TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Dr. Jessica Pierson Bishop Title: Professor

B. Educational Background

Degree	*University*	*Major*
PhD	University of Texas at Austin	Mathematics Education
MS	Texas State University	Mathematics
BS	Abilene Christian University	Mathematics (with secondary teacher certification)

C. University Appointments

Position	*University*	*Dates*
Professor	Texas State University	2023 - current
Associate Professor	Texas State University	2016 - 2023
Associate Professor	University of Georgia	2014 - 2016
Assistant Professor	University of Georgia	2012 - 2014
Assistant Professor	San Diego State University	2008 - 2012

D. Relevant Professional Experience

Position	*Entity*
Mathematics Teacher	Coppell High School, Coppell Independent School District
Professional Development Consultant	Northeast Georgia Regional Educational Service Agency, Athens, GA
Teaching Assistant	University of Texas at Austin
Graduate Research Assistant	University of Texas at Austin
Teaching Assistant	Texas State University

E. Other Professional Credentials (licensure, certification, etc.)

Texas Teacher Certificate for Secondary Mathematics (Gr 7-12), Texas State Board for Educator Certification.

F. Awards, Fellowships, Honors

Award / Honor Recipient: Excellence in Teaching at the Professor/Associate Professor Level, Department of Mathematics, December 2024

Award / Honor Recipient: Outstanding Paper Award for the 46th Annual PME-NA Conference, November 2024

Award / Honor Recipient: Excellence in Scholarly/Creative Activity at the Professor/Associate Professor Level, Department of Mathematics, December 2022

Award / Honor Recipient: College Achievement Award for Excellence in Teaching, at the Professor/Associate Professor Level, College of Science & Engineering, 2020

Award / Honor Recipient: Excellence in Teaching at the Professor/Associate Professor Level, Department of Mathematics, December 2019

Award / Honor Recipient: College Achievement Award for Excellence in Service at the Professor/Associate Professor Level, Department of Mathematics.
August 2019

Award / Honor Recipient: Excellence in Service at the Professor/Associate Professor Level, Department of Mathematics.
December 2018

Award / Honor Recipient: College Achievement Award for Excellence in Scholarly/Creative Activity at the Professor/Associate Professor Level, College of Science & Engineering, 2018

Award / Honor Recipient: Excellence in Scholarly/Creative Activity at the Professor/Associate Professor Level, Department of Mathematics, December 2017

II. TEACHING

B. Courses Taught:

Texas State University
MATH 1311 – BASIC MATH
MATH 1315 – COLL ALGEBRA
MATH 1319 – MATH BUS & ECO I
MATH 2311 – PRINC OF MATH I
MATH 2312 – INFORMAL GEOMETRY
MATH 7111 – SEMINAR IN TEACHING
MATH 7306 – RESRCH IN MATH ED
MATH 7328 – INSTRUCTIONAL TECHNIQUES & ASSESSMENT
MATH 7356B/7354 - ADVANCED QUALITATIVE RESEARCH
MATH 7378G - MATHEMATICS DISCOURSE
MATH 7396 – MATH ED RESEARCH SEMINAR
MATH 7399A/7699A - DISSERTATION

While at the University of Georgia
EMAT 3400 - Children's Mathematical Learning
EDEC 4040/7040 - Special Topics in Early Childhood Education
EMAT 9000 - Doctoral Research
EMAT 9600 - Research in Mathematics Education
EMAT 9800 - Practicum in Mathematics Education

While at San Diego State University
MTHED 212 - Children's Mathematical Thinking

MTHED/TE 604/798 - Teaching Issues in Mathematics
ED 690 - Methods of Inquiry
ED 795A - Seminar in Research I
ED 795B - Seminar in Research II
TE 910A - Teaching Mathematics in the Elementary School

C. Directed Student Learning:

Graduate Students (Masters & Doctoral Theses/Dissertations Supervised)

Doctoral

Michael D. Hicks (Co-chair), 2021, TXST
Elizabeth Lambert, 2022, TXST
Micah Swartz, 2025, TXST
Mai Bui, 2026, TXST

