

## CURRICULUM VITAE

### I. ACADEMIC DEGREES

- Ph.D.  
(2011) Curriculum and Instruction (Mathematics Education)  
Minor: Educational Psychology  
Minor: Research and Evaluation Methodologies  
Dissertation: *The effects of teaching mathematics through problem-solving contexts on sixth-grade students' problem-solving performance and representation use*  
Stephen J. Pape (advisor), Tim Jacobbe (co-advisor)  
University of Florida, Gainesville, FL
- M.Ed.  
(2007) Curriculum and Instruction (Mathematics Education)  
George Mason University, Fairfax, VA
- B.S.  
(2004) Mathematics  
College of William and Mary, Williamsburg, VA

### II. ACADEMIC POSITIONS

#### A. Teaching Positions

- 2022 – present Professor of Mathematics Education  
School of Teaching and Learning, College of Education and Human Development, Bowling Green State University, Bowling Green, OH.
- 2016 – present Associate Professor of Mathematics Education  
School of Teaching and Learning, College of Education and Human Development, Bowling Green State University, Bowling Green, OH.
- 2011 – 2016 Assistant Professor of Mathematics Education  
School of Teaching and Learning, College of Education and Human Development, Bowling Green State University, Bowling Green, OH.
- 2007 – 2011 Graduate Assistant  
School of Teaching and Learning, College of Education and Human Development, University of Florida, Gainesville, FL.
  - Research Assistant – Analysis of classroom interactions through application of a classroom observation coding protocol
  - Instructor –
    - MAE 4310: *Teaching Mathematics in the Inclusive Elementary Classroom*

- MAE 4941/4947/5945: *Secondary Mathematics Practicum*

2004 – 2007	<u>Mathematics Teacher</u> Phillip Michael Pennington School, Manassas, VA. Math 7, Math 7 Extended, Pre-Algebra, Algebra I, and Mathematics Support grades 7 and 8
2003 – 2004	<u>Mathematics Remediation Teacher</u> Bull Run Middle School, Gainesville, VA. Grades 6, 7, and 8
2001- 2003	<u>Substitute Teacher</u> Marsteller Middle School, Bristow, VA. Middle School Mathematics and Special Education

## **B. Administrative Positions**

2023-2024	Director of Grant Initiatives Bowling Green State University, Bowling Green, OH College of Education & Human Development
-----------	--

## **III. NON-ACADEMIC POSITIONS**

## **IV. TEACHING EXPERIENCES AND ACADEMIC SERVICE**

### **1. Undergraduate Courses**

Bowling Green State University

EDTL 1320: Introduction to Teaching Elementary School Mathematics

EDTL 2504: Introduction to Teaching Middle Grades Mathematics

EDTL 2740: Introduction to Secondary Mathematics

EDTL 2741: Algebra in the Secondary Mathematics Classroom

*NOTE: EDTL 2740 and 2741 have the same titles but are distinctly different courses.*

EDTL 2742: Geometry and Probability in the Secondary Mathematics Classroom

EDTL 3450: Mathematics Instruction for the Middle Childhood Teacher

EDTL 3460/4460: Investigations in Mathematics for the Middle Childhood Teacher

EDTL 4840: Advanced Seminar in Mathematics

EDTL 4980: Honors Coursework

EIEC 2320: Teaching Geometry in Elementary Grades

### **2. Undergraduate-Graduate Courses**

### 3. Graduate Courses

Bowling Green State University

EDTL 6800: Reasoning and Sense Making in Middle Grades Mathematics  
 EDTL 6800: Reasoning and Sense Making in Secondary Mathematics  
 EDTL 6800: Curriculum Design for Connections in Grades 5-10 Mathematics  
 EDTL 6800: Common Core Instruction for Middle Grades Mathematics  
 EDTL 6800: Common Core Instruction for Secondary Mathematics  
 EDTL 6800: Student Teaching in Math and Social Studies  
 EDTL 6800: Assessment in Mathematics  
 EDTL 6840: Math SMPs and Literacy  
 EDTL 6840: Modeling with Mathematics  
 EDTL 6840: Standards for Math Practice  
 EDTL 6840: Mathematical Discourse

### 4. Other Teaching

Bowling Green State University

EDTL 6800: Reasoning and Sense Making in Elementary Mathematics (3 semesters)  
 EDTL 6800: Curriculum Design for Connections in Elementary Mathematics (3 semesters)  
 EDTL 6800: Common Core Instruction in Elementary Mathematics (3 semesters)  
 Common Core for Achievement and Middle Grades Mathematical Proficiency grant instructor: Courses met for a total of 32 hours during Fall 2014, 32 hours for Spring 2015, and 64 hours for Summer 2015.  
 Common Core for Mathematical Proficiency in Elementary Schools grant instructor: Courses met for a total of 32 hours during Fall 2014, 32 hours for Spring 2015, and 64 hours for Summer 2015.

### 5. Thesis and Dissertation Students

#### a. Thesis/Project Committee Chair (BGSU), N=16

<u>Student</u>	<u>Degree</u>	<u>Year</u>	<u>Project/Thesis</u>
Tyler Spears	M.Ed. Curr. & Teaching	2012-2013	Thesis
Cassandra Cull (co-chair)	M.Ed Reading	2012-2013	Project
Megan Mortier	M.Ed. Curr. & Teaching	2013-2014	Thesis
Brandon Floro	M.Ed. Curr. & Teaching	2014-2015	Project
Elizabeth Leimkuehler	M.Ed. Reading	2014-2015	Project
Lance Kruse	M.Ed. Curr. & Teaching	2015-2016	Project
Tim Folger	M.Ed. Curr. & Teaching	2015-2016	Project
Megan Schlosser	M.Ed. Curr. & Teaching	2015-2016	Project
Maria Nielsen	M.Ed. Curr. & Teaching	2016-2017	Project
Davis Gerber	M.Ed. Curr. & Teaching	2017-2018	Project
Tiara Hicks	M.Ed. Curr. & Teaching	2019-2020	Project
Noah Brown	M.Ed. Curr. & Teaching	2020-2021	Project
Emily Evans	M.Ed. Curr. & Teaching	2021-2022	Project
Jodie Cahill	M.Ed. Curr. & Teaching	2022-2023	Project
Benjamin Lawson	M.Ed. Curr. & Teaching	2022-2023	Project

Morgan McCracken M.Ed. Curr. & Teaching 2023-2024 Project

**b. Dissertation Chair:**

**6. Membership on Dissertation Committee, N=8**

<u>Student</u>	<u>Degree</u>	<u>Year</u>	<u>University</u>
Yang Liu	Ph.D. Statistics	2015	BGSU
Yi-Ching Lee	Ph.D. Statistics	2016-2018	BGSU
Aline Abassian	Ph.D. Education	2017-2018	UCF
Serge Phanazu	Ph.D. Mathematics	2018-2020	BGSU
Lance Kruse	Ph.D. Res. & Meas.	2018-2020	Toledo
Quintana Clark	Ph.D. Agricultural Ed.	2018-2021	Purdue
James Smith	Ph.D. Mathematics Educ	2022-2024	Arizona
Aubrey Dauber	Ph.D. Clinical Psych.	2022-2024	BGSU

**7. Membership on Thesis/Project Committees (BGSU), N=1**

<u>Student</u>	<u>Degree</u>	<u>Year</u>	<u>Project/Thesis</u>
Sharon Franke	M.Ed. Reading	2011 - 2012	Project

**8. Membership on Undergraduate Committees, N=18**

<u>Student</u>	<u>Program</u>	<u>Year</u>	<u>University</u>
Josh Klein	ACTION	2012 - 2013	BGSU
Leslie Russell	ACTION & HONORS	2012 - 2013	BGSU
Megan Schlosser	ACTION & HONORS	2013 - 2015	BGSU
Lance Kruse	ACTION & HONORS	2013 - 2015	BGSU
Brittney Poling	ACTION	2013 - 2015	BGSU
Kelsey Waynick	HONORS	2013 - 2015	BGSU
Maria Nielsen	ACTION & HONORS	2014 - 2016	BGSU
Allison Bendel	ACTION	2015 - 2017	BGSU
Davis Gerber	ACTION	2015 - 2017	BGSU
Courtney Wilcox	ACTION	2015 - 2017	BGSU
Emily Swanson	HONORS	2015 - 2017	BGSU
Sarah Spayd	ACTION	2017 - 2019	BGSU
Hattie Meyer	ACTION	2019 - 2021	BGSU
Emily Evans	ACTION	2019 - 2021	BGSU
Jodie Cahill	HONORS	2019 - 2021	BGSU
Noah Silver	ACTION & HONORS	2020 - 2022	BGSU
Sophie King	ACTION	2022 - 2024	BGSU
Oliver Soper	ACTION	2022 - 2024	BGSU
Adam Lambert	HONORS	2023 - 2024	BGSU

**V. CURRICULUM DEVELOPMENT**

### A. Courses/Programs – New courses

EDTL 2504: Introduction to Teaching Middle Grades Mathematics  
 EIEC 2320: Teaching Geometry in the Elementary Grades  
 EDTL 2740: Introduction to Secondary Mathematics  
 EDTL 6800: Mathematics Education Research  
 EDTL 6800: Assessment in Mathematics  
 EDTL 6800: Reasoning and Sense Making in Elementary Mathematics  
 EDTL 6800: Reasoning and Sense Making in Middle Grades Mathematics  
 EDTL 6800: Reasoning and Sense Making in Secondary Mathematics  
 EDTL 6800: Curriculum Design for Connections in Elementary Mathematics  
 EDTL 6800: Curriculum Design for Connections in Grades 5-10 Mathematics  
 EDTL 6800: Common Core Instruction in Elementary Mathematics  
 EDTL 6800: Common Core Instruction for Middle Grades Mathematics  
 EDTL 6800: Common Core Instruction for Secondary Mathematics  
 EDTL 6800: Assessment and Special Education  
 EDTL 6800: Rasch Methodology  
 EDTL 6800: Multilingual Experiences in Mathematics Education  
 EDTL 6800: School Preferences in School Reporting  
 EDTL 6840: Math SMPs and Literacy  
 EDTL 6840: Standards for Math Practice  
 EDTL 6840: Mathematical Discourse  
 EDTL 6840: Modeling in Mathematics  
 Instructor for courses related to Common Core for Achievement and Middle Grades  
 Mathematical Proficiency grant: Courses met for a total of 32 hours during Fall 2014,  
 2015, & 2016, 32 hours for Spring 2015 & 2016, and 64 hours for Summer 2015 & 2016.  
 Instructor for courses related to Common Core for Mathematical Proficiency in Elementary  
 Schools grant: Courses met for a total of 32 hours during Fall 2014, 2015, & 2016 32  
 hours for Spring 2015 & 2016, and 64 hours for Summer 2015 & 2016.

### C. Workshops

- Bostic, J.,** Matney, G., Stone, G., & May, T. (2022, February). *Developing & evaluating assessments of problem solving: Supporting mathematics teacher educators' scholarship and practice*. Multi-day workshop at annual meeting of Association of Mathematics Teacher Educators: Henderson, NV.
- Bostic, J.** (2020, January). *Assessment, validity, and grants*. Multi-day workshop for Kentucky State University faculty and staff: Frankfort, KY.
- Bostic, J.** (2018, April). *Exploring mathematics with and for preschool-aged children*. 2 hours of workshop for preschool students, BGSU preservice teachers, and inservice teachers at Child Development Center: Bowling Green, OH.
- Gerber, D. & **Bostic, J.** (2018, March). *Creating assessments that mean something and dealing with the rest*. 4 hours of workshop for K-12 teachers at Bowling Green State University Scholars: Bowling Green, OH.

- Bostic, J.** (2018, February – March). *Problem solving and principles and standards for mathematics teaching and learning*. 8 hours of workshops for IREX Teaching Excellence and Achievement fellows at Bowling Green State University Scholars: Bowling Green, OH.
- Bostic, J.** (2017, November). *Assessing students' mathematics proficiency*. North West Ohio Symposium on Science, Technology, Engineering, and Mathematics Teaching: Bowling Green, OH.
- Bostic, J.** (2014, October). *Spaghetti, lines of best fit, and functions*. Bowling Green Council of Teachers of Mathematics: Bowling Green, OH.
- Bostic, J.** (2013, October). *Examining multiplication and division through a conceptual and developmental perspective*. Bowling Green State University: Bowling Green, OH.
- Bostic, J. & Matney, G.** (2011, November). *Teaching and assessing through problem-solving contexts*. North West Ohio Symposium on Science, Technology, Engineering, and Mathematics Teaching: Bowling Green, OH.
- Bostic, J.** (2011, November). *Expecting to win every time*. Bowling Green State University Women in Science, Technology, Engineering, and Math Conference for middle school students: Bowling Green, OH
- Bostic, J.** (2011, September). *Solving and representing my life*. Invited speaker at Bowling Green Council of Teachers of Mathematics: Bowling Green, OH.

#### **D. Educational Materials**

- Clark, Q.M., **Bostic, J.D.**, Esters, L.T., & Knobloch, N.A. (2018). *Making healthy food choices*, West Lafayette, IN: Purdue University. [Educational & Curricular Resource]
- Clark, Q.M., **Bostic, J.D.**, Esters, L.T., & Knobloch, N.A. (2019). *Urban green space*, West Lafayette, IN: Purdue University. [Educational & Curricular Resource]
- Clark, Q.M., **Bostic, J.D.**, Esters, L.T., & Knobloch, N.A. (2020). *Renewable energy*, West Lafayette, IN: Purdue University. [Educational & Curricular Resource]
- Clark, Q.M., **Bostic, J.D.**, Esters, L.T., & Knobloch, N.A. (2020). *Food security/insecurity*, West Lafayette, IN: Purdue University. [Educational & Curricular Resource]

## **VI. PROFESSIONAL DEVELOPMENT**

- *Journal for Research in Mathematics Education* (JRME) talks (2 days, 2023)
- Understanding and Teaching about Privilege (1 day, 2023)
- Student positioning in mathematics assessment research (1 day, 2023)
- Cost Analysis in Practice ([CAP](#)) Training (2 days; 2023)
- [Allies'](#) Training “How to be a strong sponsor and advocate for faculty” (1 day; 2022)
- American Education Research Association E. F. Lindquist Lecture: “Measurement in the classroom: Finding the right grain size” (1 day, 2021)
- East Asia Regional Council of Schools Training, “The Language of Psychological Safety” (1 day; 2021)
- [Allies'](#) Microaggressions Training (2 days; 2020-2021)
- BGSU – PCI Training (1 day; December 2020)
- American Institutes for Research: An Introduction to Meta-Analytic Techniques (1 day; September 2020)
- American Institutes for Research: An Introduction to Systematic Literature Reviews (1 day; September 2020)
- National Science Foundation: Managing your NSF Grant (1 day; May 2020)
- Ohio Ethics Training (1 day completed annually; 2019 - present)
- Insights into the NAEP Mathematics Assessment Framework Public Draft (1 day; June 2019)
- Preventing Discrimination and Harassment Together Training (1 day completed annually; 2015-present)
- Preventing Sexual Assault Together Training (1 day completed annually; 2015-present)
- American Institutes for Research: Evidence Standards for Evaluating Math and Science Programs (1 day; March 2019)
- National Science Foundation Education and Human Resources Discovery Research K-12 PI Meeting (DRK12; 2 days; June 2018)
- ESTEEM Workshop for Teacher Educators (1 day; February 2018)
- BGSU College of Education and Human Development Associate to Full Professor Learning Community (8 meetings; 2017-2018)
- National Science Foundation Education and Human Resources (EHR) Core Research Primary Investigators Convening (2 days; September 2017)
- National Mathematics and Science Partnerships Program Conference (2 days; March 2016)
- Connected Mathematics Project Users Conference (1 day; February 2016)
- Regional Mathematics and Science Partnerships Program Conference (2 days; November 2015)
- Active Learning Classroom Training (December 2015; 2 hours)
- Teachers Development Group Leadership Seminar 2015 (3 days; March 2015)
- National Mathematics and Science Partnerships Program Conference (2 days; September – October 2014)
- Annual meeting of Psychology of Mathematics Education (July 2014)
- Distinguished Faculty Lecture: “From Roots to STEM” (1 hour; November 2013)
- Setting the Pace lecture series: Explicit Instruction (2 hours; November 2013)
- edTPA local Training (8 hours; April 2013)
- CEHD Lecture Series (4 hours; April 2013)

