher Credential Program, Credential Advisor. REGIONAL: Northern California (1999 – 2004).
- Professional Development Institutes Directors Council, Site Co-Director. REGIONAL: Northern California (2000 – 2004).
- Integrated Teaching Core, Field Supervisor. LOCAL: Chico, California (2002 – 2003).
- California Mathematics Project, Faculty Advisor. STATEWIDE: California (2000 – 2001).
- Academic Preparation Initiative Directors Council, Site Co-Director. STATEWIDE: California (2000 – 2001).
- Mathematics Task Force, member. REGIONAL: Northern California (2000 – 2001).
- Psychology of Mathematics Education - North America, Working Group on Gender in Mathematics, member. INTERNATIONAL: North America (1998 – 1999).
- Joint Online Liberal Studies Program, Steering Committee member. REGIONAL: Northern California (1999 – 2000).

Service to the University

- Search Committee for Associate Dean of Engagement and General Education, Member, Clemson University (2016-2017)
- Bridge to Clemson, Academic Advisor, Clemson University (2015 – 2016).
- First Semester Academic Progress Program, Mentor, Clemson University (2009 – 2014).
- Mathematics Excellence Workshop, seminar leader, Clemson University (Summer 2012).
- Presidential Visiting Scholar Proposal Review Committee, Member, CSU-Chico (2001 – 2003).
- New Faculty Cohort, Faculty Mentor, CSU-Chico (2001 – 2003).
- Konkow Residence Hall Faculty Advisors Council, Member, CSU-Chico (2000 – 2003).
- Research and Sponsored Programs Committee, Member, CSU-Chico (2000 – 2003).
- Book in Common Selection Committee, Member, CSU-Chico (2001 – 2002).
- Subject Matters Projects Directors Council, Member, CSU-Chico (1999 – 2002).
- Summer Orientation, Faculty Advisor, CSU-Chico (1999 – 2002).
- Early Placement Test/Entry Level Mathematics Committee, Member, CSU-Chico (1999 – 2001).
- Integrated Teaching Core Panel, Member, CSU-Chico (2000 – 2001).
- Writing Successful External Grant Proposals Material Development Project, Review Panel Member, CSU-Chico (Spring 2001).
- Search Committee for Manager of Proposal Development Unit for the Office of Sponsored Programs, Member, CSU-Chico (Spring 2000).
- Pacific Gas & Electric Scholarship Selection Committee, Member, CSU-Chico (Spring 2000).

Service to the College

- Search Committee for Associate Dean of Research and Graduate Studies, Member, College of Engineering, Computing & Applied Sciences, Clemson University (2016-2017)
- Graduate Council, Member, College of Education, Clemson University (Fall 2016)

Service to the Department

- Undergraduate Affairs Committee, **Chair**, Department of Mathematical Sciences, Clemson University (2015 – 2016).
- Math Science Council, Member, Department of Mathematical Sciences, Clemson University (2015 – 2016).
- MATH 1050 Course Coordinator, Department of Mathematical Sciences, Clemson University (Spring 2010 – Spring 2015).
- Strategic Planning Committee, **Chair**, Department of Mathematics and Statistics, CSU-Chico (2001 – 2002).
- Curriculum Committee, **Chair**, Department of Mathematics and Statistics, CSU-Chico (2001 – 2002).
- Scholarships and Awards Committee, **Chair**, Department of Mathematics and Statistics, CSU-Chico (1999 – 2000).
- Scholarships and Awards Committee, Member, Department of Mathematics and Statistics, CSU-Chico (1998 – 1999, 2000 – 2003).
- Mathematics Education Committee, Member, Department of Mathematics and Statistics, CSU-Chico (1998 – 2004).
- Budget Committee, Member, Department of Mathematics and Statistics, CSU-Chico (2001 – 2002).
- Undergraduate Summer Research Grant, Faculty Mentor, Department of Mathematics and Statistics, CSU-Chico (Summer 2001).
- Faculty Merit Increase Committee, Member, Department of Mathematics and Statistics, CSU-Chico (2000 – 2001).
- Search Committee for Director of Developmental Mathematics, Member, Department of Mathematics and Statistics, CSU-Chico (2000 – 2001).
- Curriculum Committee, Member, Department of Mathematics and Statistics, CSU-Chico (2000 – 2001).
- Math Club, Faculty Advisor, Department of Mathematics and Statistics, CSU-Chico (1999 – 2000).
- Strategic Planning Committee, Member, Department of Mathematics and Statistics, CSU-Chico (1998 – 2001).
- Equipment Committee, Member, Department of Mathematics and Statistics, CSU-Chico (1998 – 1999).