Masters

Kathleen Bird, SDSU
Joan Case, SDSU
Laura Cline, SDSU
Jennifer Griggs, SDSU
Mindy Lewis, SDSU
Jennifer Lundemo, SDSU
Jennifer Mazzella, SDSU
Myra Reyes, SDSU
Alison Williams, SDSU

Texas State University

In progress:

Member, Dissertation Committee, Status: In progress. (2026 - Present). Postsecondary Student Success, Texas State University.
Student(s): Dharmanie Gamage, Doctoral, PhD

Member, Dissertation Committee, Status: Proposal.
Student(s): Joshua Balboa (May 2026 - Present)

Member, Dissertation Committee. Status: In progress. (2020 - Present). Mathematics, Texas State University.
Student: Eli Hewer, Doctoral, PhD

Supervisor / Chair, Applied Research Project, *MCA: Toward analyses of mathematics classroom discourse at scale*, Status: In progress. (January 2023 - current).
Student(s): Mai Bui, Duong Le

Completed:

Chair, Dissertation Committee, *Exploring Preservice Teachers' Professional Noticing of Students' Measurement Thinking,* Completed (2026). Mathematics, Texas State University.
Student: Mai Bui, Doctoral. Assistant Professor, Grand Valley State University.

Chair, Dissertation Committee, *Math Apps and Their Relationship to Student Motivation and Mathematical Identity*, Completed. (2025). Mathematics, Texas State University.
Student: Micah Swartz, Doctoral. Assistant Professor, Troy University.

Chair, Dissertation Committee, *Mathematicians as Professors: Narrative Accounts of Their Teaching Experiences and Conceptions of Teaching*, Completed. (2022). Mathematics, Texas State University.
Student: Elizabeth Lambert, Doctoral. Lecturer, University of Texas at San Antonio.

Co-chair, Dissertation Committee, *Describing students' analogical reasoning while creating structures in abstract algebra*. Completed. (2021). Mathematics, Texas State University.
Student: Michael Hicks, Doctoral. Assistant Professor, Middle Tennessee State University.

Chair, Honor's Thesis, *How Play Helps Students Comprehend Mathematics*, Completed. (Fall 2021 – Spring 2022). Mathematics, Texas State University.
Student: Samantha Homiller, Undergraduate

Member, Dissertation Committee, *Exploring the Practice-Linked Identities of Women in Calculus Lab Settings*. Status: Completed. (2023 - 2026). Mathematics, Texas State University.
Student: Brandi Rygaard Gaspard, Doctoral, PhD

Member, Dissertation Committee, *Coherence Between Instructors' Intentions and Students' Experiences With Examinations in Undergraduate Proof-based Mathematics Courses*, Status: Completed. (2022–2025). Mathematics, Texas State University.
Student(s): Anthony Tucci, Doctoral, PhD

Member, Dissertation Committee, *In Their Words: Prospective Teachers' Experiences as a Context for Investigating Their Views of Authority in a Mathematics Classroom*, Status: Completed. (2019 - 2023). Mathematics, Portland State University.
Student(s): Brenda Rosencrans, Doctoral, PhD

Member, Dissertation Committee, *STEM undergraduates' structural conception of situational attributes*, Status: Completed. (2020 - 2023). Mathematics, Texas State University.
Student(s): Sindura Subanemy Kularajan, Doctoral. Assistant Professor, Utah State University.

Member, Dissertation Committee, *Elementary preservice teachers' conceptions of and reflections on student autonomous problem-solving and mathematical practices*, Completed. (2020). Mathematics, Texas State University.
Student(s): Christina Koehne, Doctoral. Assistant Professor, SUNY New Paltz

Member, Dissertation Committee, *Exploring prospective elementary teacher's peer-interviewer verbal interactions in a mathematics content course*, Status: Completed. (2020). Mathematics, Texas State University.

