## Carolyn Mitten, Ph.D.

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## **Education**

**Doctorate of Philosophy, Curriculum & Instruction, Mathematics Education,** August 2017 *University of Florida,* Gainesville, FL

Masters of Education, Teaching & Curriculum, Mathematics Education, August 2012 *Pennsylvania State University*, Harrisburg, PA

**Bachelor of the Arts, Mathematics** cum laude, May 2008 *Messiah University,* Grantham, PA Pennsylvania State Certification, Level II, Grades 7-12

### **TEACHING**

### Assistant Professor of Education, 2019-Present

Westmont College, Department of Education, Santa Barbara, CA

- Courses Taught:
  - o ED100/101 Explorations in Teaching
  - o ED109 Liberal Studies Seminar
  - o ED110/111 Educational Psychology
  - o ED150 Mathematics Instruction for All Students in Diverse Elementary Classrooms
  - o ED160/161 Technology for the Classroom Teacher
  - o ED170 Literacy Instruction for All Students in Diverse Elementary Classrooms
  - o ED190/195 Elementary Student Teaching Seminar
  - o ED191/196 Secondary Student Teaching Seminar
  - o MA009 Calculus I
  - MA160 Fundamentals of Mathematics I
- Supervision:
  - Place single subject and multiple subject candidates in local classrooms and communicate with their cooperating teachers and administrators.
  - Conduct weekly observations for multiple subject candidates and single subject candidates across content areas. Provide ongoing feedback on lesson plans and assessments and provide support for the submission of CalTPA portfolios.
  - o Submit documentation for multiple and single subject teacher candidates.
- Advising:
  - Advise 20-30 to liberal studies majors interested in elementary education and 10-15 education minors/students interested in secondary education..

## **Assistant Professor of Education**, 2017-2019

Moravian University, Department of Education, Bethlehem, PA

- Courses Taught:
  - o EDUC312 Data-Driven Analysis Research
  - o EDUC322 PreK-4 Mathematical Thinking
  - o EDUC332 Math for Middle Level Learners
  - o EDUC362 Curriculum and Instruction in Mathematics (Secondary)
  - o MATH125 Topics in Math for Teaching
  - o EDUC620 A Constructivist Approach to Teaching Mathematics

- Supervision:
  - O Support and guide early childhood, elementary, middle, and secondary candidates across all subject areas through weekly classroom visits.
  - o Submit official documentation to the state regarding student teaching experiences.
- Advising:
  - Serve as advisor to all undergraduate and graduate teacher candidates with expressed interest in mathematics education.
  - o Appointed first-year mentor for incoming freshmen students interested in education.

### **Instructor**, 2014-2017

University of Florida, School of Teaching and Learning, Gainesville, FL

- Courses Taught:
  - MAE3312 Mathematics Content and Methods for Teaching Mathematics in the Inclusive Elementary Classroom
  - MAE5396 Formative Assessment for Mathematics Instruction

### **Adjunct Instructor**, 2013

Messiah College, Department of Math, Physics, and Statistics, Mechanicsburg, PA

• Course Taught: MATH107 Applied Math for Management

### **Adjunct Instructor**, 2013

Penn State Harrisburg, Department of Behavioral Sciences and Education, Harrisburg, PA

• Course Taught: EDMTH443 Data Analysis and Statistics Across the Curriculum K-12

## **High School Mathematics Teacher**, 2008-2013

Cumberland Valley High School, Mechanicsburg, PA

- Courses Taught: Algebra, Geometry, and Calculus
  - o Responsible for six classes sized 15-35
  - o Trained in co-teaching and effectively used strategies to improve learning of at-risk students and those with learning disabilities (self-contained and inclusive classrooms).