- Academic Language Presentation (2 hours; Jan. 2013)
- EDHD Early Learning Research Community (12 hours; Aug. 2012 – May 2013)
- CANVAS Training (3 hours; August 2012)
- Annual meeting of National Council of Teachers of Mathematics (Apr. 2012; Nov. 2012; Apr. 2014)
- Center for Teaching and Learning Fair (6 hours; Feb. 2012)
- Annual meeting of Research Council on Mathematics Learning (Feb. 2012, 2013, 2014, 2015, 2016)
- Annual meeting of Association for Mathematics Teacher Educators (Feb. 2012, 2013, 2014, 2015, 2016)
- Professional Grant Development Workshop (24 hours; Dec. 2011)
- Interdisciplinary Peer Review and Assessment Writing (9 hours per AY; Aug. – May 2011 – 2012, Aug. – May 2012 - 2013)
- Annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (Oct. 2011, 2012, 2014, 2015, 2016)
- Ohio Council of Teachers of Mathematics (Oct. 2011, 2012, 2013, 2014, 2015, 2016)
- Ohio Mathematics Education Leadership Council (5 hours each; Oct. 2011; Apr. 2012; Oct. 2012; Apr. 2013; Oct. 2013, Apr. 2014, Nov. 2014, Apr. 2015, Oct. 2015, Oct. 2016)

## VII. ACADEMIC ADVISING

Undergraduates (Taken from MyAdvisees)

2023 – 2024: 27  
 2022 – 2023: 23  
 2021 – 2022: 22  
 2020 – 2021: 16  
 2019 – 2020: 10  
 2018 – 2019: 0 (Faculty Improvement Leave/Sabbatical)  
 2017 – 2018: 20  
 2016 – 2017: 15  
 2015 – 2016: 24  
 2014 – 2015: 31  
 2013 – 2014: 29  
 2012 – 2013: 2  
 2011 – 2012: 0

Graduates (Taken from MyAdvisees)

2023 – 2024: 1  
 2022 – 2023: 1  
 2021 - 2022: 1  
 2020 - 2021: 1  
 2019 – 2020: 1  
 2018 – 2019: 0 (Faculty Improvement Leave/Sabbatical)  
 2017 – 2018: 1



2016 – 2017: 1  
 2011 – 2016: 0

## **VIII. RESEARCH INTERESTS**

My scholarship agenda is guided by an embodied cognition perspective, framed by an overarching sociocultural metaperspective, and my own teaching and learning experiences. A central part of conducting research, and a guiding factor in the teaching and learning process, is the assessment process. My primary area of scholarship is exploring validity issues and trends within the context of assessment in mathematics education. This primary area includes scholarship focused on developing and evaluating classroom-based and researcher-focused instruments that impact outcomes related to mathematics topics. Secondly, I investigate ways to enhance instructional contexts to better support teaching and learning, especially learners' mathematical proficiency. This secondary aspect includes scholarship focused on mathematics tasks, learning environment, and teachers as they influence students' outcomes (e.g., problem-solving performance, contextualization of problem solving, etc.).

## **IX. RESEARCH PROJECTS AND GRANTS**

### **A. Funded Grants**

Current Funded Total = \$16,276,357.00

- 2022 – 2026 *Quantifying Curricular Reasoning as a Critical Practice in Teaching Mathematics* (\$2,985,401 – funded by National Science Foundation under DRK-12 program: NSF: #2201165. Principal Investigator.) Collaborative award Principal Investigator: Dawn Teuscher, NSF#2201164.
- 2021 – 2026 *Developing & Evaluating Assessments of Problem Solving – Computer Adaptive Testing (DEAP-CAT)* (\$3,122,630 – funded by National Science Foundation under DRK-12 program: NSF #2100988. Principal Investigator.) Collaborative award Principal Investigator: Toni May (Sondergeld), NSF#2101026.
- 2019 – 2024 *Validity evidence for Measurement in Mathematics Education (V-M<sup>2</sup>ED)* (\$1,944,717 – funded by National Science Foundation under DRK-12 program: NSF #1920621. Principal Investigator.) Collaborative award Principal Investigator: Erin Krupa, NSF #1920619.
- 2019 - 2021 *Designing an Inclusive Middle-level Program (IMPerative)*; \$225,000 – funded by Ohio Deans Compact on Exceptional Children. Co-Principal Investigator.) Principal Investigator: Brooks Vostal.
- 2018 - 2022 *Improving Motivation, Pedagogy, Assessment, and Collaboration for Teachers (IMPACT)*; \$2,667,817 – funded by United States of American Department of Education. Senior personnel.) Principal Investigator: Tracy Huziak-Clark.

- 2017-2023 *Developing & Evaluating Assessments of Problem Solving (DEAP)* (\$1,543,241 – funded by National Science Foundation under DRK-12 program: NSF#1720646. Principal Investigator.) Collaborative award Principal Investigator: Toni Sondergeld, NSF# 1720661.
- 2016 – 2020 *Enhancing minority middle school student knowledge, literacy, and motivation in STEM using contextualized agricultural life science learning experiences.* (\$1,043,985 – funded by National Science Foundation under Innovative Technology Experiences for Students and Teachers [ITEST] program: NSF#1513256. Senior Personnel.) Principal Investigator: Levon Esters.
- 2016-2017 *Validity evidence for Measurement in Mathematics Education (V-M<sup>2</sup>ED)* (\$87,055 – funded by National Science Foundation under PRIME program: NSF#1644314. Principal Investigator).
- 2014 - 2018 *Common Core for Mathematical Proficiency in Elementary Schools (COMP)* (\$1,858,362 – funded by Ohio Department of Education under Ohio Mathematics Science Partnership program. Co-Investigator.) Principal Investigator: Gabriel Matney.
- 2014 - 2017 *Common Core for Achievement and Middle Grades Mathematical Proficiency (C<sup>2</sup>AM<sup>2</sup>P)* (\$798,149 – funded by Ohio Department of Education under Ohio Mathematics Science Partnership program: Principal Investigator.)
- 2014 - 2015 *Common Core for Reasoning and Sense Making: Secondary ((CO)<sup>2</sup>RES Secondary)* (\$92,753 – funded by Ohio Board of Regents: Principal Investigator.)
- 2014 – 2015 *Common Core for Reasoning and Sense Making: Elementary ((CO)<sup>2</sup>RES Elementary)* (\$93,006 – funded by Ohio Board of Regents. Co-Principal Investigator.) Principal Investigator: Gabriel Matney.
- 2013 - 2014 *Common Core for Reasoning and Sense Making: Secondary ((CO)<sup>2</sup>RES Secondary)* (\$87,545 – funded by Ohio Board of Regents. Principal Investigator.)
- 2013 – 2014 *Common Core for Reasoning and Sense Making: Elementary ((CO)<sup>2</sup>RES Elementary)* (\$89,164 funded by Ohio Board of Regents. Co-Principal Investigator.) Principal Investigator: Gabriel Matney.
- 2012 - 2013 *Common Core for Reasoning and Sense Making: Secondary ((CO)<sup>2</sup>RES Secondary)* (\$78,190 – funded by Ohio Board of Regents. Principal Investigator.)
- 2012 – 2013 *Common Core for Reasoning and Sense Making: Elementary ((CO)<sup>2</sup>RES Elementary)* (\$81,476 funded by Ohio Board of Regents. Co-Principal Investigator.) Principal Investigator: Gabriel Matney.

**B. Research Projects:**

2011 *Preservice Middle Grade Teachers' Proof Representations* (Principal Investigator)

## X. PUBLICATIONS

### 1. Books

a. **Textbooks** (chronological from most recent to earliest)

b. **Scholarly Books**

N=2

**Bostic, J.**, Krupa, E., & Shih, J. (2019). *Assessment in mathematics education contexts: Theoretical frameworks and new directions*. New York, NY: Routledge.

**Bostic, J.**, Krupa, E., & Shih, J. (2019). *Quantitative measures of mathematical knowledge: Researching instruments and perspectives*. New York, NY: Routledge.

c. **Anthologies**

d. **Chapters in Books** (chronological from most recent to earliest)

N= 10, peer-reviewed

Gerber, D., Lavery, M., **Bostic, J.** (2021). Making valid instructional decisions: Teaching educators to consider validity evidence. In S. L. Nichols & D. Varier (Eds.), *Teaching on Assessment* (pp. 37-53). Charlotte, NC: Information Age Publishers.

**Bostic, J.**, Krupa, E., & Shih, J. (2019). Introduction: Aims and scope for *Assessment in mathematics education contexts: Theoretical frameworks and new directions*. In **J. Bostic**, E. Krupa, & J. Shih (Eds.), *Assessment in mathematics education contexts: Theoretical frameworks and new directions* (pp. 1-11). New York, NY: Routledge.

Krupa, E., **Bostic, J.**, & Shih, J. (2019). Validation in mathematics education: An introduction to *Quantitative Measures of Mathematical Knowledge: Researching Instruments and Perspectives*. In **J. Bostic**, E. Krupa, & J. Shih (Eds.), *Quantitative Measures of Mathematical Knowledge: Researching Instruments and Perspectives* (pp. 1-13). New York, NY: Routledge

**Bostic, J.**, Krupa, E., Carney, M., & Shih, J. (2019). Reflecting on the past and thinking ahead in the measurement of students' outcomes. In **J. Bostic**, E. Krupa, & J. Shih (Eds.), *Quantitative measures of mathematical knowledge: Researching instruments and perspectives* (pp. 205-229). New York, NY: Routledge.

Matney, G., **Bostic, J.**, & Lavery, M. (2019). A validation process for complex pedagogical knowledge: The standards for mathematical practice knowledge assessment. In **J. Bostic**, E. Krupa, & J. Shih (Eds.), *Quantitative measures of mathematical knowledge: Researching instruments and perspectives* (pp. 179-204). New York, NY: Routledge.

Lavery, M., Jong, C., Krupa, E., & **Bostic, J.** (2019) Developing an assessment with validity in mind. In **J. Bostic**, E. Krupa, & J. Shih (Eds.), *Assessment in mathematics education*

*contexts: Theoretical frameworks and new directions* (pp. 12-39). New York, NY: Routledge.

- Murnen, T., **Bostic, J.**, Weaver, J., Fordham, N. (2018). *Adopt-an-apprentice teacher: Re-investing early field experiences*. Handbook of Research on Field-based Teacher Education (pp. 367-394). Hershey, PA: IGI Global.
- Bostic, J.**, & Sondergeld, T. (2018). In D. Thompson, M. Burton, A. Cusi, & D. Wright (Eds.), *Validating and vertically equating problem-solving measures*. Classroom assessment in mathematics: Perspectives from around the globe (pp. 139-155). Cham, Switzerland: Springer.
- Floro, B. & **Bostic, J.** (2017). A case study of middle school teachers' noticing during modeling with mathematics tasks. In E. Schack, M. Fisher, & J. Wilhelm (Eds.), *Teacher noticing: Bridging and broadening perspectives, contexts, and frameworks*, pp. 73-89. Cham, Switzerland: Springer.
- Pape, S. J., Irving, K. E., Bell, C. V., Shirley, M., L., Owens, D. T., Owens, S., **Bostic, J. D.**, & Lee, S. C. (2011). Principles of effective pedagogy within the context of connected classroom technology: Implications for teacher knowledge. In R. N. Ronau, C. R. Rakes, & M. L. Niess (Eds), *Educational technology, teacher knowledge, and classroom impact: A research handbook on frameworks and approaches*, pp. 176-199. Hershey, PA: IGI Global.

e. **Contributions to Books** (chronological from most recent to earliest)

2. **Journal Articles**

a. **Refereed**

1. **Journal Articles**

**International and National** (chronological from most recent to earliest)

N=45

**Bostic, J.** (2023). Engaging hearts and minds in assessment research. *School Science and Mathematics Journal*, 123(6), 217-219. <https://doi.org/10.1111/ssm.12621>  
[Acceptance rate  $\cong$  20%]

Cahill, J.\* & **Bostic, J.** (In Press). Preparing preservice mathematics teachers to teach for social justice. *School Science and Mathematics Journal*. <https://doi.org/10.1111/ssm.12602>  
[Acceptance rate  $\cong$  20%]

\* Undergraduate student mentored.

- Folger, T., **Bostic, J.**, & Krupa, E. (2023). *Defining test-score interpretation, use, and claims: Delphi study for the validity argument. Educational Measurement: Issues & Practice*. <https://doi.org/10.1111/emip.12569> [Acceptance rate  $\cong$  11%]
- May, T., Koskey, K., **Bostic, J.**, Stone, G., Kruse, L., & Matney, G. (2023). Evaluating the differential impact of dichotomous and partial credit scoring models on student problem-solving assessment outcomes. *School Science and Mathematics Journal*, 123(2), 54-76. <https://doi.org/10.1111/ssm.12570> [Acceptance rate  $\cong$  25%]
- Bright, D., Fan, Y., Fornaro, C., Koskey, K., May, T., **Bostic, J.**, & Swineford, D. (2023). Examining the influence of COVID-19 on elementary mathematics standardized test scores in a rural Ohio school district. *Mid-Western Educational Researcher*, 34(4), 446-469. [Acceptance rate  $\cong$  31 %]
- Koskey, K. L. K., May, T. A. Fan, Y., Bright, D., Stone, G., Matney, G., & **Bostic, J. D.** (2023). Flip it: An exploratory (versus explanatory) sequential mixed methods design using Delphi and differential item functioning to evaluate item bias. *Methods in Psychology*, 8, 100117. <https://doi.org/10.1016/j.metip.2023.100117>
- Folger, T.D., Stewart, M., **Bostic, J.**, & May, T. A (in press). Validating the use of student-level instruments to examine preservice teachers' mathematical problem solving. *School Science and Mathematics Journal*, 122(8), 417-428. [Acceptance rate  $\cong$  20 %]
- Folger, T., Roberts, A., & **Bostic, J.** (2022). Examining school accountability: Discriminating schools' A-F report card grades. *Mid-Western Educational Researcher*, 34(3), 295-316. [Acceptance rate  $\cong$  31 %]
- Kruse, L., Stone, G., May, T., & **Bostic, J.** (in press). Validity and test-length reduction strategies for complex assessments. *Journal of Applied Measurement*. [Acceptance rate  $\cong$  20 %]
- Carney, M., **Bostic, J.**, Krupa, E., & Shih, J. (2022). Interpretation and use statements for instruments in mathematics education. *Journal for Research in Mathematics Education*, 53(4), 334-340. [Acceptance rate  $\cong$  7%]
- Matney, G., **Bostic, J.**, Fox, M., Hicks, T., May, T., & Stone, G. (2022). Fourth-grade students' sensemaking during multi-step problem solving. *Journal for Mathematical Behavior*, 65. <https://doi.org/10.1016/j.jmathb.2022.100933> [Acceptance rate  $\cong$  18 %]
- Brown, N., **Bostic, J.**, Folger, T., Folger, L., Hicks, T., & Nofziger, S. (2022). *Revising assessments to address UDL and standards. Mathematics Teacher: Learning & Teaching*, 115(4), 252-264. [Acceptance rate  $\cong$  38%]
- Hicks, T., & **Bostic, J.** (2021). Formative assessment through think alouds. *Mathematics Teacher: Learning & Teaching*, 114(8), 598-606. [Acceptance rate  $\cong$  38%]