Student(s): Teresa Salazar, Doctoral. Assistant Professor, East Texas Baptist University

Member, Dissertation Committee, Status: Proposal. (2020 - 2024). Mathematics, Texas State University.
Student(s): Youngkee Cho, Doctoral, PhD, ABD – did not complete

Supervisor / Chair, Applied Research Project, *CAREER: Characterizing Productive Mathematics Discourse*, Status: Completed. (December 2017 – 2022).
Student(s): Christina Koehne, Michael Hicks, Diane Leuders, Elizabeth Lambert, Mai Bui, Mehmet Kirmizi

Supervisor / Chair, Qualifying Exam Committee, Status: Completed.
Student(s): Mai Bui (Fall 2022 – Spr 2023)
Micah Swartz (Fall 2022 – Spr 2023)

Member, Qualifying Exam Committee, Status: Completed.
Student(s): Anthony Tucci (Spr 2022)
Brandi Rygaard (Spr 2022)
Joshua Balboa (May 2025 – May 2026)

While at the University of Georgia

Member, Dissertation Committee, *Preservice teachers' questioning in elementary students' mathematical problem solving*, Status: Completed. (2019). Mathematics Education, The University of Georgia.
Student(s): Yi Jung Lee, Doctoral, Assistant Professor, University of Arkansas

Member, Dissertation Committee, *Identity Formation as a Teacher of Mathematics: The Emotional Geographies of Prospective Elementary Teachers*, Status: Completed. (2016). Mathematics Education, The University of Georgia.
Student(s): C. Nicholas Gomez, Doctoral, Associate Professor, University of Texas, Austin

Member, Dissertation Committee, *Problem Posing in Middle-grades Mathematics Classes*, Status: Completed. (2015). Mathematics Education, The University of Georgia.
Student(s): Clayton Kitchings, Doctoral, Assistant Professor, Shorter University

Supervisor / Chair, Applied Research Project, *CAREER: Characterizing Productive Mathematics Discourse*, Status: Completed. (2012 - 2016).
Student(s): Julia Przybyla-Kuchek, Hamilton Hardison, Clay Kitchings, Eric Siy, Adam Molnar.

Supervisor / Chair, Applied Research Project, *Do you know why 6 – -2 is the same as 6 + 2?*, Status: Completed. (2014).
Student(s): Andrew Peake, Undergraduate.
Additional Comments: Faculty Mentor for CURO (Center for Undergraduate Research Opportunities) Project

Supervisor / Chair, Internship
Student(s): C. Nicholas Gomez, Doctoral, 2013
Eric Siy, Doctoral, 2014

While at San Diego State University

Member, Dissertation Committee, *Teachers' Beliefs Regarding How to Support the Generalization of Students' Learning*, Status: Completed. (2013). Mathematics Education, San Diego State University.
Student(s): Jaime Diamond, Associate Professor, University of Georgia

Member, Dissertation Committee, *Negotiating Meaning for the Symbolic Expressions for Vectors and Vector Equations in a Classroom Community of Practice*, Status: Completed. (2012). Mathematics Education, San Diego State University.
Student(s): George Sweeney, Associate Professor, Santa Ana College

Member, Dissertation Committee, *Investigating Number Sense Development in a Mathematics Content Course for Prospective Elementary Teachers*, Status: Completed. (2012). Mathematics Education, San Diego State University.
Student(s): Ian Whitacre, Associate Professor, Florida State University

Member, Dissertation Committee, *Mrs. Miller's Evolution in Teaching Science as Inquiry: A Case Study of a Teacher's Change in Responsiveness*, Status: Completed. (2012). Science Education, San Diego State University.
Student(s): Jennifer Lineback, Professor & Chair, Point Loma Nazarene University

Member, Dissertation Committee, *The Missing Strand of Mathematical Content Knowledge: Defining and Assessing for Productive Disposition in Elementary School Teachers*, Status: Completed. (2012). Mathematics Education, San Diego State University.
Student(s): John (Zig) Siegfried, Associate Professor, James Madison University