### K-12 Mathematics Teacher, 2010-2011

Huntington Learning Center, Harrisburg, PA

• Courses Taught: All K-12 mathematics

## Student Teacher, 2007

Bermudian Springs Middle School, York Springs, PA

• Courses Taught: 7<sup>th</sup> and 8<sup>th</sup> Grade Algebra and Geometry

### Pre-Professional, 2006

Mechanicsburg Middle School, Mechanicsburg, PA

• Volunteered and taught Pre-Algebra in a 6th grade classroom

### RESEARCH

### **Research Interests**

- Formative assessment and instructional technology to support math instruction
- Preservice and novice teachers' assessment literacy
- Preservice teachers' mathematics beliefs and attitudes
- Increasing young girls' access and engagement with STEM education

## **Research Experience**

## Enriching Formative Assessment Practice through Modified Lesson Study, PI, 2022-present

- Westmont College
- Developing a study on the impact of a modified lesson study assignment within a elementary math methods content course on preservice teachers' use of formative assessment practices.

## Interdisciplinary Connections between Math & Literacy Methods Courses, PI, 2019-2021

- Westmont College
- Developed a study to analyze and compare student perceptions about best practices in teaching mathematics and literacy and its impact on the structure of elementary methods courses in a small teacher preparation program.

## Practice-Based Learning and Pre-Service Teachers' Assessment Literacy, PI, 2018-2019

- Moravian College
- Developed a mixed-methods study to look at the impact of a practice-based course on pre-service teachers' assessment literacy. Analyzed assignment data and an assessment literacy inventory to identify strengths and weaknesses of the course design and provide state accreditation data.

# Preparing Pre-Service Teachers to Implement Formative Assessment and Reach the Needs of All Learners, PI, 2016-2017

- University of Florida
- Dissertation research study will identify the conceptual and practical tools that are developed in a practice-embedded formative assessment course for pre-service teachers and how those tools are sustained after their first few years in the classroom.

### Pre-Service Teacher Beliefs about Struggling Learners Study, PI, 2015-2016

- University of Florida, Dr. Tim Jacobbe (Co-PI)
- Designed a study with pre-service teachers in an elementary mathematics methods course to explore changes in their beliefs about mathematics ability as they participated in a mathematics practicum experience with struggling learners in an after-school program for high-needs students.

## Algebra Nation Professional Development Network, Graduate Research Assistant, 2013-2016

- Lastinger Center, University of Florida
- Served on the content committee of a professional development site for Algebra I teachers in Florida. Served as content curator where I developed a rubric for resources to be used on the site and reviewed resources to ensure teacher Algebra I resources were of high quality.

## Differentiated Instruction in Standards-based Curricula Study, PI, 2014-2015

- University of Florida, Dr. Tim Jacobbe (Co-PI)
- Designed a study to look at how elementary teachers at a local school understood differentiation and the knowledge and beliefs that informed the adaptions they made to the *Investigations* curriculum.

## **Common Core State Standards for Mathematics Implementation Study**, Graduate Research Assistant, 2013-2015

- University of Florida, Dr. Thomasenia Adams (PI)
- Aided in the analysis and dissemination of the results of a statewide survey aimed to understand
  mathematics teachers' knowledge, preparation, and use of the Common Core State Standards for
  Mathematics.

- SEC Mentoring Program, Graduate Research Assistant, 2013-2014
  - Dr. Michael Bowie (PI) and Dr. Cheryl Williams (Co-PI)
  - Developed and presented mathematics workshops for young black males enrolled in afterschool program. Wrote literature review on the impact of mentoring programs for young black males.
- Helios Professional Development Initiative Evaluation, Graduate Research Assistant, 2013-2014
  - University of Florida, Lastinger Center
  - Collaborated with a team of researchers to evaluate the outcomes of a professional development program for local math and science teachers. Primary duties included coding large sets of qualitative data, running statistical analyses of available quantitative data, and preparing a final report.