- Bostic, J., Vostal, B., & Folger, T.** (2021). Growing TTULPs through your lessons. *Mathematics Teacher: Learning & Teaching*, 114(7), 495-507. [Acceptance rate  $\cong$  38%]
- Bostic, J.** (2021). Think alouds: Informing scholarship and broadening partnerships through assessment. *Applied Measurement in Education*, 34(1), 1-9. DOI: 10.1080.08957347.2020.1835913 [Acceptance rate  $\cong$  15%]
- Bostic, J., Sondergeld, T, Matney, G., Stone, G., & Hicks, T.** (2021). Gathering response process data for a problem-solving measure through whole-class think alouds. *Applied Measurement in Education*, 34(1), 46-60. DOI: 10.1080.08957347.2020.1835913 [Acceptance rate  $\cong$  15%]
- Bostic, J., Clark, Q., Vo, T., Esters, L., & Knobloch, N.** (2021). A design process for developing agricultural life science-focused model eliciting activities. *School Science and Mathematics Journal*, 121(1), 13-24. [Acceptance rate  $\cong$  25%]
- Bostic, J., Lesseig, K., Sherman, M., & Boston, M.** (2021). Classroom observation and mathematics education research. *Journal of Mathematics Teacher Education*, 24, 5-31, <https://doi.org/10.1007/s10857-019-09445-0>. [Acceptance rate  $\cong$  15%]
- Polly, D., **Bostic, J.**, & Eddy, C. (2020). Editor's notes. *Investigations in Mathematics Learning*, 12(4), 243-245. DOI: 10.1080/19477503.2020.1846409 [Acceptance rate  $\cong$  15%]
- Roberts, T., **Bostic, J.**, & Matney, G. (2020). Modeling with Mathematics in the Moment. *Mathematics teacher: Learning and teaching PreK-12*, 113(10), 864-867. [Acceptance rate  $\cong$  20%]
- Lavery, M. R., **Bostic, J.**, Kruse, L., Krupa, E., & Carney, M. (2020). Argumentation Surrounding Argument-Based Validation: A Systematic Review of Validation Methodology in Peer-Reviewed Articles. *Educational Measurement: Issues and Practice*, 39(4), 116-130. [Acceptance rate  $\cong$  11%]
- Nielsen, M. & **Bostic, J.** (2020). Informing programmatic-level conversations on mathematics preservice teachers' problem-solving performance and experiences. *Mathematics Teacher Education and Development*, 22(1), 33-47. [Acceptance rate  $\cong$  18%]
- Abassian, A., Safi, F., Bush, S., & **Bostic, J.** (2020). Five different perspectives on mathematical modeling. *Investigations in Mathematics Learning*, 12(1), 53-63. [Acceptance rate  $\cong$  13%] <https://doi.org/10.1080/19477503.2019.1595360>
- Krupa, E., Carney, M., & **Bostic, J.** (2019). Approaches to instrument validation. *Applied Measurement in Education*, 32(1), 1-9. [Acceptance rate  $\cong$  18%]

- Bostic, J., Matney, G., & Sondergeld, T.** (2019). A lens on teachers' promotion of the Standards for Mathematical Practice. *Investigations in Mathematics Learning, 11*(1), 69-82. doi.org/10.1080/19477503.2017.1379894 [Acceptance rate  $\cong$  19%]
- Nielsen, M., & **Bostic, J.** (2018). Connecting and using multiple representations. *Mathematics Teaching in the Middle School, 23*(7), 386-393. [Acceptance rate  $\cong$  25%]
- Bostic, J.** (2017). Moving forward: Instruments and opportunities for aligning current practices with testing standards. *Investigations in Mathematics Learning, 9*(3), 109-110. [Acceptance rate  $\cong$  20%]
- Bostic, J., Sondergeld, T., Folger, T. & Kruse, L.** (2017). PSM7 and PSM8: Validating two problem-solving measures. *Journal of Applied Measurement, 18*(2), 151-162. [Acceptance rate  $\cong$  20%]
- Bostic, J., & Matney, G.** (2016). Leveraging modeling with mathematics-focused instruction to promote other standards for mathematical practice. *Journal of Mathematics Education Leadership, 17*(2), 21-33. [Acceptance rate  $\cong$  15%]
- Casey, S., & **Bostic, J.** (2016). Structurally sound mathematics and statistics instruction. *Mathematics Teaching in the Middle School, 22*, 100-107. [Acceptance rate  $\cong$  25%]
- Bostic, J.** (2016). Fostering preservice teachers' justification: A case study of instruction with proof-related tasks and manipulatives. *Journal of Mathematics Education at Teachers College, 7*(1), 35-43. [Acceptance rate  $\cong$  30%]
- Bostic, J., Pape, S., & Jacobbe, T.** (2016). Encouraging sixth-grade students' problem-solving performance by teaching through problem solving. *Investigations in Mathematics Learning, 8*(3), 30-58. [Acceptance rate  $\cong$  30%]
- Folger, T., & **Bostic, J.** (2015). Supporting middle school students' problem solving with the PSM6. *School Science and Mathematics Journal, 115*, Retrieved from <https://www.ssma.org/assets/docs/Oct2015folgerbostic.pdf> [Acceptance rate  $\cong$  20%]
- Bostic, J., & Sondergeld, T.** (2015). Measuring sixth-grade students' problem solving: Validating an instrument addressing the mathematics Common Core. *School Science and Mathematics Journal, 115*, 281-291. [Acceptance rate  $\cong$  20%]
- Thomas, A., & **Bostic, J.** (2015). Improving argumentative writing through mathematics and collaboration. *Voices from the Middle, 22*(3), 38-49. [Acceptance rate  $\cong$  15%]
- Boston, M., **Bostic, J., Lesseig, K., Sherman, M.** (2015). Classroom Observation tools to support the work of mathematics teacher educators. Invited manuscript for *Mathematics Teacher Educator, 3*, 154-175. [Acceptance rate  $\cong$  15%]

\* Note that the second, third, and fourth authors contributed equally to this presentation and are listed alphabetically.

**Bostic, J.** (2015). A blizzard of a value. *Mathematics Teaching in the Middle School*, 20, 350 – 357. [Acceptance rate  $\cong$  25%]

\* Note that *Mathematics Teaching in the Middle School* editors selected this article as their “favorite article” from this issue.

Yee, S., & **Bostic, J.** (2014). Developing a contextualization of students’ mathematical problem solving. *Journal for Mathematical Behavior*, 36, 1-19. [Acceptance rate  $\cong$  20%]

**Bostic, J.**, & Matney, G. (2014). Role-playing the Standards for Mathematical Practice: A Professional Development Tool. *Journal for Mathematics Education Leadership*, 15(2), 3-10. [Acceptance rate  $\cong$  25%]

Snyder, J. \*, & **Bostic, J.** (2014). Connecting the threads of area and perimeter. *Teaching Children Mathematics*, 20, 418-425. [Acceptance rate  $\cong$  25%]

\* Undergraduate student mentored during methods semester.

Matney, G., Jackson, J., & **Bostic, J.** (2013). Connecting instruction, minute contextual experiences, and a realistic assessment of proportional reasoning. *Investigations in Mathematics Learning*, 6, 41-68. [Acceptance rate  $\cong$  30%]

**Bostic, J.** (December 2012/January 2013). Model-eliciting activities for teaching mathematics. *Mathematics Teaching in the Middle School*, 18, 262 – 266. [Acceptance rate  $\cong$  25%]

**Bostic, J.**, & Jacobbe, T. (2011). Reflecting on teaching: A doctoral student’s maturation over an academic year. *International Journal of University Faculty & Teaching Development*, 2(1), 71-80. [Acceptance rate  $\cong$  50%]

**Bostic, J.**, & Pape, S. (2010). Examining students’ perceptions of two graphing technologies and their impact on problem solving. *Journal of Computers in Mathematics and Science Teaching*, 29(2), 139-154. [Acceptance rate  $\cong$  20%]

**Bostic, J.**, & Jacobbe, T. (2010). Promote problem-solving discourse. *Teaching Children Mathematics*, 17(1), 32-37. [Acceptance rate  $\cong$  25%]

State (chronological from most recent to earliest)

N=6

Kruse, L., Sondergeld, T. A., **Bostic, J.**, Waddell, E., Ibarrola Recalde, G., & Stone, G. (2020). Evaluating the impact of the common core for achievement middle grades mathematical proficiency program. *Pennsylvania Education Leadership Journal*, 39(2), 5-33. [Acceptance rate  $\cong$  40%]



- Kruse, L., Schlosser, M., & **Bostic, J.** (2017). Fueling teachers' interest in learning about the standards for mathematical practice. *Ohio Journal for School Mathematics*, 77, 34-43. [Acceptance rate  $\cong$  40%]
- Brahier, D., & **Bostic, J.** (2015). *A model for enhancing mathematics teacher preparation*. *Ohio Journal of School Mathematics*, 71, 26-30. [Acceptance rate  $\cong$  44%]
- Vostal, B., **Bostic, J.**, Fidler, D., Stewart, A., & Waterson, A. (2014). Responding to the Third-grade Guarantee with Co-teaching. *Ohio Journal of English Language Arts*, 54(1), 17-25. [Acceptance rate  $\cong$  60%]
- Bostic, J.**, Vostal, B., & Ruffer, B. (2014). Promoting Citizenry through Problem-based learning. *Ohio Social Studies Review*, 51(1), 73-87. [Acceptance rate  $\cong$  30%]
- Bostic, J.**, & Matney, G. (2013). Overcoming a Common Storm: Designing PD for Teachers Implementing the Common Core. *Ohio Journal of School Mathematics*, 67, 12-19. [Acceptance rate  $\cong$  44%]

## 2. Proceedings (chronological from most recent to earliest)

N= 55

- Krupa, E., (speaker), **Bostic, J.**, Bentley, B., Folger, T., & Burkett, K. (2024, July). *Math education assessments: Cataloging quantitative instruments and validity evidence since 2000*. Proceedings of the International Council on Mathematics Education, Sydney, Australia.
- May, T., **Bostic, J. (speaker)**, Teuscher, D., Koskey, K., ...Stone, G. (2024, July). *Building effective instrument development teams: Two case studies*. Poster presented at the meeting of the International Council on Mathematics Education, Sydney, Australia.
- Bostic, J., (speaker)**, May, T., Folger, T., Matney, G., Koskey, K., Stone, G. (2024, July). *Applying empathic principles to mathematics education assessment*. Proceedings of the of the International Council on Mathematics Education (pp. TBA), Sydney, Australia.
- Bostic, J.**, May, T., Matney, G., Koskey, K., Stone, G., & Folger, T. (2024, March). *Computer adaptive mathematical problem-solving measure: A brief validation report*. In D. Kombe & A. Wheeler (Eds.), *Proceedings of the 51<sup>st</sup> annual meeting of the Research Council on Mathematics Learning* (pp. ##-##). Columbia, SC.
- Folger, T., **Bostic, J.**, & Woodward, D. (2023, October). Evaluating the universal screeners for number sense: A validation study. In R. Hammock & B. Cory, (Eds.), *Proceedings of the 122<sup>nd</sup> annual convention of the School Science and Mathematics Association* (Vol. 10, pp. 6-14). Colorado Springs, CO: SSMA.
- Bostic, J.**, Krupa, E., Folger, T., Bentley, B., & Burkett, K. (2023, October). *K-12 Student and Teacher Math Measures: What's out there? What do we need?* Paper presented at the

Research Conference for the National Council of Teachers of Mathematics (pp. TBD).  
Washington, DC.

**Bostic, J.**, Folger, T., Koskey, K., Matney, G., May, T., & Stone, G. (2023, October). *A modified depth of knowledge framework for word problems*. Paper presented at the forty-fifth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. TBD). Reno, NV.

Krupa, E., Folger, T., Bentley, B., **Bostic, J.**, Folger, T., & Burkett, K. (2023, October). *Quantitative instrument repository for mathematics education research with validity evidence*. Paper presented at the forty-fifth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. TBD). Reno, NV.

**Bostic, J.** (2023, April). A synthesis of mathematics and statistics assessments: 2000-2020. Paper presented at the annual meeting of the annual meeting of the American Education Research Association. Chicago, IL.

Folger, T., **Bostic, J.**, & Krupa, E. (2023, April). *Delphi study for the validity argument: Defining test-score interpretation, use, and claims*. Paper presented annual meeting of the annual meeting of the American Education Research Association. Chicago, IL.

Koskey, K., May, T., Fan, Y., Bright, D., Matney, G., Stone, G., & **Bostic, J.** (2023, April). *Flip it: An exploratory (versus explanatory) sequential design using delphi method evaluating potential item bias*. Paper presented annual meeting of the annual meeting of the American Education Research Association. Chicago, IL.

**Bostic, J.**, Folger, T., Bentley, B., & Krupa, E., (2023, March). *Impacting scholarship: Approaches to gather validity evidence*. In Cobbs, G. and Kombe, D. (Eds.), Proceedings of the 50<sup>th</sup> Annual Meeting of the Research Council on Mathematics Learning (pp. 16-25). Las Vegas, NV.

**Bostic, J.**, Krupa, E., Folger, T., Bentley, B., & Stokes, D. (2022, October). *Gathering validity evidence to support mathematics education scholarship*. In A. Lischka, E. Dyer, E., R. Jones, J. Lovett, J. Strayer, & S. Drown (Eds.), Proceedings of the forty-fourth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 100-104). Nashville, TN.

**Bostic, J.**, Folger, T., Matney, G., May, T., Koskey, K., & Stone, G. (2022, October). *Changing populations: Using the PSMs with teachers*. In A. Lischka, E. Dyer, E., R. Jones, J. Lovett, J. Strayer, & S. Drown (Eds.), Proceedings of the forty-fourth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 233-234). Nashville, TN.

Koskey, K. L. K., Bright, D., Struloeff, K., Sondergeld, T., Stone, G., **Bostic, J.**, & Matney, G. (2022). Adaptation of the Delphi Technique in the development of assessments of

problem-solving in computer adaptive testing environments (DEAP-CAT). Proceedings of the International Conference on Education, Research, and Innovation. Seville, Spain.

**Bostic, J.** & Krupa, E. (2021, October). *Abstracts for assessments: Describing a summary statement*. In D. Olanoff, K. Johnson, & S. Spitzer (Eds.), Proceedings of the 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 1854-1858). Philadelphia, PA.

Folger, T., Fornaro, C., **Bostic, J.**, & Sondergeld, T. (2021, October) *Teachers' interpretations of assessment results*. In D. Olanoff, K. Johnson, & S. Spitzer (Eds.), Proceedings of the 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 111-112). Philadelphia, PA.

**Bostic, J.**, Sondergeld, T., Matney, G., & Stone, G. (2021, October). *Three steps forward: Validity evidence for the PSM*. In D. Olanoff, K. Johnson, & S. Spitzer (Eds.), Proceedings of the 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 26-30). Philadelphia, PA.

Fornaro, C., Folger, T., May, T., & **Bostic, J.** (2021, October). *Classroom assessments building towards standardized assessments*. In D. Olanoff, K. Johnson, & S. Spitzer (Eds.), Proceedings of the 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 117-118). Philadelphia, PA.

Bright, D., Fornaro, C., Fan, Y., May, T., & **Bostic, J.** (2021, October). *Investigating the impact of COVID-19 on standardized test scores*. In D. Olanoff, K. Johnson, & S. Spitzer (Eds.), Proceedings of the 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 325-326). Philadelphia, PA.

**Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2021, April). *Whole-class think alouds: A tool for investigating problem solving*. Paper presented annual meeting of the annual meeting of the American Education Research Association. Orlando, FL.

Kruse, L., Stone, G., Sondergeld, T., **Bostic, J.** (2021, April). *Validity and test-length reduction strategies for complex assessments*. Paper presented annual meeting of the annual meeting of the American Education Research Association. Orlando, FL.

Matney, G., **Bostic, J.**, Fox, M., Sondergeld, T., & Stone, G. (2021, March). *Fourth-grade students sensemaking of word problems*. In H. Marchionda & S. Bateiha (Eds.), Proceedings of the 48th Annual Meeting of the Research Council on Mathematics Learning (pp. 59-66). Denton, TX. [Acceptance rate  $\cong$  40%].