Member, Dissertation Committee, *Methods of Mathematical Struggle*, Status: Completed. (2012). Mathematics Education, San Diego State University.
Student(s): Michael Smith

Supervisor / Chair, Master's Thesis, *An elementary look at productive disposition*, Status: Completed. (2010). San Diego State University.
Student(s): Alison Williams

Supervisor / Chair, Master's Thesis, *Balloons and weights: An integer model that outweighs the rest*, Status: Completed. (2010). San Diego State University.
Student(s): Jennifer Griggs

Supervisor / Chair, Master's Thesis, *And you thought one-half was easy!*, Status: Completed. (2010). San Diego State University.
Student(s): Jennifer Lundemo

Supervisor / Chair, Master's Thesis, *Balloons and weights: An integer model that outweighs the rest*, Status: Completed. (2010). San Diego State University.
Student(s): Jennifer Mazzella

Supervisor / Chair, Master's Thesis, *And you thought one-half was easy!*, Status: Completed. (2010). San Diego State University.
Student(s): Joan Case

Supervisor / Chair, Master's Thesis, *And you thought one-half was easy!*, Status: Completed. (2010). San Diego State University.
Student(s): Kathleen Bird

Supervisor / Chair, Master's Thesis, *An elementary look at productive disposition*, Status: Completed. (2010). San Diego State University.
Student(s): Laura Cline

Supervisor / Chair, Master's Thesis, *Traveling and calculating with integers*, Status: Completed. (2010). San Diego State University.
Student(s): Mindy Lewis

Supervisor / Chair, Master's Thesis, *Traveling and calculating with integers*, Status: Completed. (2010). San Diego State University.
Student(s): Myra Reyes

Supervisor / Chair, Applied Research Project, Status: Completed. (2011).
Student(s): Bridget Druken
Additional Comments: First-year Doctoral Research Project Supervisor

Supervisor / Chair, Applied Research Project
Student(s): Brooke Ernest (2011)
Ian Whitacre (2009)
Additional Comments: First-year Doctoral Research Project Supervisor

D. Courses Prepared and Curriculum Development:

Texas State University

Develop/Revise Curriculum

MATH 7354: Advanced Qualitative Research, Revise Existing Course, Texas State University, 2020.
Revised existing course and corresponding syllabus for Advanced Qualitative Research (MATH 7356B) to meet new graduate college requirements, and shepherded the new course (MATH 7354) through the university's Course Inventory Management (CIM) system at the departmental, college, and university level.

MATH 7378G: Discourse Processes, Traditions & Analysis in Mathematics Education, New Course, Texas State University: Fall 2018.

I developed and designed a new doctoral-level course as an introduction to the theory and methods for discourse analysis in educational settings. Discourse and discourse analysis have been used to answer research questions posed in and across disciplines throughout the humanities and social sciences. In this course the focus is on both theoretical approaches and analytic methods that describe language-in-use in social life related to issues in mathematics education.

First-time Course Preparation

MATH 7111: Graduate Teaching Seminar, First-time Course Preparation, Texas State University, Fall 2021.

Designed a special section of this course for doctoral students planning to teach MATH 2311 and/or MATH 2312 to support their professional growth as mathematics teacher educators.

MATH 7396: Mathematics Education Research Seminar, First-time Course Preparation, Texas State University, Summer 2021.

Designed a research seminar for a doctoral student to learn about research on mathematical authority, apply that knowledge to analyze existing data, and develop researchable questions of interest.

MATH 2312: Informal Geometry, First-time Course Preparation, Texas State University, Fall 2020.

MATH 2311: Principles of Mathematics I, First-time Course Preparation, Texas State University, Fall 2019.

MATH 7356B: Advanced Qualitative Research, First-time Course Preparation, Texas State University: Spring 2019.

MATH 7328: Instructional Technology and Assessment, First-time Course Preparation & Course Revision, Texas State University: Spring 2017.