## **Publications**

- **Mitten, C.** (2021). Tales from a Recession: Encouragement for Entering the Teaching Profession during Challenging Times. *International Christian Community of Teacher Educators Journal*.
- **Mitten, C.,** Collier, Z., & Leite, W. (2021). Online Resources for Mathematics: How Teacher Use Impacts Student Performance. *Investigations in Mathematics Learning*.
- **Mitten, C.** (2020). FALA Framework: A Learning Progression for Novice Teachers' Use of Formative Assessment. *Proceedings for the 42<sup>nd</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*.
- **Mitten, C.,** & Ross, D. (2018). Sustaining a commitment to teaching in a research-intensive university: What we learn from award-winning faculty. *Studies in Higher Education*.
- **Mitten, C.,** Jacobbe, T., & Jacobbe, E. (2017). How Are They Doing? Using Technology to Facilitate Formative Assessment. *Australian Primary Mathematics Classroom*.
- **Mitten, C.,** & Jacobbe, T. (in preparation). Context Matters: Critical Factors Impacting Novice Teachers' Use of Formative Assessment for Teaching Mathematics.
- **Mitten, C.** (in preparation). Engaging Quiet Students in the Collaborative Mathematics Learning Environment.
- **Mitten, C.** (in preparation). Merging Theory and Practice to Help Preservice Teachers Develop Assessment Literacy.

### **Presentations**

- **Mitten, C.** (2022). *Preservice Teachers' Perceptions of Math and Literacy Pedagogy*. Presentation accepted for the Fall 2022 Conference of the California Council on Teacher Education, San Diego, CA.
- **Mitten, C.** (2021). Compassionate Assessors: Supporting Teacher Candidates in Developing a More Caring Approach to Assessment. Presentation accepted for the bi-annual meeting of the International Community for Christian Teacher Educators, Mount Vernon, OH.

- Mitten, C. (2021). FALA Framework: A Learning Progression for Novice Teachers' Use of Formative Assessment. Presentation accepted for the North American Chapter of the International Group for the Psychology of Mathematics Education, Mazatlan, Mexico.
- **Mitten, C.** (2021). Comparing Preservice Teachers' Perceptions of Math and Literacy Methods. Presentation accepted for the virtual meeting of the Association of Mathematics Teacher Educators.
- **Mitten, C.** (2021). Formative Assessment in the Digital Age: Capturing Students' Mathematical Thinking with Technology. Presentation accepted for the virtual meeting of the National Council of Teachers of Mathematics.
- **Mitten, C.,** & Wheeler, A. (2020). *Enhancing Formatives Assessment Practice with Technology*. Presentation accepted for the virtual meeting of the California Math Council.
- Mitten, C., Aoki, N., Hong, A., Roach, D., & Thomas, A. (2020). *Integration and Balance: Voices of Preservice Teachers on Teaching Math and Literacy*. Presentation accepted at Research Council on Mathematics Learning (RCML), Las Vegas, NV.
- **Mitten, C.** (2019). *Bridging Theory and Practice to Develop Assessment Literacy*. Presentation accepted for the annual meeting of the Association of Teacher Educators, Atlanta, GA.
- **Mitten, C.** (2018). *Context Matters: Supports and Barriers to Formative Assessment.* Presentation accepted for the annual meeting of the Research Council on Mathematics Learning, Baton Rouge, LA.
- Mitten, C. (2017). Theory into Practice: Internships as Meaningful Opportunities to Implement Formative Assessment Concepts. Presentation accepted for the annual meeting of the Association of Mathematics Teacher Educators, Orlando, CA.
- Mitten, C., Collier, Z., & Leite, W. (2016). Online Resources for Mathematics: Exploring How and Why They Support Student Learning. Presentation accepted for the annual meeting of the American Educational Research Association, Washington, DC.
- Mitten, C. (2016). Shifting Perspectives: Practicum as an Opportunity for Preservice Teachers to Understand Student Math Ability Differently. Presentation accepted for the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- **Mitten, C.** (2016). *Tools for Success: Preparing PSTs to Effectively Differentiate Instruction*. Presentation accepted for the annual meeting of the Research Council on Mathematics Learning, Orlando, FL.
- **Mitten, C.** (2016). *Is Change Possible? Practicum as a Way to View Math Ability Differently.*Presentation accepted for the annual meeting of the Research Council on Mathematics Learning, Orlando, FL.
- Mitten, C., Collier, Z., & Leite, W. (2015). Online Resources for Mathematics: Exploring How and Why They Support Student Learning. Presentation accepted for the annual meeting of the Florida Educational Research Association, Jacksonville, FL.