**Bostic, J.**, Sondergeld, T., & Schnepf, J. (2020, November). *Broadening the problem-solving measures: Moving online*. Paper presented at the annual meeting of the School Science

- and Mathematics Association. In M. Mohr-Schroeder & J. Thomas (Eds.), *Proceedings of the Annual Meeting of the School Science & Mathematics Association* (pp. 59-66). Minneapolis, MN. [Acceptance rate  $\cong$  30%].
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2020, April). *Validation as design-based research: Implications for practice and theory*. Paper presented at annual meeting of the annual meeting of the American Education Research Association. San Francisco, CA.
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2020, April). *Developing a series of problem-solving measures for elementary students*. Paper presented at annual meeting of the annual meeting of the American Education Research Association. San Francisco, CA.
- Sondergeld, T., Stone, G., Kruse, L., **Bostic, J.**, & Matney, G. (2020, April). *Evaluating Dichotomous and Partial-Credit Scoring within a Constructed-Response Assessment: Is More Information Always Psychometrically Better?* Paper presented at annual meeting of the annual meeting of the American Education Research Association. San Francisco, CA.
- Kruse, L., Waddell, E., Recalde, G., Sondergeld, T., & **Bostic, J.** (2020, April). *Evaluating the impact of a multi-year mathematics proficiency program*. Paper presented at annual meeting of the annual meeting of the American Education Research Association. San Francisco, CA.
- Lavery, M., Gerber, D., & **Bostic, J.** (2020, April). *Making valid instructional decisions: Teaching educators to consider validity evidence*. Paper presented at annual meeting of the annual meeting of the American Education Research Association. San Francisco, CA.
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2020, March). *Measuring what we intend: A validation argument for the grade 5 problem-solving measure (PSM5). Validation: A Burgeoning Methodology for Mathematics Education Scholarship*. In J. Cribbs & H. Marchionda (Eds.), *Proceedings of the 47th Annual Meeting of the Research Council on Mathematics Learning* (pp. 59-66). Las Vegas, NV. [Acceptance rate  $\cong$  42%].
- Clark, Q., **Bostic, J.**, Esters, L., & Knoblach, N. (2019, October). *Designing agricultural life science MEAs through the lens of a novice: A self study*. In S. Otten, A. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.), *Proceedings of the 41<sup>st</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 946-947). St. Louis, MO: University of Missouri.
- Sondergeld, T., Stone, G., **Bostic, J.**, & Matney, G., (2019, July). *Validity in a different context: Exploring relations to other variables evidence*. In M. Graven, H. Venkat, A. Essien, & P. Vale (Eds.), *Proceedings of the 43<sup>rd</sup> Meeting of the International Group for the Psychology of Mathematics Education* (Vol. 4, p. 4-10). Pretoria, South Africa. Retrieved from <http://www.pmena.org/html/proceedings.html>
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2019, July). *Developing a problem-solving measure for grade 4*. In M. Graven, H. Venkat, A. Essien, & P. Vale (Eds.), *Proceedings*

of the 43<sup>rd</sup> Meeting of the International Group for the Psychology of Mathematics Education (Vol. 4, p 4-16). Pretoria, South Africa. Retrieved from <http://www.pmena.org/html/proceedings.html>

- Matney, G., **Bostic, J.**, & Lavery, M. (2019, April). *Knowing the standards for mathematical practice: A validation process for the SMP knowledge assessment*. Proceedings of the 2019 Annual Meeting of the American Educational Research Association. Toronto, CA. [Acceptance rate  $\cong$  35%].
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2019, February). *Validation: A Burgeoning Methodology for Mathematics Education Scholarship*. In A. Sanogo & J. Cribbs (Eds.), *Proceedings of the 46th Annual Meeting of the Research Council on Mathematics Learning* (pp. 43-50). Charlotte, NC. [Acceptance rate  $\cong$  50%].
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2018, November). *Content validity evidence for new problem-solving measures (PSM3, PSM4, and PSM5)*. In T. Hodges, G. Roy, & A. Tyminski (Eds.), *Proceedings for the 40<sup>th</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1641). Greenville, SC. [Acceptance rate  $\cong$  30%].
- Bostic, J. D.** (2018). Improving test development reporting practices. In L. Venenciano & A. Sanogo (Eds.), *Proceedings of the 45th Annual Meeting of the Research Council on Mathematics Learning* (pp. 57-64). Baton Rouge, LA. [Acceptance rate  $\cong$  63%].
- Brahier, D. & **Bostic, J. D.** (2018). Action research in undergraduate mathematics teacher education. In L. Venenciano & A. Sanogo (Eds.), *Proceedings of the 45th Annual Meeting of the Research Council on Mathematics Learning* (pp. 161-168). Baton Rouge, LA. [Acceptance rate  $\cong$  63%].
- Lavery, M., Carney, M., **Bostic, J.**, Shih, J., Krupa, E., Wilson, M., & Kruse, L. (2018, April). *Examining the arguments surrounding the argument-based approach to validation: A systematic review of validation methodology*. Proceedings of the 2018 Annual Meeting of the American Educational Research Association. New York, NY. [Acceptance rate  $\cong$  33%].
- Shih, J., **Bostic, J.**, Carney, M., & Krupa, E. (2017). *Exploring and examining quantitative measures* (Working Group). In E. Galindo & J. Newton (Eds.), *Proceedings for the 39<sup>th</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1516-1523). Indianapolis, IN. Retrieved from [https://www.conf.purdue.edu/landing\\_pages/pmena/docs/PMENA39\\_2017\\_Proceedings.pdf](https://www.conf.purdue.edu/landing_pages/pmena/docs/PMENA39_2017_Proceedings.pdf). [Acceptance rate  $\cong$  100%].
- Bostic, J.**, Matney, G., & Sondergeld, T. (2017). *(Re)Considering teachers' promotion of the standards for mathematical practice*. In T. Olson & L. Venenciano (Eds.), *Proceedings of the 44th Annual Meeting of the Research Council on Mathematics Learning* (pp. 1-8). Ft. Worth, TX. [Acceptance rate  $\cong$  52%].

- Bostic, J.,** Carney, M., Krupa, E., & Shih, J. (2016, October). *Exploring and examining quantitative measures*. In M. Wood, E. Turner, M. Civil, & J. Eli (Eds.), Proceedings for the 38<sup>th</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 1641-1647). Tuscon, AZ. Retrieved from <http://www.pmena.org/pmenaproceedings/PMENA%2038%202016%20Proceedings.pdf> [Acceptance rate  $\cong$  30%].
- Bostic, J.,** Matney, G., & Sondergeld, T. (2016, February). *Exploring validity and reliability for the revised SMPs look-for protocol*. In K. Adolphson & T. Olson (Eds.), Proceedings of the 43<sup>rd</sup> Annual Meeting of the Research Council on Mathematics Learning (pp. 9-17). Orlando, FL. [Acceptance rate  $\cong$  41%].
- Bostic, J.,** & Sondergeld, T. (2015, November). *Development of vertically equated problem-solving measures*. In T., Bartell, K., Bieda, R., Putnam, K., Bradfield, & H. Dominguez (Eds.), Proceedings of the 37<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 395-398). East Lansing, MI: Michigan State University. Retrieved from <http://www.pmena.org/pmenaproceedings/PMENA%2037%202015%20Proceedings.pdf> [Acceptance rate  $\cong$  30%].
- Bostic, J.,** & Matney, G. (2015, April). *Using the look-for rubric to examine elementary teachers' instruction*. Proceedings of the 2015 Annual Meeting of the American Educational Research Association. Chicago, IL. Abstract retrieved from <http://www.aera.net/Publications/OnlinePaperRepository/AERAOnlinePaperRepository/t/abid/12720/Default.aspx> [Acceptance rate  $\cong$  35%].
- Bostic, J.,** & Sondergeld, T. (2015, April). *Measuring sixth-grade students' problem solving: Validating an instrument addressing the common core*. Proceedings of the 2015 Annual Meeting of the American Educational Research Association. Chicago, IL. Abstract retrieved from <http://www.aera.net/Publications/OnlinePaperRepository/AERAOnlinePaperRepository/t/abid/12720/Default.aspx> [Acceptance rate  $\cong$  35%].
- Bostic, J.,** & Matney, G. (2015, February). *Supporting K-10 teachers instructional changes to promote the standards for mathematical practice*. In M. Che & K. Adolphson (Eds.), Proceedings of the 42<sup>nd</sup> Annual Meeting of the Research Council on Mathematics Learning. Las Vegas, NV. Retrieved from <http://web.unlv.edu/RCML/2015Proceedings.pdf> [Acceptance rate  $\cong$  39%]
- Bostic, J.,** & Sondergeld, T. (2014, July). *Validating the PSM6*. In P. Liljedahl, C. Nicol, S. Osterle, & D. Allan (Eds.), Proceedings of the 38<sup>th</sup> Meeting of the International Group for the Psychology of Mathematics Education and the North American Chapter of the Psychology of Mathematics Education. Vancouver, BC. Retrieved from <http://www.pmena.org/html/proceedings.html> [Acceptance rate  $\cong$  40%]



- Brahier, D., & **Bostic, J.** (2014, February). *Rethinking the preparation of math and science teachers*. In G. Matney & M. Che (Eds.), Proceedings of the 41<sup>st</sup> Annual Meeting of the Research Council on Mathematics Learning. San Antonio, TX. Retrieved from <http://web.unlv.edu/RCML/2014Proceedings.pdf> [Acceptance rate  $\cong$  40%]
- Bostic, J.**, & Matney, G. (2014, February). *Opportunities to engage K-5 students in the standards for mathematical practice*. In G. Matney & M. Che (Eds.), Proceedings of the 41<sup>st</sup> Annual Meeting of the Research Council on Mathematics Learning. Retrieved from <http://web.unlv.edu/RCML/2014Proceedings.pdf> San Antonio, TX. [Acceptance rate  $\cong$  40%]
- Bostic, J.**, & Matney, G. (2013, March). *Preparing K-10 teachers through common core for reasoning and sense making*. In S. Reeder & G. Matney (Eds.), Proceedings of the 40<sup>th</sup> Annual Meeting of the Research Council on Mathematics Learning. Tulsa, OK. Retrieved from <http://web.unlv.edu/RCML/2013Proceedings.pdf> [Acceptance rate  $\cong$  75%]
- Bostic, J.**, & Yee, S. (2012, October). *A developmental perspective into students' contextualization of problem solving*. In L. Van Zoest, J-J. Lo, and J. Kratsky (Eds.), Proceedings of the 34<sup>th</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, pp. 190-193. Kalamazoo, MI: Western Michigan University. Retrieved from <http://www.pmena.org/html/proceedings.html> [Acceptance rate  $\cong$  30%]
- Matney, G., **Bostic, J.**, & Brahier, D. (2012, February). *Overcoming a common storm: Designing the PD teachers need for successful common core implementation*. In S. Reeder (Ed.), Proceedings of the 39<sup>th</sup> Annual Meeting of the Research Council on Mathematics Learning, pp. 162-172. Charlotte, NC. Retrieved from <http://web.unlv.edu/RCML/2012Proceedings.pdf> [Acceptance rate  $\cong$  50%]
- Bostic, J.** (2011, October). *Exploring the effects of curricula on fifth-grade students' problem solving*. In L. Wiest & T. Lamberg (Eds.), Proceedings of the 33<sup>rd</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, pp. 1889-1890. Reno, NV: University of Nevada - Reno. Retrieved from <http://www.pmena.org/html/proceedings.html> [Acceptance rate  $\cong$  28%]
- Bostic, J.**, Pape, S., & Jacobbe, T. (2011, October). *Validating two problem-solving instruments for use with sixth-grade students*. In L. Wiest & T. Lamberg (Eds.), Proceedings of the 33<sup>rd</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, pp. 756-763. Reno, NV: University of Nevada - Reno. Retrieved from <http://www.pmena.org/html/proceedings.html> [Acceptance rate  $\cong$  28%]

## b. Non-Refereed Articles

## 1. Journals

## 2. Newsletters

**Bostic, J.** (2021, October). Let's think about it. *Validator*, 2(1), pp.1-2.

**Bostic, J.** (2019, October). We can do better! *Intersection Points*, 44(6), p. 3-4.

**Bostic, J.** (2014, October). Open doors to dairy queen through modeling with mathematics. *Intersection Points*, 39(2), p. 5-7.

**Bostic, J.** (2012). Cinnamon rolls: A hands-on stem activity. *The Northwest Ohio STEM Connection*, 2(1), p. 6

## 3. Miscellaneous

### c. Editorships of Journals

Editor. (2021 – 2024). *Investigations in Mathematics Learning*.

Editor. (2020). Special issue of *Applied Measurement in Education*. Topic: Response process validity evidence and novel approaches to gathering such evidence.

Associate Editor. (2019 - 2023). *Mid-western Educational Researcher*.

Associate Editor. (2018 – 2020). *Investigations in Mathematics Learning*.

Editor. (2016-2017). Special issue of *Investigations in Mathematics Learning*. Topic: validity-related aspects of research, evaluation, and measurement using quantitative tools within mathematics education contexts.

### 3. Book Reviews (International and National)

**Bostic, J. & Kruse, L.** (2016). Considerations for problem solving in secondary mathematics. [Review of the book *Mathematics in middle and secondary school: A problem solving approach*, by A. Karp & N. Wasserman]. *Teachers College Record*.

**Bostic, J.** (2016). A book review of enacted mathematics curriculum. [Review of the book *Enacted mathematics curriculum: A conceptual framework and research needs*, by D.R. Thompson & Z. Usiskin (Eds.)]. *Teachers College Record*.

## 4. Abstracts

## 5. Reports

### a. Published

### b. Unpublished



- Bostic, J.** (2023). *Year 2 report for Developing and Evaluating Assessments of Problem Solving – Computer Adaptive Testing (DEAP-CAT)*. Bowling Green, OH: Author.
- Bostic, J.** (2023). *Year 4 report for Validity and Measurement in Mathematics Education (V-M<sup>2</sup>Ed)*. Bowling Green, OH: Author.
- Bostic, J.** (2022). *Year 3 report for Validity and Measurement in Mathematics Education (V-M<sup>2</sup>Ed)*. Bowling Green, OH: Author.
- Bostic, J.** (2022). *Year 1 report for Developing and Evaluating Assessments of Problem Solving – Computer Adaptive Testing (DEAP-CAT)*. Bowling Green, OH: Author.
- Bostic, J.** (2022). *Year 5 report for Developing and Evaluating Assessments of Problem Solving (DEAP)*. Bowling Green, OH: Author.
- Bostic, J.** (2021). *Year 2 report for Validity and Measurement in Mathematics Education (V-M<sup>2</sup>Ed)*. Bowling Green, OH: Author.
- Bostic, J.** (2021). *Year 4 report for Developing and Evaluating Assessments of Problem Solving (DEAP)*. Bowling Green, OH: Author.
- Bostic, J.** (2020). *Year 1 report for Validity and Measurement in Mathematics Education (V-M<sup>2</sup>Ed)*. Bowling Green, OH: Author.
- Bostic, J.** (2020). *Year 3 report for Developing and Evaluating Assessments of Problem Solving (DEAP)*. Bowling Green, OH: Author.
- Bostic, J.** (2019). *Year 2 report for Developing and Evaluating Assessments of Problem Solving (DEAP)*. Bowling Green, OH: Author.
- Bostic, J.** (2018). *Year 1 report for Developing and Evaluating Assessments of Problem Solving (DEAP)*. Bowling Green, OH: Author.
- Bostic, J.** (2017). *Year 1 report for Validity evidence for Measurement in Mathematics Education (V-M<sup>2</sup>ED)*. Bowling Green, OH: Author.
- Belcher, J., Stearns, S., Pollock, J., Steiner, J., Midden, W., Matney, G., **Bostic, J.**, & Burgoon, J., (2017). *Annual report for NWO FY17*. Bowling Green, OH: Author.
- Bostic, J.**, Belcher, J., & Sondergeld, T. (2017). *Year 3 report for common core for achievement and middle grades mathematics proficiency*. Bowling Green, OH: Author.
- Belcher, J., Stearns, S., Pollock, J., Steiner, J., Midden, W., Matney, G., **Bostic, J.**, & Burgoon, J., (2016). *Annual report for NWO FY16*. Bowling Green, OH: Author.