This graduate level course introduces students to research on teachers, teaching/instruction, and assessment within the field of mathematics education. One of the goals of the course is to survey the research literature on mathematics teaching and identify major themes and categories of research to help students develop a foundational understanding of existing scholarship in this area. The course was organized around four major domains: research on teachers; research on teaching/instructional practices; assessment (as a critical aspect of teaching); and the learning and education of teachers. Moreover, I revised this course to incorporate a field-based component where students spent significant time in a local elementary school assessing children's mathematical thinking across grade levels and in different content domains. The purpose of this experience was to give students practical, hands-on opportunities to engage in formative assessment, to analyze assessment data to identify trends and patterns, and to use the data to plan for future instruction.

MATH 7306: Current Research in Mathematics Education, First-time Course Preparation: Fall 2016

While at The University of Georgia

EDEC 4040/7040 Special Topics in Early Childhood Education, Curriculum Development: 2015.

This course was collaboratively designed and taught by faculty from Mathematics Education, Elementary Education, and Language Arts and Literacy in order to prepare prospective teachers pursuing a degree in Early Childhood & Elementary Education (K–5) for the edTPA Early Childhood performance assessment required by the GaPSC (Georgia Professional Standards Commission) for certification in the state of Georgia. Teaching this course required developing all new course assignments, assessments, activities and readings and making sure they were aligned with edTPA requirements.

EMAT 9600 Research in Mathematics Education: Discourse Processes, Traditions, and Analysis, Curriculum Development: 2014.

This graduate level course is an introduction to theory and methods for the analysis of discourse in educational settings. This course focus on approaches and methods that describe language-in-use in social life related to researchable issues in education. It covers influential theories of discourse from sociolinguistics, psycholinguistics, linguistics, and the philosophy of language and how these theories have been used to understand learning—especially in mathematics and science classrooms. The overall goals of the course are to equip students with knowledge of a number of discourse analysis traditions and enable them to conduct discourse analysis on their own.

EMAT 9800 Practicum in Mathematics Education, Curriculum Development: 2013.

This 3-hour practicum was a customized internship focused on children's mathematical thinking. It was designed for mathematics doctoral students as part of their coursework to obtain a Graduate Certificate in Mathematics Education. The coursework entailed a set of readings, observations of K-12 instruction in public schools, and 3 interviews with elementary children and middle grade students.

EMAT 3400 Children's Mathematical Learning, First Time Course Preparation: 2012.

This course is the first of a two-course math methods sequence designed for prospective elementary grades teachers (PreK-5). The course has a field-based component where students interact with elementary school children to assess and develop mathematical understandings.

While at San Diego State University

MTHED 604 Teaching Issues in Mathematics: A Closer Look at Discourse, Curriculum Development: 2011.

This course was designed to increase practicing teachers' awareness of the importance of classroom discourse, to provide teachers with tools to begin to shift this aspect of their teaching, and to provide opportunities for systematic reflection

on an important aspect of classroom practice. Assignments and course activities were designed to help teachers critically analyze and reflect on their own discourse and interaction patterns as they interact with children.

ED 690 Methods of Inquiry, First Time Course Preparation: 2009.

This course was developed as part of SDSU's Master of Arts program with a specialization in K-8 mathematics education. Because the students in this program are practicing teachers, the course was designed for teachers to gain experience with different types of qualitative research, engage in doing research in ways that would meaningfully impact their classrooms, and prepare for designing and conducting a research study the following year. Students critically examined and analyzed published research, with a focus on methodology and trustworthiness, they collected a variety of data sources, and they analyzed data using multiple quantitative methods.

TE 910A Teaching Mathematics in the Elementary School, First Time Course Preparation: 2008.

I collaborated with mathematics education faculty and instructors at San Diego State University to integrate California credential requirements (as mandated by the California Commission on Teacher Credentialing and now referred to as the Performance Assessment for California Teachers [PACT]) into TE 910A, Teaching Mathematics in the Elementary School. This included the creation and revision of a performance assessment in our math methods course, the Mathematics Content Area Task, that fulfilled these state-mandated Teaching Performance Expectations. Students must demonstrate proficiency in the content area of mathematics in order to receive a multiple-subject teaching credential; the Content Area Task is a performance assessment we integrated into our course that allowed the college to evaluate student proficiency and recommend candidates for a multiple-subject teaching credential

ED 795A Seminar in Research I, First Time Course Preparation: 2009.