- Mitten, C., & Jacobbe, T. (2015). *Differentiation in a Standards-Based Curriculum: Meeting All Students' Needs.* Presentation accepted for the annual meeting of the National Council of Teachers of Mathematics, Boston, MA.
- Shannon, D., **Mitten, C.,** & Ross, D. (2015). *Adaptive Scholars: Embracing Challenges and Cultivating Professional Networks*. Presentation accepted for the annual meeting of the American Educational Research Association. Chicago, IL.
- **Mitten, C.** & Jacobbe, T. (2015). *Differentiation in a Standards-Based Mathematics Curriculum:*Exploring Teachers' Use of Instructional Strategies that Improve Learning for All. Presentation accepted for the annual meeting of the Research Council on Mathematics Learning, Las Vegas, NV.
- Wilburne, J., & **Mitten, C.** (2015). *Differentiating Mathematics Education Courses: Practicing What we Preach.* Presentation accepted at the annual conference of the Association of Mathematics Teacher Educators, Orlando, FL.
- **Mitten, C.** & Jacobbe, T. (2014). Exploring how teachers differentiate mathematics instruction while using a standards-based curriculum. Presentation accepted for the annual meeting of the School Science and Mathematics Association, Jacksonville, FL.
- Kaplan, O., & Mitten, C. (2014). An exploratory study of mathematics teachers' incorporation of the Common Core State Standards for Mathematics. Presentation accepted at the annual conference of the Florida Society of the Social Sciences, Gainesville, FL.
- Kaplan, O., Adams, T., & **Mitten, C.** (2013). Barriers to Efficiently Incorporating Common Core State Standards for Mathematics (CCSS-M) in Mathematics Instruction: An Exploratory Study.

  Presentation accepted at the annual conference of the Southeastern Region Association of Teacher Educators, Sarasota, FL.

### Grants

NSF Noyce Capacity Grant, Westmont College. (Under revision)

**Professional Development Grant, Westmont College.** (2020, Funded)

**SOAR Undergraduate Research Grant, Moravian University.** (2019, Funded)

**FDRC Travel Grant, Moravian University.** (2019, Funded).

FDRC Travel Grant, Moravian University. (2018, Funded).

School of Teaching and Learning Travel Grant, University of Florida. (2017, Funded).

School of Teaching and Learning Travel Grant, University of Florida. (2016, Funded).

School of Teaching and Learning Travel Grant, University of Florida. (2015, Funded).

Graduate Student Council Travel Grant, University of Florida. (2015, Funded).

School of Teaching and Learning Travel Grant, University of Florida. (2015, Funded).

### MAA Tensor Women and Mathematics Grant. (2014, Unfunded).

### PROFESSIONAL SERVICE

### National

Journal Reviewer, International Journal of STEM Education, 2021-present

Journal Reviewer, School Science and Mathematics, 2018-present

Journal Reviewer, Investigations in Mathematics Learning, 2016-present

Journal Reviewer, Journal for Teacher Education, 2016-present

Journal Reviewer, Teaching Children Mathematics, 2016-2019

Proposal Reviewer (Invited), American Educational Research Association (AERA) Conference, 2022

Proposal Reviewer, American Educational Research Association (AERA) Conference, 2021

Proposal Reviewer, Psychology of Mathematics Education North America (PME-NA) Conference, 2020

Proposal Reviewer, National Council of Teachers of Mathematics (NCTM) Research Conference, 2018