**Bostic, J.,** Belcher, J., & Sondergeld, T. (2016). *Year 2 report for common core for achievement and middle grades mathematics proficiency*. Bowling Green, OH: Author.

Belcher, J., Stearns, S., Pollock, J., Steiner, J., Midden, W., Matney, G., **Bostic, J.,** & Burgoon, J., (2015). *Annual report for NWO FY15*. Bowling Green, OH: Author.

**Bostic, J.,** Belcher, J., & Sondergeld, T. (2015). *Year 1 report for common core for achievement and middle grades mathematics proficiency*. Bowling Green, OH: Author.

**Bostic, J.,** Burgoon, J., & Belcher, J. (2015). *Final project report for year 3 of common core for reasoning and sense making: Secondary*. Bowling Green, OH: Author.

**Bostic, J.,** Burgoon, J., & Belcher, J. (2014). *Final project report for year 2 of common core for reasoning and sense making: Secondary*. Bowling Green, OH: Author.

**Bostic, J.,** Burgoon, J., & Belcher, J. (2014). *Interim project report for year 3 of common core for reasoning and sense making: Secondary*. Bowling Green, OH: Author.

**Bostic, J.,** & Burgoon, J. (2014). *An initial report on south central mathematics faculty from (CO)<sup>2</sup>RES Secondary*. Bowling Green, OH: Author.

**Bostic, J.,** Burgoon, J., & Belcher, J. (2013). *Interim project report for year 2 of common core for reasoning and sense making: Secondary*. Bowling Green, OH: Author.

**Bostic, J.,** Burgoon, J., & Belcher, J. (2013). *Final project report for year 3 of common core for reasoning and sense making: Secondary*. Bowling Green, OH: Author.

**Bostic, J.,** Burgoon, J., & Belcher, J. (2012). *Interim project report for year 1 of common core for reasoning and sense making: Secondary*. Bowling Green, OH: Author.

## **XI. PAPERS READ TO PROFESSIONAL SOCIETIES**

### **A. Invited**

#### **International/National**

**N=15**

Krupa, E., (speaker), **Bostic, J.,** Bentley, B., Folger, T., & Burkett, K. (2024, July). *Math education assessments: Cataloging quantitative instruments and validity evidence since 2000*. Poster presented at the meeting of the International Council on Mathematics Education, Sydney, Australia.

May, T., **Bostic, J. (speaker),** Teuscher, D., Koskey, K., ...Stone, G. (2024, July). *Building effective instrument development teams: Two case studies*. Poster presented at the meeting of the International Council on Mathematics Education, Sydney, Australia.

- Bostic, J., (speaker),** May, T., Folger, T., Matney, G., Koskey, K., Stone, G. (2024, July). *Applying empathic principles to mathematics education assessment*. Poster presented at the meeting of the International Council on Mathematics Education, Sydney, Australia.
- Bostic, J. & Krupa, E.** (2022, November). *Starting from the bottom: A look at validity and validation scholarship*. Paper presented at the IIS Cognitive Science Seminar. University of Memphis.
- Bostic, J.** (2022, November). *Disturbing the field through your scholarship*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Nashville, TN.
- Bostic, J.** (2022, April). *Writing mathematics education research: Disturbing the field*. Invited session on behalf of the American Education Research Associate Special Interest Group – Research on Mathematics Education, San Diego, CA.
- Sondergeld, T. (speaker), Stone, G., **Bostic, J., & Matney, G.** (2021, July). *Standardized testing administration time differences on problem-solving outcomes*. Poster presented at the meeting of the International Council on Mathematics Education, Shanghai, China (virtual).
- Stone, G., (speaker), Sondergeld, T., **Bostic, J., & Matney, G.** (2021, July). *Handling missing data on advanced problem solving measures*. Poster presented at the meeting of the International Council on Mathematics Education, Shanghai, China (virtual).
- Bostic, J.** (2021, April). *A measured approach*. Invited session on behalf of the American Education Research Associate Special Interest Group – Research on Mathematics Education, Orlando, FL (virtual).
- Bostic, J.** (Speaker). (2018, February). *I am new to mathematics teacher education: Realities of teaching, scholarship, and service*. Paper presented at meeting of the Association of Mathematics Teacher Educators conference. Houston, TX. [Session Leaders: Lynch, S., James, J., Eskelson, S., Wilkerson, T., & Waller, P.]
- Bostic, J.,** (speaker) & Sondergeld, T. (2016, July). *Validating and vertically equating problem-solving measures*. Paper presented at the meeting of the International Council on Mathematics Education, Hamburg, Germany.
- Thomas, A. (speaker), & **Bostic, J.** (co-author, not speaker). (2015, February 18). *Improving argumentative writing through mathematics and collaboration*. [Audio podcast]. Retrieved from <http://www.ncte.org/journals/vm/podcasts/march-2015-falter-thomas>
- Yee, S., & **Bostic, J.** (Speaker). (2014, October 11). *Developing a contextualization of students' mathematical problem solving* [Audio podcast]. Retrieved from <http://mathed.podomatic.com/>

Matney, G., & **Bostic, J.** (2013, August). *GeoGebra as a ccssm tool for reasoning and sensemaking*. Paper presented at the meeting of the GeoGebra Dynamic Mathematics - North America, Miami University, Oxford, OH.

**Bostic, J.**, & Matney, G. (2013, January). *An overview of common core for reasoning and sensemaking: Secondary*. Poster presented at meeting of Association of Mathematics Teacher Educators. Orlando, FL.

### **Regional/State/Local**

N=7

Vostal, B R., **Bostic, J. D.**, Olson, J., Shah, J., & Vostal, M. (2020). *Mid-Western Educational Researcher: Guidelines and Suggestions for Authors, Reviewers, and Editors*. Presented at the annual meeting of the Mid-Western Educational Research Association, hosted virtually due to COVID-19.

**Bostic, J.** (2020, July). *Assessment, accountability, and action steps: Strategies for the academic year*. Paper presented at the Ohio Mathematics Education Leadership Council and Ohio Council of Teachers of Mathematics online meeting. Online presentation.

**Bostic, J.** (2019, April). *Assessment Practices in Higher Education and Beyond*. Paper presented at the University of Nevada Las Vegas, Las Vegas, NV.

**Bostic, J.** & Matney, G. (2017, June). *Rough drafts and mathematics teaching practices: Supporting teachers' promotion of the mathematics teaching practices*. Paper presented at the Elementary Mathematics Specialists and Teacher Leaders Conference, Westminster, MD.

**Bostic, J.** & Matney, G. (2017, May). *Leveraging classroom observation data for meaningful growth: Using the revised standards for mathematical practice protocol*. Paper presented at the Maryland Council of Teachers of Mathematics Coaching Conference, Stevenson, MD.

**Bostic, J.**, & Sondergeld, T. (2015, November). *Designing instrumentation: A guide to validating measures*. Paper presented at the fall meeting of the Ohio Mathematics Science Partnership, Columbus, OH.

**Bostic, J.**, Burgoon, J., Matney, G., & Belcher, J. (2015, November). *Addressing research designs: A close look at (CO)<sup>2</sup>MP*. Paper presented at the fall meeting of the Ohio Mathematics Science Partnership, Columbus, OH.

## **B. Refereed**

### **International/National**

N=120

- Bostic, J.**, Folger, T., May, T., Koskey, K., Matney, G., & Stone, G. (2024, April). *Borrowing theory from engineering: Applying empathic design principles to mathematics assessment development*. Paper presented at annual meeting of the American Education Research Association. Philadelphia, PA.
- Koskey, K., Folger, T., **Bostic, J.**, Fan, Y., Bright, D., Hutson, T., May, T., Matney, G., & Stone, G. (2024, April). *A mixed methods study exploring patterns in sixth-grade students' mathematical problem-solving errors*. Paper presented at annual meeting of the American Education Research Association. Philadelphia, PA.
- Stone, G., May, T., Koskey, K., **Bostic, J.**, & Matney, G. (2024, April). *Establishing multi-level benchmarks for small-scale, complex examinations using objective standard setting*. Paper presented at annual meeting of the American Education Research Association. Philadelphia, PA.
- Bostic, J.D.**, May, T., Matney, G., Koskey, K., Stone, G., & Folger, T. (2024, March). *Brave new world: Computer-adaptive, problem-solving tests*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Columbia, SC.
- McCracken, M. & **Bostic, J.** (2024, March). Exploring students' decision making of fairness in mathematical assessments. Poster presented at annual meeting of the Research Council on Mathematics Learning. Columbia, SC.
- Nielsen, P., Teuscher, D., & **Bostic, J.** (2024, March). *Identifying teacher tensions through curricular reasoning to induce growth*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Columbia, SC.
- Gallagher, M., Walkowiak, T., Folger, T., **Bostic, J.**, & Zelkowski, J. (2024, February). *So many measures! Choosing the right measure for your teacher education program evaluation*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. Orlando, FL.
- Matney, G., Fan, Y., Koskey, K. L. K., Bright, D. N., Hutson, T. M., May, T. A., **Bostic, J. D.**, Stone, G. E., & Klein, M. (2024, February). *Researched strategies for minimizing bias sources to improve equitable assessment of mathematical problem-solving skills*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. Orlando, FL.
- Woodward, D., **Bostic, J.**, & Folger, T. (2023, October). *The universal screeners for number sense: An open-source assessment project for K-6*. Paper presented at the annual meeting of the School Science and Mathematics Association. Colorado Springs, CO.
- Bostic, J.**, Krupa, E., Folger, T., Bentley, B., & Burkett, K. (2023, October). *What can I use? A discussion of quantitative instruments for K-12 student and teacher contexts*. Paper presented at the annual meeting of the School Science and Mathematics Association. Colorado Springs, CO.

- Bostic, J.**, Krupa, E., & Jong, C. (2023, October). *K-12 Student and Teacher Math Measures: What's out there? What do we need?* Paper presented at the Research Conference for the National Council of Teachers of Mathematics. Washington, DC.
- Bostic, J.**, Folger, T., Koskey, K., Matney, G., May, T., & Stone, G. (2023, October). *A modified depth of knowledge framework for word problems*. Paper presented at the forty-fifth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Reno, NV.
- Krupa, E., Folger, T., Bentley, B., **Bostic, J.**, Folger, T., & Burkett, K. (2023, October). *Quantitative instrument repository for mathematics education research with validity evidence*. Paper presented at the forty-fifth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. TBD). Reno, NV.
- Bostic, J.**, May, T., Krupa, E., & Teuscher, D. (2023, June). Strengthening dissemination practices by leveraging strengths. Paper presented at the 2023 DRK-12 PI meeting. Arlington, VA.
- Bostic, J.** (2023, April). *Allying through formative assessment*. Paper presented at annual meeting of the United States Mathematics Recovery Council. Spokane, WA.
- Bostic, J.** (leader), Carney, M., Folger, T., Harrell-Williams, L., Krupa, E., Shih, J., Wilson, M. (discussant). (2023, April). *A synthesis of mathematics and statistics assessments: 2000-2020 [symposium]*. Paper presented at annual meeting of the American Education Research Association. Chicago, IL.
- Bostic, J.** (discussant). (2023, April). *What have we learned about assessment during Covid-19?* Discussant for "Examining effects of Covid-19 on students' assessment experiences". Education Research Association. Chicago, IL.
- Folger, T., **Bostic, J.**, & Krupa, E. (2023, April). *Delphi study for the validity argument: Defining test-score interpretation, use, and claims*. Paper presented annual meeting of the annual meeting of the American Education Research Association. Chicago, IL.
- Koskey, K., May, T., Fan, Y., Bright, D., Matney, G., Stone, G., & **Bostic, J.** (2023, April). *Flip it: An exploratory (versus explanatory) sequential design using delphi method evaluating potential item bias*. Paper presented annual meeting of the annual meeting of the American Education Research Association. Chicago, IL.
- Matney, G., **Bostic, J.**, May, T., Stone, G., & Koskey, K. L. K. (2023, February). *Examining Student Sensemaking on Multistep Problems*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. New Orleans, LA.

- Bostic, J.**, Krupa, E., Folger, T., Bentley, B., & Stokes, D. (2022, November). *Gathering validity evidence to support mathematics education scholarship*. Paper presented at the North American Chapter of the International Group for the Psychology of Mathematics Education. Nashville, TN.
- Bostic, J.**, Folger, T., Matney, G., May, T., Koskey, K., & Stone, G. (2022, November). *Changing populations: Using the PSMs with teachers*. Poster presented at 44<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Nashville, TN.
- Bostic, J.**, Folger, T., Evans, E., Koskey, K., Brown, N., & Matney, G. (2022, October). Developing a framework for classifying word problems depth of knowledge. Paper presented at the annual meeting of the School Science and Mathematics Association. Missoula, MT.
- Bostic, J.** & Seals, M. (2022, October). Fishing for mathematics and catching student engagement. Paper presented at the annual meeting of the School Science and Mathematics Association. Missoula, MT.
- Bostic, J.**, Folger, T., Brown, N., & Evans, E. (2022, April). *Universally designing mathematics assessments & instruction*. Paper presented at the annual meeting of the US Math Recovery Council, Oak Brook, IL.
- Folger, T. D., Roberts, A. C., & **Bostic, J. D.** (2022, April). *Using non-achievement based variables to differentiate district performance grades* [Poster presentation]. American Educational Research Association Annual Meeting. San Diego, CA.
- Gallagher, M. A., Bardelli, E., Folger, T., Neely, A., **Bostic, J.**, Walkowiak, T., Wilhelm, A., & Zelkowski, J. (2022, April). *Measures of mathematics teachers' behavior and affect: An examination of the assessment landscape*. Paper to be presented at the annual meeting of the American Educational Research Association. San Diego, CA.
- Bostic, J.D.**, Matney, G., May, T., Stone, G., & Folger, T. (2022, April). *PSM5: Measuring elementary students' mathematical problem solving*. Paper presented at the annual meeting of the American Educational Research Association. San Diego, CA.
- Bostic, J.D.**, May, T., Matney, G., Stone, G., & Folger, T. (2022, March). *Assessment standard setting: What, How, and Why?*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Grapevine, TX
- Evans, E. & **Bostic, J.** (2022, March). *Exploring mathematical problem-solving strategies used by students with learning disabilities*. Poster presented at annual meeting of the Research Council on Mathematics Learning. Grapevine, TX

- Drown, N., Matney, G., & **Bostic, J.** (2022, March). *Evaluating the mathematical self-efficacy of children during assessments*. Poster presented at annual meeting of the Research Council on Mathematics Learning. Grapevine, TX.
- Folger, T., **Bostic, J.**, & Krupa, E. (2022, March). *Examining validity evidence: Promoting valid interpretations and uses*. [Paper presented at annual meeting of the Research Council on Mathematics Learning. Grapevine, TX.
- Bostic, J.D.**, Carney, M., Casey, S, Engledowl, C., Folger, T., Gallagher, M., Howell, H., Smith, W., Tjoe, H., & Wilhelm, A. (2022, February). *Choose your instruments wisely: Supporting mathematics teacher educators' research and practice*. Symposium presented at annual Association of Mathematics Teacher Educators Conference. Henderson, NV.
- Folger, T., Stewart, M., **Bostic, J.** (2022, February) *Starting a dialogue around elementary preservice teachers' problem solving*. Paper presented at annual Association of Mathematics Teacher Educators Conference. Henderson, NV.
- Bostic, J.D.** (2022, January). Chair of stem education session. Paper presented at 20<sup>th</sup> Hawaii International Conference on Education. Waikola, HI.
- Bostic, J. D.**, Matney, G., Folger, T, Brown, N., Evans, E., Sondergeld (May), T., & Stone, G. (2022, January). *Deepening the validity argument for the problem-solving measures 3-5*. Paper presented at 20<sup>th</sup> Hawaii International Conference on Education. Waikola, HI.
- Folger, T., **Bostic, J.D.**, Koskey, K., Brown, N., & Evans, E. (2022, January). *A validity study aligning the problem-solving measures for grades 3 – 8 to webb's depth-of-knowledge framework*. Paper presented at 20<sup>th</sup> Hawaii International Conference on Education. Waikola, HI.
- Folger, T., Fornaro, C., **Bostic, J.**, & Sondergeld, T. (2021, October) *Teachers' interpretations of assessment results*. Poster presented at 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Philadelphia, PA.
- Fornaro, C., Folger, T., May, T., & **Bostic, J.** (2021, October). *Classroom assessments building towards standardized assessments*. Poster presented at the 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Philadelphia, PA.
- Bright, D., Fornaro, C., Fan, Y., May, T., & **Bostic, J.** (2021, October). *Investigating the impact of COVID-19 on standardized test scores*. Poster presented at the 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Philadelphia, PA.
- Bostic, J.**, Sondergeld, T., Matney, G., & Stone, G. (2021, October). *Three steps forward: Validity evidence for the PSM*. Paper presented annual meeting of 43<sup>rd</sup> annual meeting of



the North American Chapter of the International Group for the Psychology of Mathematics Education. Philadelphia, PA.