ED 795A is the first in a two-course sequence in which students design and carry out original research. The ED 795A/B course sequence is designed to support students' growth as teacher-researchers and prepare teachers to engage in systematic inquiry long after the course has ended. In ED 795A students design a research study by selecting a research topic and appropriately aligning research questions with larger methodological frameworks, data sources, and methods of analysis. The primary focus is the conceptualization and design of the study and collecting data.

ED 795B Seminar in Research II, First Time Course Preparation: 2010.

ED 795B is the second in a two-course sequence in which students design and carry out original research. The ED 795A/B course sequence is designed to support students' growth as a teacher-researcher and prepare teachers to engage in systematic inquiry long after the course has ended. In ED 795B the primary focus is collecting and analyzing data, writing a paper that would be appropriate to share with other teachers, and making a presentation to colleagues.

MTHED 212 Children's Mathematical Thinking, First Time Course Preparation: 2009.

This is an undergraduate course designed to introduce prospective teachers to differences in the ways that adults and children make sense of mathematics. The main goal of the course is for students to consider the complexity, challenges, and opportunities open to those who take seriously the idea of teaching mathematics to children in a way that supports children developing rich mathematical understanding.

III. SCHOLARLY/CREATIVE

* Note that Jessica Bishop has also published under the name Jessica Pierson

A. Works in Print (including works accepted, forthcoming, in press):

1. Books:

d. Chapters in Books:

Refereed:

Bishop, J. P., Lamb, L. L., Philipp, R. A., Whitacre, I., & Schappelle, B. P. (2018). Students' thinking about integer open number sentences. In L. Bofferding & N. M. Wessman-Enzinger (Eds.), *Exploring the integer addition and subtraction landscape: Perspectives on integer thinking,* (pp. 47–71). Springer.

Herbel-Eisenmann, B., Meaney, T., **Bishop, J. P.**, & Heyd-Metzuyanim, E. (2017). Highlighting heritages and building tasks: A critical analysis of mathematics classroom discourse literature. In J. Cai (Ed.), *Compendium for Research in Mathematics Education*, (pp. 722–765). Reston, VA: National Council of Teachers of Mathematics.

Bishop, J. P. (2016). Embracing tensions: A commentary to Mistele's and Jacobsen's case. In D. Y. White, S. Crespo, & M. Civil (Eds.), *Cases for teacher educators: Facilitating conversations about inequities in mathematics classrooms.* (pp. 275–280). Charlotte, NC: Information Age Publishing.

Martin, T., **Pierson, J.**, Rivale, S. D., Vye, N. J., & Bransford, J. D. (2007). The role of generating ideas in challenge-based instruction in promoting adaptivity. In *Innovations 2007: World Innovations in Engineering Education and Research*.

2. Articles:

a. Refereed Journal Articles:

Bishop, J. P., Hicks, M. D., Koehne, C., Bui, M. T., & White, A. (2025). An activity-based perspective on mathematical authority. *Journal for Research in Mathematics Education, 56*(4), 159–183.

Bui, M. T., & **Bishop, J. P.** (2025). Measurement: Big ideas and little noticings. *Mathematics Teacher: Learning and Teaching PreK-12*, 118(11), 839–847.

Hicks, M. D., **Bishop, J. P.**, Koehne, C., & Bui, M. (2023). Reconsidering mathematical authority. *Mathematics Teacher: Learning and Teaching Pre-K–12, 116*(11), 826–836.

Lamb, L. L., **Bishop, J. P.**, Whitacre, I., & Philipp, R. A. (2023). Flexibility across and flexibility within: The domain of integer addition and subtraction. *Journal of Mathematical Behavior, 70*.