Outreach

- Math Field Day, annual outreach event for 6th-graders throughout northern California, organizer, Chico, CA (May 2000, 2001, 2002, 2003)
- Expanding Your Horizons, annual outreach event for 10th-grade girls throughout northern California, organizer, Chico, CA (January 2000, 2001, 2002, 2003)
- “What’s Hot!,” Counselor’s Update, California State University-Chico, 30-minute session, Chico, CA (March 2000).
- “Math! What, Me Worry?” Community Action Volunteers in Education, 3-hour workshop, Chico, CA (May 1999, October 1999, April 2000)
- “A Talk to Die For,” Math Field Day, one-hour session, Chico, CA (May 1999).
- “Effective Mathematics Intervention,” Teacher Credential Program, 1-day workshop, Chico, CA (May 1999)
- “I’ve Got a Secret!” Expanding Your Horizons, one-hour session, Chico, CA (January 1999).

Service to the Community

- Chess Team Coach, Clemson Elementary School, Clemson, SC (2014 – current).
- Community Advisory Board, Anderson School District 4, Anderson County, SC (2009 – 2010).
- MathCounts Faculty Advisor, Montessori School of Anderson, Anderson, SC (2006 – 2007).

PROFESSIONAL DEVELOPMENT

Faculty Mentoring Program 2016-2017
Clemson University, Clemson, SC
Mentee participant in a year-long faculty mentoring program

Precalculus to Calculus: Insights and Innovations June 2016
University of Saint Thomas, Saint Paul, MN
Directed by David Bressoud with funding from the National Science Foundation and the Mathematical Association of America
Three-day conference and two-day workshop on precalculus and calculus curricular innovations and teaching practice

MAA CoMInDS Summer Workshop June 2016
University of Maine, Orono, ME
Directed by Natasha Speer and Dave Kung, with funding from the National Science Foundation and the Mathematical Association of America
Three-day workshop on mathematics graduate student professional development program design

Interpretive Phenomenological Analysis January 2016
Clemson University, Clemson, SC
Directed by James Huff
Three-hour workshop on interview analysis through an interpretive phenomenological lens, including hands-on practice

College Educators Investigating Childrens Mathematical Thinking June 2002
San Diego State University, San Diego, CA
Directed by Randolph Phillip with funding from the National Science Foundation
One-week institute including review of relevant research, hands-on practice interviewing children about mathematical reasoning, coding interviews transcripts, and discussion of results

Teaching Undergraduate Geometry June 1999
Cornell University, Ithaca, NY
Directed by David Henderson with funding from the National Science Foundation
One week institute including content development for Euclidean and non-Euclidean geometries, analysis of student work, and discussion of effective teaching strategies for undergraduate geometry

TIMMS Workshop January 1999
Redding, CA
Directed by William Schmidt with funding from the Chico Mathematics Project
One day workshop on results from the Third International Mathematics and Science Study with discussion of implications for classroom practice in grades K – 12

Teacher Leadership Academy October 1998 – May 1999
Chico, CA and Redding, CA Directed by William Fisher with funding from the Chico Mathematical Project

Seven-month academy with three weekend retreats and a three-week summer institute, focused on development of effective pedagogical content knowledge for mathematics instruction in grades K – 12 and of leadership skills for transformation of school community

Cooperative Learning Workshop September 1998
CSU-Chico, Chico, CA
Organized by Center for Excellence in Learning and Teaching
Half-day workshop on implementing cooperative learning strategies in college courses

Linear Algebra with an Interactive Text January 1998
Baltimore, MD
Organized by Eugene Herman, Michael Pepe, Robert Moore, and Jim King
Two-hour workshop at Joint Mathematics Meetings

Active and Interactive Teaching Techniques in the Mathematics Classroom January 1997
San Diego, CA
Organized by Phyllis Chinn and Dale Oliver
Two-hour minicourse at Joint Mathematics Meetings

Preparing the Professoriate August 1996 – May 1998
North Carolina State University, Raleigh, NC
Faculty mentor: Jo-Ann Cohen
Two-year program designed to prepare graduate students for success in faculty positions. Program components included grant-writing, preparation of professional materials, shadowing faculty mentor in committee duties, opportunities to teach more advanced coursework, monthly seminar series on balancing professional duties in academics

PROFESSIONAL MEMBERSHIPS

- American Educational Research Association
- American Mathematical Society
- American Society of Engineering Education
- Mathematical Association of America
- National Council of Measurement in Education
- National Council of Teachers of Mathematics
- Psychology of Mathematics Education - North America