- Bostic, J.** & Krupa, E. (2021, October). Abstracts for assessments. Paper presented annual meeting of 43<sup>rd</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Philadelphia, PA.
- Bostic, J.** & Sondergeld, T. (2021, June). *Developing & evaluating assessments of problem solving*. Poster presented during invited structured session on assessment at 2021 CADRE DRK12 PI meeting. (virtual).
- Bostic, J.** (2021, June). *Developing & evaluating assessments of problem solving*. Poster presented at 2021 CADRE DRK12 PI meeting. (virtual).
- Bostic, J.,** Matney, G., Sondergeld, T., & Stone, G. (2021, April). *Whole-class think alouds: A tool for investigating problem solving*. Poster presented annual meeting of the annual meeting of the American Education Research Association. Orlando, FL.
- Bostic, J.D.** (Chair). (2021, April). *Algebra at the secondary and post-secondary levels*. Symposium conducted at the American Education Research Association, Orlando, FL. (virtual).
- Kruse, L., Stone, G., Sondergeld, T., **Bostic, J.** (2021, April). *Validity and test-length reduction strategies for complex assessments*. Paper presented annual meeting of the annual meeting of the American Education Research Association. Orlando, FL. (virtual)
- Brahier, D. & **Bostic, J.** (2021, February). *Predicting success in a mathematics education program*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Denton, TX
- Bostic, J.,** Eddy, C., Polly, A., & Matney, G. (2021, February). *Getting involved with Investigations in Mathematics Learning: RCML's research journal*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Denton, TX. (virtual)
- Matney, G., **Bostic, J.,** Fox, M., Sondergeld, T., & Stone, G. (2021, February). *Students' sense making in multistep word problems*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Denton, TX. (virtual)
- Bostic, J.,** Sondergeld, T., & Schnepf, J. (2020, November). *Broadening the problem-solving measures: Moving online*. Paper presented at the annual meeting of the School Science and Mathematics Association. Minneapolis, MN. (virtual)
- Bostic, J.** (leader), Jacobsen, E., Lavery, M., Sloane, F. (discussant), Walkowiak, T., & Wilson, M. (2020, April). *Informing perspectives on validation: Narratives from mathematics education*. Symposium paper presented at annual meeting of the annual meeting of the American Education Research Association. San Francisco, CA.

<https://www.aera20.net/EXECUTIVE-DIRECTOR-LEVINE-AND-PRESIDENT-SIDDLE-WALKER-ANNOUNCE-CANCELLATION-OF-THE-2020-VIRTUAL-ANNUAL-MEETING.html> (Conference canceled)

**Bostic, J. D.**, Krupa, E. E. & Shih, J. C. (2020, Apr 17 - 21) *Validation as design science-based research: Implications for practice and theory* [Symposium]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/v7ctewj> (Conference Canceled)

**Bostic, J.** (leader), Arneson, A., Confrey, J., Krupa, E. (discussant), & Perry, L. (2020, April). *Igniting discussions about measures for mathematics education contexts*. Symposium paper presented at annual meeting of the annual meeting of the American Education Research Association. San Francisco, CA. <https://www.aera20.net/EXECUTIVE-DIRECTOR-LEVINE-AND-PRESIDENT-SIDDLE-WALKER-ANNOUNCE-CANCELLATION-OF-THE-2020-VIRTUAL-ANNUAL-MEETING.html> (Conference canceled)

**Bostic, J. D.**, Matney, G., Sondergeld, T. A. & Stone, G. E. (2020, Apr 17 - 21) *Developing a series of problem-solving measures for elementary students* [Symposium]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/wfjgkks> (Conference Canceled)

Sondergeld, T. A., Stone, G. E., Kruse, L., **Bostic, J. D.** & Matney, G. (2020, Apr 17 - 21). *Evaluating dichotomous and partial-credit scoring within a constructed-response assessment: Is more information always psychometrically better?* [Roundtable Session]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/uvb3whq> (Conference Canceled)

Kruse, L., Waddell, E., Ibarrola Recalde, G. D., Sondergeld, T. A. & **Bostic, J. D.** (2020, Apr 17 - 21). *Evaluating the impact of a multiyear mathematics proficiency program* [Roundtable Session]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/stovl98> (Conference Canceled)

Gerber, D., Lavery, M. R. & **Bostic, J. D.** (2020, Apr 17 - 21) *Making valid instructional decisions: Teaching educators to consider validity evidence* [Symposium]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/sw6kb8d> (Conference Canceled)

**Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2020, March). *Measuring what we intend: Problem-solving Measure (PSM5)*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Las Vegas, NV.

**Bostic, J.**, Eddy, C., & Polly, D. (2020, March). *Getting involved with the RCML Research Journal Investigations in Mathematics Learning*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Las Vegas, NV.

Hicks, T. & **Bostic, J.** (2020, March). *Assessing for misconceptions using whole-class think alouds*. Poster presented at annual meeting of the Research Council on Mathematics Learning. Las Vegas, NV.

- Krupa, E., **Bostic, J.**, Cavey, L., Hjalmarson, M., Walkowiak, T., & Williams, L. (2020, February). *Quantitative research instruments relevant to mathematics teacher educators*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. Phoenix, AZ.
- Clark, Q., **Bostic, J.**, Esters, L., & Knoblach, N. (2019, October). *Designing agricultural life science MEAs through the lens of a novice: A self study*. Poster presented at 41<sup>st</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. St. Louis, MO.
- Bostic, J.**, Matney, G., Sondergeld, T., Stone, G., & Steinmiller, H. (2019, September). *Gathering response process validity evidence and influencing classroom instruction in the process*. Paper presented at annual National Council on Measurement in Education special conference on classroom assessment. Boulder, CO.
- Sondergeld, T., Stone, G., **Bostic, J.**, & Matney, G., (2019, July). *Validity in a different context: Exploring relations to other variables evidence*. Paper presented at the meeting of the Psychology of Mathematics Education (PME 43). Pretoria, South Africa.
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2019, July). *Developing a problem-solving measure for grade 4*. Paper presented at the meeting of the Psychology of Mathematics Education (PME 43). Pretoria, South Africa.
- Clark, Q. M., **Bostic, J.D.**, Esters, L. T., Knobloch, N. A., Alexander, E., Brown, Z., ..., Kornegay, R. (2019, June). *A framework for developing agricultural life sciences model-eliciting activities*. Paper presented at Hawaii University International Conference on STEM/STEAM and Education, Honolulu, HI.
- Bostic, J.**, Krupa, E., Shih, J., & Carney, M. (2019, April). *Synthesizing measures of K12 students' math knowledge*. Paper presented at the annual meeting of the National Council of Teachers of Mathematics research conference. San Diego, CA.
- Matney, G., **Bostic, J.**, & Lavery, M. (2019, April). *Knowing the standards for mathematical practice: A validation process for the SMP knowledge assessment*. Paper presented at the 2019 Annual Meeting of the American Educational Research Association. Toronto, ON, CA.
- Matney, G., **Bostic, J.**, & Lavery, M. (2019, February). *A quantitative measure of teachers' SMP knowledge: The SMP-KA*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Charlotte, NC.
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2019, February). *Validation as design-based research: Examples from building the PSMs*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Charlotte, NC.

- Polly, A., **Bostic, J.**, & Eddy, C. (2019, February). *Getting involved with Investigations in mathematics learning*. Paper presented at annual meeting of the Research Council on Mathematics Learning. Charlotte, NC.
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2018, November). *Content validity evidence for new problem-solving measures (PSM3, PSM4, and PSM5)*. Poster presented at the 40<sup>th</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Greenville, SC.
- Gerber, D., **Bostic, J.**, & Lavery, M. (2018, October). *Promoting understanding and applications of validity for teachers' classroom assessment*. Paper presented at the 2<sup>nd</sup> annual conference on the confluence of classroom assessment and large-scale psychometrics and related disciplines (National Council on Measurement in Education). Lawrence, KS.
- Lavery, M., Carney, M., **Bostic, J.**, Shih, J., Krupa, E., Wilson, M., & Kruse, L. (2018, April). *Examining the arguments surrounding the argument-based approach to validation: A systematic review of validation methodology*. Paper presented at the annual meeting of the American Educational Research Association. New York, NY.
- Bostic, J.** & Matney, G. (2018, February). *Current trends: Improving test development and implementation practices*. Paper presented at meeting of the Research Council on Mathematics Learning. Baton Rouge, LA.
- Brahier, D., **Bostic, J.**, & Matney, G. (2018, February). *Action research in undergraduate mathematics teacher education*. Paper presented at meeting of the Research Council on Mathematics Learning. Baton Rouge, LA.
- Gerber, D. & **Bostic, J.** (2018, February). *Five sources of validity and connections to effective assessment*. Poster presented at annual meeting of the Research Council on Mathematics Learning. Baton Rouge, LA.
- Lesseig, K., **Bostic, J.**, Sherman, M., & Boston, M. (2018, February). *Classroom observation protocols: Choose your own tool*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. Houston, TX.
- Matney, G. & **Bostic, J.** (2018, February). *Examining preservice teachers informal field experiences*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. Houston, TX.
- Bostic, J.**, Carney, M., Krupa, E., & Shih, J. (2017, October). *Exploring and examining quantitative measures* (Working Group). Paper presented at the 39<sup>th</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Indianapolis, IN.
- Bostic, J.** (2017, September). *Organizing and examining currently available quantitative assessments*. Paper presented at the National Science Foundation ECR PI Convening. Alexandria, VA.

- Bostic, J.**, Matney, G., & Sondergeld, T. (2017, April). *Considering K-10 teachers' promotion of the SMPs*. Poster presented at the meeting of the National Council of Teachers of Mathematics research conference. San Antonio, TX.
- Lesseig, K., **Bostic, J.\***, Sherman, M., & Boston, M. (2017, April). *Classroom observation protocols: Choose your own tool*. Paper presented at the meeting of the National Council of Teachers of Mathematics research conference. San Antonio, TX.
- Bostic, J.**, Matney, G., & Sondergeld, T. (2017, March). *(Re)Considering teachers' promotion of the standards for mathematical practice*. Paper presented at meeting of the Research Council on Mathematics Learning. Ft. Worth, TX.
- Nielsen, M. & **Bostic, J.** (2017, March). *Exploring mathematics preservice teachers problem solving*. Poster presented at meeting of the Research Council on Mathematics Learning. Ft. Worth, TX.
- Bostic, J.** & Matney, G. (2017, February). *Aligning lesson study with professional development aims*. Poster presented at the meeting of the Association of Mathematics Teacher Educators conference. Orlando, FL.
- Casey, S., & **Bostic, J.** (2017, February). *Differences in structure: How implementation of SMP 7 differs for mathematical and statistical standards*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. Orlando, FL.
- Bostic, J.**, Carney, M., Krupa, E., & Shih, J. (2016, October). *Exploring and examining quantitative measures* (Working Group). Paper presented at the 38<sup>th</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Tuscon, AZ.
- Fordham, N., **Bostic, J.**, Kruse, L., Fletcher, J., & Murnen, T. (2016, October). *Adopt an apprentice teacher: A middle level, field-centric preparation model that works*. Paper presented at the annual meeting of the Association of Middle Level Educators. Austin, TX.
- Bostic, J.**, Belcher, J., & Matney, G. (2016, March). *Fostering mathematical proficiency and developing at-Scale problem-solving measures*. Poster presented at meeting of the U.S. Department of Education Mathematics and Science Partnership. Baltimore, MD.
- Belcher, J., Matney, G., & **Bostic, J.** (2016, March). *Lesson study approach to teacher and student learning and engagement in grades K – 8 urban/suburban districts*. Poster presented at U.S. Department of Education - Mathematics and Science Partnerships Program Conference, Baltimore, MD.
- Bostic, J.** & Matney, G. (2016, February). *First look! A validation study of the SMPs look-for protocol*. Paper presented at meeting of the Research Council on Mathematics Learning. Orlando, FL.

- Folger, T. & **Bostic, J.** (2016, February). *Exploring validity evidence for the PSM7 and PSM8*. Poster presented at meeting of the Research Council on Mathematics Learning. Orlando, FL.
- Kruse, L., Schlosser, M., & **Bostic, J.** (2016, February). *Exploring preservice and inservice educators sensemaking of the SMPs*. Poster presented at meeting of the Research Council on Mathematics Learning. Orlando, FL.
- Bostic, J.** & Matney, G. (2016, January). *Measuring teachers' promotion of the standards for mathematical practice*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. Irvine, CA.
- Bostic, J.**, & Sondergeld, T. (2015, November). *Development of vertically equated problem-solving measures*. Paper presented at the 37<sup>th</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. East Lansing, MI: Michigan State University.
- Matney, G., **Bostic, J.**, & Mortier, M. (2015, October). *Professional development for growth in middle-grades teachers' classroom discourse*. Paper presented at the 2015 Annual Meeting of the School Science and Mathematics Association. Oklahoma City, OK.
- Matney, G., **Bostic, J.**, & Sullivan, C. (2015, October). *Thinking differently about preservice teacher field experiences: Benefits of math camp*. Paper presented at the 2015 Annual Meeting of the School Science and Mathematics Association. Oklahoma City, OK.
- Bostic, J.**, & Sondergeld, T. (2015, April). *Measuring sixth-grade students' problem solving: Validating an instrument addressing the common core*. Paper presented at the meeting of the American Educational Research Association. Chicago, IL.
- Bostic, J.**, & Matney, G. (2015, April). *Using the look-for rubric to examine elementary teachers' instruction*. Paper presented at the meeting of the American Educational Research Association. Chicago, IL.
- Bostic, J.**, & Matney, G. (2015, February). *Supporting K-10 teachers instructional changes to promote the standards for mathematical practice*. Paper presented at the meeting of the Research Council on Mathematics Learning. Las Vegas, NV.
- Bostic, J.**, Conrady, K., Ives, S., & Yee, S. (2015, February). *Smoothing the ups and downs: Tools for professional transitions*. Paper presented at the meeting of the Research Council on Mathematics Learning. Las Vegas, NV.
- \* Note that all four authors contributed equally to this presentation and are listed alphabetically.