Bishop, J. P., Hardison, H. L., Przybyla-Kuchek, J. E. (2022). Responsiveness to students' mathematical thinking in middle-grades classrooms. *Journal for Research in Mathematics Education, 53*(1), 10–40.

Bishop, J. P., Koehne, C., & Hicks, M. D. (2022). By whose authority? Negotiating authority for modes of activity in mathematics classrooms. *For the Learning of Mathematics, 42*(2), 35–41.

Bishop, J. P., Lamb, L. C., Philipp, R. A., Whitacre, I., & Schappelle. B. (2022). Beyond the sign rules. *Mathematics Teacher: Learning and Teaching PreK-12, 115*(3), 202–210.

Hawthorne, C., Philipp, R. A., Lamb, L. L., **Bishop, J. P.**, Whitacre, I., Schappelle, B. P. (2022). Reconceptualizing a mathematical domain on the basis of student reasoning: Considering teachers' perspectives about integers. *Journal of Mathematical Behavior, 65*.

Bishop, J. P. (2021). Responsiveness and intellectual work: Features of mathematics classroom discourse related to student achievement. *Journal of the Learning Sciences, 30*(3), 466–508.

Bishop, J. P., Hardison, H. L., Przybyla-Kuchek, J. E., & Hassay, E. L. (2020). Responsiveness: Leveraging Student Thinking to Foster Productive Discussions. *Mathematics Teacher: Learning and Teaching PreK-12, 113*(12), 995–1002.

Lamb, L. L., **Bishop, J. P.**, Philipp, R. A., Whitacre, I., & Schappelle, B. P. (2018). A cross-sectional investigation of students' reasoning about integer addition and subtraction: Ways of reasoning, problem types, and flexibility. *Journal for Research in Mathematics Education*, 49(5), 575 – 613.

Whitacre, I., Lamb, L., Azuz, B., **Bishop, J. P**., Philipp, R. A., & Schappelle, B. P. (2017). Integer comparisons across the grades: Students' justifications and ways of reasoning. *Journal of Mathematical Behavior, 45*, 47–62.

Bishop, J. P., Lamb, L. L., Philipp, R. A., Whitacre, I., & Schappelle, B. P. (2016). Leveraging structure: Logical necessity in the context of integer arithmetic. *Mathematical Thinking and Learning*, *18*(3), 209–232.

Bishop, J. P., Lamb, L. L., Philipp, R. A., Whitacre, I., & Schappelle, B. P. (2016). Unlocking the structure of positive and negative numbers. *Mathematics Teaching in the Middle School*, *22*(2), 84–91.

Whitacre, I., Bouhjar, K., **Bishop, J. P.**, Philipp, R. A., Schapelle, B. P., & Lamb, L. L. (2016). Regular numbers and mathematical worlds. *For the Learning of Mathematics*, *36*(2), 20–25.

Bishop, J. P., Lamb, L. L., Philipp, R. A., Whitacre, I., Schappelle, B. P., & Lewis, M. L. (2014). Obstacles and affordances for integer reasoning: An analysis of children's thinking and the history of mathematics. *Journal for Research in Mathematics Education*, *45*(1), 19–61.

Bishop, J. P., Lamb, L. L., Philipp, R. A., Whitacre, I., & Schappelle, B. P. (2014). Using order to reason about negative numbers: The case of Violet. *Educational Studies in Mathematics*, *86*, 39–59.

Whitacre, I., **Bishop, J. P.**, Philipp, R., Lamb, L. L., & Schappelle, B. (2014). Dollars and sense: Students' integer perspectives. *Mathematics Teaching in the Middle School*, *20*(2), 84–89.

Whitacre, I., **Bishop, J. P.**, Philipp, R., Lamb, L. L., Schappelle, B., & Bagley, S. (2014). "Negative of my money, positive of her money": Secondary students' ways of relating equations to a context. *International Journal of Mathematical Education in Science and Technology*, *46*(2), 234–249.

Bishop, J. P. (2012). "She's always been the smart one. I've always been the dumb one": Identities in the mathematics classroom. *Journal for Research in Mathematics Education*, *43*(1), 34–74.