Proposal Reviewer, Association of Mathematics Teacher Educators, August 2016

Proposal Reviewer, Research Council on Mathematics Learning (RCML) Conference, September 2015

Proposal Reviewer, National Council of Teachers of Mathematics (NCTM) Research Conference, 2015

Proposal Reviewer, National Council of Teachers of Mathematics (NCTM) Research Conference, 2014

### University

Program Review Committee, Westmont College, 2023-present

Education Faculty Search Committee Chair, Westmont College, 2023

Education Department Chair, Westmont College, 2022-present

Westmont Education Association Faculty Advisor, Westmont College, 2022-present

Quantitative Literacy ILO Assessment Team, 2022-present

Education Faculty Search Committee Chair, Westmont College, 2022

Mathematics Field Day Chalk Talk Finals Judge, Westmont College, 2022

English Faculty Search Committee External Member, Westmont College, 2022

Title IX Adjudication Committee, Westmont College, 2021-2023

Fulbright Scholarship Application Review Committee, Westmont College, 2021

Boundless Brilliance (Girls in STEM) Faculty Advisor, Westmont College, 2021-present

Physics Faculty Search Committee External Member, Westmont College, 2021

Westmont College Teacher Credential Advisory Board Member, Westmont College, 2019-present

Human Subjects Institutional Research Board Committee, Moravian University, 2018-2019

Education Department Master's Thesis Committee, Moravian University, 2018-2019

Teacher Education Committee, Moravian University, 2017-2019

Scholars Day Session Moderator, Moravian University, 2018

Special Education Faculty Search Committee Member, Moravian University, 2017

Literacy Education Faculty Search Committee Member, Moravian University, 2017

President, Student Alliance of Graduates in Education, University of Florida, 2014-2015

Graduate Student Council Representative, University of Florida, 2014-2015

### **Local and State**

San Marcos HS Education Pathway Advisory Board Member, 2023-present

Read with Cleveland Elementary Volunteer, 2023

Santa Barbara County Credential Programs Advisory Board Member, 2022-present

Santa Barbara County Partners in Education Board Member, 2022-present

SBUSD Teacher Induction Program (TIP) Advisory Board Member, 2020-present

California Council on Teacher Education Delegate for Westmont College, 2019-present

California Teacher Performance Assessment Co-coordinator for Westmont College, 2019-present

Westmont College Educators Connection, Faculty Co-coordinator, 2019-present

Santa Barbara Community Church, Children's Ministry Volunteer, 2019-present

William Penn Elementary School Family STEM Night, Faculty Coordinator and Volunteer, 2019

Cheston Elementary School Family Math Night, Faculty Coordinator and Volunteer, 2018

SEC Mentoring Elementary Mathematics Workshops, Invited Speaker, 2014

Common Core Parent Night, Invited Speaker, 2013

New Hope Church, Children's and Youth Ministry Volunteer, 2000-2013

### **Professional Organization Memberships**

National Council of Teachers of Mathematics (NCTM)
Association of Mathematics Teacher Educators (AMTE)
Research Council on Mathematics Learning (RCML)
School Science and Mathematics Association (SSMA)
Association of Teacher Educators (ATE)
American Educational Research Association (AERA)
International Community of Christian Teacher Educators (ICCTE)
California Council on Teacher Education (CCTE)

### **AWARDS AND HONORS**

STaR 2018 Fellowship, Association of Mathematics Teacher Educators Graduate Student Teaching Award, University of Florida Graduate Research Fellowship Award, University of Florida Dr. Frank C. and Juliette D. Bolser Memorial Fellowship, University of Florida Charles A. and Alma A. Hoffman Scholarship, University of Florida Elizabeth and William F. Leonard Endowment Scholarship, University of Florida Poster Presentation Honorable Mention, Florida Society for the Social Sciences Dean's Scholarship, Provost's Scholarship, and Dean's List, Messiah College ETS Praxis II: Mathematics Content Knowledge Recognition of Excellence