- Bostic, J., Matney, G., & Mortier, M.** (2015, February). *Fostering growth in middle-grades teachers' classroom discourse*. Paper presented at the meeting of the Association of Mathematics Teacher Educators conference. Orlando, FL.
- Vostal, B., & **Bostic, J.** (2014, November). *Implementing project-based learning in inclusive settings: A special education/general education professional development partnership*. Paper presented at the meeting of the Teacher Education Division of the Council for Exceptional Children. Indianapolis, IN.
- Bostic, J., & Sondergeld, T.** (2014, July). *Validating the psm6*. Paper presented at the meeting of the Psychology of Mathematics Education and Psychology of Mathematics Education – North America (PME 38). Vancouver, Canada.
- Matney, G., & **Bostic, J.** (2014, April). *Creating spaces to develop mathematically proficient students: Essential instructional elements of the ccsm*. Paper presented at the meeting of the National Council of Supervisors of Mathematics. New Orleans, LA.
- Matney, G., & **Bostic, J.** (2014, April). *Spaces for children's development of structure, pattern, and repeated reasoning*. Paper presented at the meeting of the National Council of Teachers of Mathematics. New Orleans, LA.
- Bostic, J., & Matney, G.** (2014, February). *Opportunities to engage K-5 students in the standards for mathematical practice*. Paper presented at the meeting of the Research Council on Mathematics Learning. San Antonio, TX.
- Brahier, D., & **Bostic, J.** (2014, February). *Rethinking the preparation of math and science teachers*. Paper presented at the 41<sup>st</sup> Paper presented at the meeting of the Research Council on Mathematics Learning. San Antonio, TX.
- Sherman, M., **Bostic, J.**, Lesseig, K., & Boston, M. (2014, February). *A comparison of commonly used mathematics classroom observation protocols*. Paper presented at the meeting of the Association of Mathematics Teacher Educators. Irvine, CA.
- Bostic, J., & Matney, G.** (2014, February). *Role-playing the standards for mathematical practice: A professional development tool*. Paper presented at the meeting of the Association of Mathematics Teacher Educators. Irvine, CA.
- Bostic, J., Matney, J., Brahier, D., Gojak, L., & Speer, W.** (2013, March). *Preparing teachers for the ccsm: Looking towards the future*. Paper presented at the meeting of the Research Council on Mathematics Learning. Tulsa, OK.
- Bostic, J.** (2013, January). *Middle grades preservice teachers' experiences with proof and reasoning focused instruction*. Paper presented at the meeting of the Association of Mathematics Teacher Educators. Orlando, FL.

**Bostic, J.**, Pape, S., & Jacobbe, T. (2012, April). *Exploring students' outcomes after teaching mathematics via problem solving*. Paper presented at the Meeting of the National Council of Teachers of Mathematics Pre-session. Philadelphia, PA.

Pape, S.J., Irving, K.E., Bell, C.V., Shirley, M.K., Owens, D.T., Owens, S.K., **Bostic, J.D.**, Lee, S.C. (2012, April). *Principles of effective pedagogy within the context of connected classroom technology: Implications for teacher knowledge*. Paper presented at the meeting of the American Educational Research Association. Vancouver, BC.

Matney, G., **Bostic, J.**, & Brahier, D. (2012, February). *Overcoming a common storm: Designing the pd teachers need for successful common core implementation*. Paper presented at the meeting of the Research Council on Mathematics Learning. Charlotte, NC.

**Bostic, J.**, Pape, S., & Jacobbe, T. (2011, October). *Validating two problem-solving instruments for use with sixth-grade students*. Paper presented at the meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Reno, NV.

**Bostic, J.** (2011, October). *Exploring the effects of curricula on fifth-grade students' problem solving*. Poster presented at the meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Reno, NV.

### Regional/State

N=36

Folger, T., **Bostic, J.**, & Vostal, B. (2023, October). *Leveraging students' strengths with universal design for learning*. Paper presented at the annual meeting of the Ohio Council of Teachers of Mathematics, Sandusky, OH.

**Bostic, J.**, Brown, N., & Evans, E. (2021, October). *Creating equitable instruction and assessment in mathematics*. Paper presentation at the annual meeting of the Ohio Council of Teachers of Mathematics. Virtual meeting.

Matney, G., **Bostic, J.**, Sondergeld, T., & Stone, G. (2020, October). *Exploring problem-solving assessment through lesson study*. Paper presented at the annual meeting of the Ohio Council of Teachers of Mathematics, Sharonville, OH.

Keyes, S., Borchardt, K., Vostal, B., Gallagher, D., **Bostic, J.**, Brodeur, K., Messenheimer, T., Seals, M., & Murray, M. (2020, January). *Imperative: Designing an inclusive middle-level program*. Poster presented at the Ohio Dean's Compact on Exceptional Children, Dublin, OH.

**Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2019, October). *Connecting problem solving and assessment: Lessons from the field*. Paper presented at the annual meeting of the Ohio Council of Teachers of Mathematics, Sandusky, OH.



- Clark, Q. & **Bostic, J.** (2019, October). *Developing a math modeling task using agricultural life sciences contexts*. Paper presented at the annual meeting of the Ohio Council of Teachers of Mathematics, Sandusky, OH.
- Bostic, J.**, Matney, G., Sondergeld, T., & Stone, G. (2019, September). *Measuring students' problem solving and informing your practice with standards-aligned results*. Paper presented at the meeting of the National Council of Teachers of Mathematics regional conference, Boston, MA.
- Gerber, D., & **Bostic J.** (2018, October). *Creating mathematics assessments that mean something...yeah, that'd be great*. Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Akron, OH.
- Bostic, J.**, Gerber, D., Nielsen, M., & Casey, S. (2018, March). *Promote statistical thinking with three tasks*. Paper presented at the meeting of the Michigan Association of Mathematics Teacher Educators conference conversations among colleagues, Ypsilanti, MI.
- Casey, S., & **Bostic, J.** (2017, December). *Comparing use of structure (SMP7) in mathematical and statistical tasks*. Paper presented at the meeting of the National Council of Teachers of Mathematics regional conference, Chicago, IL.
- Bostic J.**, & Matney, G. (2017, October). *Fostering teachers' promotion of the standards for mathematical practice during classroom instruction*. Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Columbus, OH.
- Bostic, J.**, Kruse, L., & Nielsen, M. (2017, March). *Middle and secondary mathematics teacher apprentices engaged in a field-centric preparation model*. Paper presented at the meeting of the Michigan Association of Mathematics Teacher Educators conference conversations among colleagues, East Lansing, MI.
- Bostic, J.** (2016, October). *CAMPing through middle grades math lessons*. Paper presented at the annual meeting of the Ohio Council of Teachers of Mathematics, Sandusky, OH.
- Casey, S., & **Bostic, J.** (2016, March). *Structure in mathematics and statistics*. Paper presented at the meeting of the Michigan Association of Mathematics Teacher Educators conference conversations among colleagues, Kalamazoo, MI.
- Koestler, C., Kruse, L., Schlosser, M., & **Bostic, J.** (2016, March). *Connecting the NCTM process standards and the CCSSM practices with prospective and practicing teachers*. Paper presented at the meeting of the Michigan Association of Mathematics Teacher Educators conference conversations among colleagues, Kalamazoo, MI.
- Bostic, J.**, & Thomas, A. (2015, November). *Developing writing in mathematics via an electronic pen pals project*. Paper presented at the meeting of the National Council of Teachers of Mathematics regional conference, Minneapolis, MN.

**Bostic, J., & Matney, G.** (2015, November). *What do you want on it? Statistics, modeling, and pizza.* Paper presented at the meeting of the National Council of Teachers of Mathematics regional conference, Minneapolis, MN.

**Bostic J., & Matney, G.** (2015, October). *Buy modeling with mathematics and get more SMPs for Free.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cincinnati, OH.

Baldwin, E., **Bostic J.,** (2015, October). *Reading in math class?! Promote reading through the Practice Standards.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cincinnati, OH.

Floro, B., **Bostic J.,** (2015, October). *Can you notice what I'm doing right now?* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cincinnati, OH.

Lentz, K., Lustgarden, A., & **Bostic J.,** (2015, October). *Discover your optimal workout by modeling with mathematics.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cincinnati, OH.

Matney, G., Walston, A., & **Bostic J.,** (2015, October). *Mathematics camps activities: Pathways to student enjoyment of mathematics.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cincinnati, OH.

Schlosser, M., Kruse, L., Waynick, K., & **Bostic J.,** (2015, October). *Examining instruction through action research and how you can too.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cincinnati, OH.

**Bostic J.,** Edwards, T., & Koestler, C. (2015, October). *Positioning teachers as professionals: Reframing professional development.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cincinnati, OH.

\* Note that all three authors contributed equally to this presentation and are listed alphabetically.

**Bostic J., & Matney, G.** (2014, November). *Connecting cedar point and the geometry-focused common core state standards.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cleveland, OH.

Matney, G., **Bostic, J.,** Matney, T., Kruse, L., Sullivan, C., Haynes, E., & Schlosser, M. (2014, November). *Mathematics camps: Overcoming the stigma.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cleveland, OH.

Mortier, M., **Bostic, J., & Matney, G.** (2014, November). *Exploring the effects of professional development on teachers' discourse practices.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cleveland, OH.

- Graham, T., Edwards, T., & **Bostic, J.** (2014, November). *How have pre-service courses shifted with ohio's new learning standards?* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cleveland, OH.
- Russell, L., Coder, H., **Bostic, J.**, & Meel, D. (2014, November). *The ways to influence instruction through action research.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Cleveland, OH.
- Bostic J.**, & Matney, G. (2013, October). *Issues with the transition to common core instruction and resources to overcome them.* Paper presented at the meeting of the Ohio Mathematics Education Leadership Council conference, Dayton, OH.
- Matney, G., & **J. Bostic** (2013, October). *Promoting students' fluency with the common core state standards.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Dayton, OH.
- Bostic, J.**, & Matney, G. (2013, October). *Making sense of modeling with mathematics.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Dayton, OH.
- Bostic, J.** (2012, November). *Proving operations with numbers using manipulatives.* Paper presented at the meeting of the National Council of Teachers of Mathematics regional conference, Chicago, IL.
- Bostic J.**, & Matney, G. (2012, October). *Divergent perceptions of the standards for mathematical practice among K- 10 teachers.* Paper presented at the meeting of the Ohio Mathematics Education Leadership Council conference, Columbus, OH.
- Matney, G., & **Bostic, J.** (2012, October) *The big core theory: Teaching and learning the common core.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics, Columbus, OH.
- Bostic, J.**, & Matney, G. (2012, October). *Modern standards: Teaching with and for the Common Core State Standards.* Paper presented at the meeting of the Ohio Council of Teachers of Mathematics conference, Columbus, OH.

## Local

## XII. SERVICE

### A. School

- Mentor: New faculty mentor (Victoria VanUitert, 2023-present)  
 Mentor: New faculty mentor (Eric Anderson, 2023-present)  
 Mentor: New faculty mentor (Thomas Roberts, 2017-2022)  
 Chair: Policies and Procedures Committee (2017-2018; 2020-2021)

- Co-Chair: Policies and Procedures Committee (2016-2017)
- Volunteer: Student Teacher Match Meeting at Otsego High School (2016)
- Volunteer: School of Teaching and Learning (Life Science) Floor Liaison (2014 – 2017)
- Member: Policies and Procedures Committee (2014-present)
- Volunteer: Student Teacher Match Meetings (2014-present)
- Member: Curriculum Committee (2014)
- Member: Classroom Technology Assistant Professor Search Committee (2013; NOTE: Invited to participate but position was cut by BGSU Provost.)
- Member: School Director Evaluation committee (2012 – 2014)
- Volunteer: School of Teaching and Learning Middle Childhood and Adolescent/Young Adult Preview Day (2011 – 2018; 2019-present)
- Member: Middle Childhood Education Committee (Mathematics Education representative; 2011- present)

## **B. College**

- Member: BGSU Assistant Professor of Special Education Committee member (2023-2024)
  - Member: BGSU Assistant Professor of STEAM Education Committee member (2022-2023)
  - Member: College of Education and Human Development Tenure and Promotion Council (elected; 2019-2022)
- Board
- Member: CAEP Middle Childhood Mathematics Education (2017-present)
  - Volunteer: College of Education and Human Development Education Day (2013 - present)
  - Volunteer: College of Education and Human Development Advising Day (2013)
  - Member: Research Development Council (2012-2014; 2014-2016)
  - Leader: College of Education and Human Development Research Development Council Research Grant Subcommittee Leader (2014 & 2016)
  - Member: Educational Foundations Instructor Search Committee member (invited to serve as School of Teaching and Learning rep.; 2014 – 2015)
  - Volunteer: TEE Day (Middle Childhood Education representative; 2012)
  - Member: CORE Task Force Volunteers EDFI 30X0: Educational Psychology (2012)
  - Member: Course Evaluation Ad Hoc (School of Teaching and Learning representative; 2012.)
  - Volunteer: Get with the Program for Middle Childhood Education (2011 - 2017)
  - Member: School of Teaching and Learning Director Search Committee (2012-2013)

## **E. University**

- Member: BGSU Vice President for Research Committee member (2022-2023; 2023-2024)
- Member: Olscamp Award and Outstanding Early Career Award Review Committee (2021, 2022)
- Member: BGSU Allies Faculty Associate (2021-present)
- Member: BGSU ad hoc Committee for faculty research productivity COVID19 (2020)
- Member: BGSU Mathematics Education Committee (2019-present)
- Member: Graduate College appeals committee (2017-2018)

Fac. Assoc: Faculty associate for NWO Center for Excellence in STEM (invited; 2015-2018)  
 Speaker: Panel member for session titled “*Getting your research agenda off the ground as a new faculty member at BGSU*” at new faculty orientation (2015)  
 Member: Bowling Green State University Honors College faculty affiliate (2014-present)  
 Member: NWO Center for Excellence in STEM ambassador (2011-present)  
 Volunteer: Undergraduate Research Symposium Session Moderator (2014)  
 Member: Academic Honesty Committee (2012 – 2015)  
 Member: Interdisciplinary Peer Review and Assessment Writing Center for Teaching and Learning presentation (2011 – 2013; leader during 2012-2013)

## D. Professional

### International

INVITED  
 Reviewer: International Congress on Mathematical Education (2024): Topic Study Group 3.14: Research and development in assessment in mathematics education  
 Reviewer: *Mathematics Education Research Journal* (2022-present)  
 Reviewer: *Educational Measurement: Issues and Practice* (2021-present)  
 Chair: Psychology of Mathematics Education presentations focused on argumentation and reasoning (2019)  
 Reviewer: American Education Research Association Proposals (2019; 2020; 2021) for Division C: Mathematics  
 Reviewer: *Mathematical Thinking and Learning* (2018-present)  
 Editorial Board  
 Member: Journal for Research in Mathematics Education (2019-2022)  
 Reviewer: *Mathematics Teacher Education and Development* (2018 - present)  
 Board  
 Member: United States Mathematics Recovery Council (2017-2023)  
 Board  
 Member: *Context* Research Instrument Library (Royal Danish Library; 2017-present)  
 Reviewer: International Council on Mathematics Education Proposal Reviewer (2015- 2016)  
 Discussant: American Education Research Association presentation (2011)  
 Reviewer: American Education Research Association Division C Poster Award (2011)  
 Reviewer: American Education Research Association Proposals (2011)
 

- Division K - Teaching and Teacher Education: Section 1: STEM. Science, Technology, Engineering and Mathematics
- Special Interest Group: Research in Mathematics Education

### National

Coordinator: SIMULATE site coordinator for BGSU (2023)  
 Editorial Board  
 Member: Mid-Western Education Research Journal (2022-2024)

- Invited Mentor for early career researchers and graduate students on Writing for mathematics education journals: American Educational Research Association, Research in Mathematics Education (SIG-RME; 2022-2023, 2023-2024)
- Invited Mentor for graduate students focusing on Assessment, Validity, Quantitative, and Mixed methods research in mathematics education: American Educational Research Association, Research in Mathematics Education (SIG-RME; 2020 & 2021)
- Advisory Board
- Member: *Microlearning mathematics modules designed to facilitate preservice elementary teacher practices regarding equity and responsive mathematics instruction.* (\$599,875 – funded by National Science Foundation under IUSE Noyce Scholarship Program, NSF#1914810). PI: C. Jong. (2019-2022)
- Reviewer: Journal of Engineering Education (2019-present)
- Editorial Board
- Member: Journal of Urban Mathematics Education (2019-present)
- Reviewer: Journal for Research in Mathematics Education (2018-present)
- Advisory Board
- Member: *Using Technology to Capture Classroom Interactions (UTCCI): The Design, Validation and Dissemination of a Formative Assessment of Instruction Tool for Diverse K-8 Mathematics Classrooms.* (\$1,997,498 – funded by National Science Foundation under Discovery Research K-12 program: DRL-1814114). PI: K. Melhuish. (2018-2022)
- Advisory Board
- Member: *Model-eliciting Activity Design Considerations to Achieve STEM Integration.* (\$8,392 – funded by George Mason University SEED grant). PI: C. Baker. (2018-2019)
- Member Association of Mathematics Teacher Education Newsletter Committee (2017-2020; invited position)
- Reviewer: Research Council of Mathematics Learning Memorial Scholarship Reviewer (2017, 2018, 2019)
- Reviewer: *Journal of Educational Measurement* (2017-present)
- Reviewer: *Cognition and Instruction* (2017-present)
- Reviewer: *Journal of Mathematical Behavior* (2017-present)
- Reviewer: *Sage Open Access Journal* (2017-present)
- Member: National Science Foundation Education Directorate Program Review Committee (2017, 2018, 2019, 2020, 2023, 2024)
- Ad Hoc: National Science Foundation Education Directorate Program Reviewer (2017)
- Discussant National Council of Teachers of Mathematics Research Conference (2017)
- Board
- Member: *Investigations in Mathematics Learning* Editorial Board Member (2017-2018)
- Editor: Research Council on Mathematics Learning *Intersection Points* (2016-2017)
- Leader: Association of Mathematics Teacher Education Mentorship Panel (2015-2016)
- Member: National Science Foundation Education Directorate Program Review Committee (2014, 2015)
- Member: Research Council on Mathematics Learning Conference Committee

- (2014-2017; elected position)  
 Chair Association of Mathematics Teacher Education Membership Committee  
 (2015-2017; invited position)  
 Member Association of Mathematics Teacher Education Membership Committee  
 (2014; invited position)  
 Reviewer: National Council of Teachers of Education Reviewer of Council of Accreditation  
 of Educator Preparation (CAEP) Standards (2013; invited position)  
 Reviewer: *Journal of Mathematics Education Leadership* (2013-present)  
 Reviewer: *Mathematics Teacher Educator* (2013 - present)  
 Reviewer: *Investigations in Mathematics Learning* (2013 - present)  
 Volunteer: Research Council for Mathematics Learning Annual Meeting (2013 - present)  
 Reviewer: Mathematics Assessments for Physics Educational Technology (PhET) program  
 at Univ. of Colorado – Boulder (2013; invited position)  
 Reviewer: Research Council on Mathematics Learning Conference Proceedings (2012-  
 present)  
 Reviewer: Research Council on Mathematics Learning Conference (2012-present)  
 Reviewer: Association of Mathematics Teacher Education Conference (2011 - present)  
 Reviewer: *School Science and Mathematics Journal* (2012 - present)  
 Reviewer: *Teaching Children Mathematics* and *Mathematics Teaching in the Middle School*  
 (2011 - present)  
 Reviewer: North American Chapter of the International Group for the Psychology of  
 Mathematics Education (2011 - present)

### **State**

- Reviewer: Ohio Grade 6 Math Content Advisory Committee (2017-2019)  
 Chair: Ohio Council of Teachers of Mathematics 2019 Conference Registration (2018-  
 2019)  
 Volunteer: Ohio Council of Teachers of Mathematics Conference (2016-2017)  
 Member: Ohio Council of Teachers of Mathematics Advocacy Coordinator Search  
 Committee (2015-2016)  
 Co-Chair: Ohio Mathematics Education Leadership Council (2015-2016)  
 Board  
 Member: Ohio Mathematics Education Leadership Council (2013 – 2016)  
 Reviewer: *Ohio School Mathematics Journal* (2012 - present)  
 Volunteer: Ohio Council of Teachers of Mathematics Conference (2012)  
 Volunteer: Higher education committee member for fourth- and fifth-grade *Ohio*  
*Performance Assessment Pilot Project* (2012 –2014)  
 Reviewer: Undergraduate and graduate mathematics education program reviewer for Ohio  
 Board of Regents (2011-2015)

### **Local**

- Volunteer: Gesu School in Toledo, OH, Middle School Mathematics Program Support (2014)  
 Reviewer: Maritime Academic of Toledo Grade 8 Curriculum Reviewer (2013)  
 Reviewer: Montessori School of Bowling Green Middle School Mathematics  
 Instructional Reviewer (2013)  
 Volunteer: edTPA Middle Childhood Education Mathematics Scorer (2013)

Co-advisor: Bowling Green Council of Teachers of Mathematics co-advisor (2012 – present)  
 Presenter: STEM in the Park (2012-2019)  
 Volunteer: Ohio Junior Science and Humanities Symposium Judge (2012 - 2018)

### **XIII. RESEARCH OR PROFESSIONAL CONSULTANTSHIPS**

#### **A. Inservice (volunteer)**

- From flour to cookies: Reflections in scholarship (1 day; Baylor University, January 2024)
- Pathways to success after high school (2 days; Evergreen Local School district, Spring 2023)
- Honors College Project Pathways (1 day; Bowling Green State University; September 2022)
- Cross-institutional Collaborations: Pathways to success (1 day; University of Nevada Las Vegas; March 2019)

#### **F. Consultantships (Paid)**

- EdScape IXR (4 days, October 2023 – July 2025, University of Memphis & MindTrust)
- Pillars and Pizza (1 day; January 2023, Troy School District)
- Choose your own adventure (1 day; November 2022, Saint Rose Catholic Schools)
- Assessment & Mathematics standards (5 days; August 2022-December 2022, Perrysburg Public Schools)
- Cross-curricular literacy strategies for content specialists (1 day; February 2022, Evergreen Public Schools)
- What do I do with these grades? Unpacking grading for instructional decision making (1 day; February 2022, Evergreen Public Schools)
- Co-teaching, UDL, and Assessment (6 days; August 2020 – May 2021, Evergreen Public Schools)
- Assessment, Validity, and Grants. (Presentation and meetings with Kentucky State University faculty, January 2020)
- New Mexico State University SNACK math program (Item review as consultant for NSF-funded project, September 2018)
- Enacting the Standards for Mathematical Practice in Algebra and Geometry (4 sessions; May 2018 – June 2018, Sidney Local School District)
- Exploring Standards for Mathematical Practice in High School Mathematics (4 sessions; March 2018 – May 2018, Bellefontaine Local School District)
- Advisory (Board) Panel member for Measurement of College Readiness (August 2017 – May 2019, National Math and Science Initiative, West Coast Analytics, & University of California, Berkley, California)
- Encouraging Praxis with the Standards for Mathematical Practice (7 sessions; May 2017 – May 2018, Springfield Local School District, Springfield, Ohio)
- Integrating Universal Design for Learning into your instruction (5 sessions; August 2016 – January 2017, North Central School District, Pioneer, Ohio)



- Promoting Mathematical Practices (1 session; October 2016, Akron Public Schools, Akron, OH)
- Realizing the Potential for co-teaching (5 sessions; August 2015 – March 2016, North Central School District Elementary and Secondary Faculty, Pioneer, Ohio)
  - Building co-teaching relationships in secondary classrooms (August 2015)
- Activating Universal Design for Learning (5 sessions; August 2015 – March 2016, North Central School District Elementary and Secondary Faculty, Pioneer, Ohio)
  - Universal design for learning: An introduction (August 2015)
  - Using universal design for learning to think through our lessons (August 2015)
- Shelby CO<sup>2</sup>RES Middle (10 sessions; December 2014 – September 2015, Sidney, OH)
- Adopting Mathematics Curricula for 2020 (December 2014, Bellevue School District, Bellevue, OH)
- Connecting the Standards to Best Mathematics Teaching Practice (4 sessions; BGSU, October – December 2014, Bowling Green, OH)
- Mathematical Fluency in grades K-6 (1 session; North Central School District Elementary Faculty, September 2014, Pioneer, OH)
- Unpacking the Ohio Learning Standards and Curricular Expectations (1 session; North Central School District Elementary Faculty, August 2014, Pioneer, OH)
- Adopting Curricula in the Common Core Era (1 session; March 2014, Sandusky City School District, Sandusky, OH)
- Shelby CO<sup>2</sup>RES Elementary (8 sessions; February – September 2014, Shelby County Educational Services Center, Sidney, OH)
- Delivering Feedback (1 session; February 2014, North Central School District Elementary and Secondary Faculty, Pioneer, Ohio)
- Model Curriculum: K-6 Mathematics (1 session; September 2013, North Central School District Elementary Faculty, Pioneer, Ohio)
- Problem-Based Learning: What, Why, and How (1 session; August 2013, North Central School District Secondary Faculty, Pioneer, Ohio)
- An Introduction to Co-Teaching (1 session; August 2013, North Central School District Elementary Faculty, Pioneer, Ohio)
- Exploring Opportunities to Read and Write in Classes Drawing on Mathematics (1 session; March 2013, North Central School District Secondary Mathematics Faculty, Pioneer, Ohio)
- Examining your textbooks and the Common Core State Standards – Mathematics (1 session; February 2013, North Central School District Elementary Faculty, Pioneer, Ohio)
- Creating Worthwhile Tasks (1 session; November 2012, North Central School District Secondary Mathematics and Science Faculty, Pioneer, Ohio)
- Initiating and Maintaining Mathematical Discourse (1 session; October 2012, North Central School District Elementary and Secondary Mathematics Faculty, Pioneer, Ohio)
- Negotiating your Mathematical Learning Environment (1 session; September 2012, North Central School District Elementary and Secondary Mathematics Faculty, Pioneer, Ohio)
- Persevering through Mathematical Practices (1 session; August 2012, North Central School District Elementary and Secondary Faculty, Pioneer, Ohio)

#### **XIV. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

American Education Research Association (since 2010)  
 Association of Mathematics Teacher Educators (since 2009)  
 Ohio Council of Teachers of Mathematics (since 2011)  
 Ohio Mathematics Education Leadership Council (since 2012)  
 National Council of Teachers of Mathematics (since 2003)  
 North American Chapter of the International Group for the Psychology of Mathematics  
 Education (since 2009)  
 Research Council on Mathematics Learning (since 2012)  
 School Science and Mathematics Association (since 2018)

## **XV. HONORS AND AWARDS**

### **A. Membership in Honor Societies**

### **B. Awards**

2021 Ohio Council of Teachers of Mathematics March 2021 “Made a Difference”  
 2020 BGSU Paul R. Olscamp Research Award  
 2018-2019 BGSU Center for Faculty Excellence Recognized Faculty Member  
 2018 BGSU College of Education and Human Development Research Award  
 2013-2018 BGSU Exceptional Educator nominated by graduating student(s) or EDHD  
 recipient  
 2017 BGSU Outstanding Community Partnership Award  
 (Nancy Fordham, Tim Murnen, Jonathan Bostic, Joanna Weaver, & Marty Sears)  
 2016 National Residence Hall Honorary Faculty/Staff of the Month Award  
 2015 BGSU Outstanding Early Career Award  
 2014 Research Council on Mathematics Learning Memorial Scholarship (\$1,000)  
 2014 BGSU Master Teacher Award (nominated but not conferred)  
 2013 Favorite Faculty Member nominated by College of Arts & Sciences Honor and  
 Award Recipient  
 2013 National Residence Hall Honorary Enlightening Educator Award  
 (Nominated but not conferred)  
 2012 Service, Teaching, and Research (STaR) Fellow – 2012 Cohort  
 2012 FAHLE Research Assistant Award (\$20,000 for GRA to work 20  
 hours/week during AY 2012-2013)  
 2011 Alumni Fellowship: University of Florida (\$21,000)

## XVI. TEACHING EVALUATIONS

MEAN RATING = 4.570; UNIT MEAN RATING = 4.338

Year and Term	Course #	Enrollment (Number of Actual Respondents)	Mean Rating 4 or 5 point scale	Standard Deviation	Unit Mean Rating (SD)
Spring 24	No course	--	--	--	--
Fall 23	EIEC 2320	38(34)	4.72	0.547	4.46(.870)
Spring 23	EDTL 2740	30(26)	4.40	0.784	4.38(.941)
Fall 22	EIEC 2320	38(38)	4.39	0.839	4.38(.898)
Spring 22	EDTL 2740	26(23)	4.60	0.585	4.35(.946)
Fall 21	EDTL 1320	29(28)	4.73	0.500	4.44(.883)
Spring 21	EDTL 2740	17(17)	4.80	0.463	4.43(.885)
Spring 21	EDTL 2504	31 (30)	4.53	0.841	4.43(.885)
Fall 20	EDTL 2740	13(9)	4.82	0.348	4.41(.882)
Spring 20	EDTL 2742	26(17)	4.45	0.629	4.33(.928)
Fall 19	EDTL 2741	25(25)	4.72	0.421	4.29(.942)
Fall 19	EDTL 2740	21(21)	4.83	0.381	4.29(.942)
Fall 18- Spring 19	<i>Faculty Improvement Leave</i>	--	--	--	--
Spring 18	EDTL 2740	24(20)	4.57	0.62	4.36 (0.86)
Fall 17	EDTL 2740	23(21)	4.67	0.633	4.26 (0.907)
Spring 17	EDTL 2740	21(19)	4.44	0.766	4.30 (0.899)
Fall 16	EDTL 2504	18(17)	4.56	0.592	4.24 (0.939)
Fall 16	EDTL 2740	19(16)	4.66	0.496	4.24 (0.939)
Spring 16	EDTL 2504	28(27)	4.58	0.63	4.28(.903)
Spring 16	EDTL 2740	25(22)	4.73	0.461	4.28(.903)
Fall 15	EDTL 2740 +	14(12)	4.40	0.640	4.19 (.953)
Fall 15	EDTL 4460	30(24)	4.47	0.715	4.19 (.953)
Spring 15	EDTL 2740/2740H	24(19)	4.45	1.004	4.29 (.951)
Fall 14	EDTL 6800	23(22)	4.56	.952	4.19 (1.009)
Fall 14	EDTL 2740	24(17)	4.41	.916	4.19 (1.009)
Summer 14	EDTL 6800	24(24)	4.90	0.297	4.36(0.913)
Spring 14	EDTL 6800	25	unavailable	unavailable	4.37 (0.894)
Spring 14	EDTL 2740	16(14)	4.28	0.945	4.37 (0.894)
Fall 13	EDTL 6800	23(20)	4.32	1.252	4.32 (0.903)
Fall 13	EDTL 4460	20(20)	4.46	0.605	4.32 (0.903)
Fall 13	EDTL 4460	19(19)	4.84	0.361	4.32 (0.903)
Summer 13	EDTL 6800	23(22)	4.70	0.885	4.32(0.938)
Spring 13	EDTL 2740	26(26)	4.23	0.747	4.40(0.867)
Spring 13	EDTL 2740	11 (9)	4.66	0.534	4.40(0.867)
Spring 13	EDTL 6800	23(20)	4.47	0.647	4.40(0.867)
Fall 12	EDTL 6800	23(20)	4.32	1.455	4.30 (0.955)
Fall 12	EDTL 4460	19	4.62	0.697	4.30 (0.955)
Fall 12	EDTL 4460	17	4.52	0.769	4.30 (0.955)

<b>Summer 12</b>	EDTL 6800	24	4.809	0.488	4.485 (0.894)
<b>Spring 12</b>	EDTL 3450	21	4.458	1.016	4.348 (0.958)
<b>Spring 12</b>	EDTL 6800	24	unavailable	unavailable	4.348 (0.958)
<b>Fall 11</b>	EDTL 4840	9	unavailable	unavailable	3.59
<b>Fall 11</b>	EDTL 3460	30(12)	3.44*	0.52	3.59
<b>Fall 11</b>	EDTL 3450	19 (14)	3.69*	0.52	3.59

\* Survey based on 4-point scale.

+This is a new course with an old course number, different from past sections EDTL 2740. All sections of EDTL 2740 after Fall 2015 adhere to this new course.