Lamb, L. L., **Bishop, J. P.**, Philipp, R., Whitacre, I., Schappelle, B., & Lewis, M. L. (2012). Developing symbol sense for the minus sign. *Mathematics Teaching in the Middle School*, *18*(1), 5–9.

Whitacre, I., **Bishop, J. P.**, Lamb, L. L., Philipp, R. A., Schappelle, B. P., & Lewis, M. L. (2012). Happy and sad thoughts: An exploration of children's integer reasoning. *Journal of Mathematical Behavior*, *31*, 356–365.

Bishop, J. P., Lamb, L. L., Philipp, R. A., Schappelle, B. P., & Whitacre, I. (2011). First graders outwit a famous mathematician. *Teaching Children Mathematics*, *17*, 350–358.

b. Non-refereed Articles:

Lamb, L. L., **Bishop, J. P.**, Philipp, R. A., Whitacre, I., Schappelle, B. P., & Lewis, M. L. (2012). High school students' conceptions of the minus sign. *Mathematics Teaching*, *227*, 4–44.

Pierson, J., & Pierson, E. (2010). Teaching mathematical vocabulary in the context of problem solving. *California Mathematics Communicator*, *34*(4), 24–27.

c. Manuscripts Submitted/Under Review

Swartz, M. A. & **Bishop, J. P.** (under review). There's an app for that—but should there be? *Mathematics Teacher: Learning and Teaching PreK-12*.

Swartz, M. A. & **Bishop, J. P.** (under review). The (un)intended consequences of math apps. *Journal of Mathematics Education at Teachers College.*

3. Conference Proceedings:

a. Refereed Conference Proceedings:

Bishop, J. P. (accepted). Building classroom connectedness through discourse. Paper to be presented at the *Proceedings of the Forty-eighth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Provo, UT, October 2026.

Bishop, J. P., Bui, M. T., Hicks, M. D., Koehne, C., White, A. (2024). Portraits of mathematical authority in middle-grades classrooms. In K.W. Kosko, J. Caniglia, S. Courtney, M. Zolfaghari, & G.A. Morris (Eds.), *Proceedings of the Forty-sixth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 1757–1766). Cleveland, OH.

Lamb, L., de Alba, C. A., & **Bishop, J. P.** (2023). Students' pre-instructional ideas about integer multiplication. In T. Lamberg & D. Moss (Eds.), *Proceedings of the Forty-fifth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Vol 2* (pp. 448-449). Reno: NV.

Bishop, J. P., Hicks, M. D., & Koehne, C. (2021). Mathematical authority in authoring, animating, and assessing mathematical ideas. In D. Olanoff, K. Johnson, & S. M. Spitzer (Eds.), *Proceedings of the forty-third Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 1520–1525). Philadelphia: PA.

Hicks, M. D., Tucci, A. A., Koehne, C. R., Melhuish, K. M., & **Bishop, J. P.** (2021). Examining the distribution of authority in an inquiry-oriented abstract algebra environment. In S. S. Karunakaran & A. Higgins (Eds.), *2021 Research in Undergradute Mathematics Education Reports*.

Hardison, H., Przybyla-Kuchek, J., **Bishop, J. P.** (2019). Student to student responsiveness in middle-grades classrooms. In *41st Annual Conference of the*

North American Meeting of the International Group for the Psychology of Mathematics Education, (pp. 1708–1712). St Louis, MO.

Lambert, E., Hicks, M., Koehne, C., **Bishop, J. P.** (2019). The power of words spoken: How authority influences discourse. In *41st Annual Conference of the North American Meeting of the International Group for the Psychology of Mathematics Education*, (pp. 1763). St Louis, MO.

Bishop, J. P., Hardison, H., Przybyla-Kuchek, J. (2016). Profiles of responsiveness in middle grades mathematics classrooms. *Proceedings of the 38th Annual Conference of the North American Meeting of the International Group for the Psychology of Mathematics Education*, (pp. 1173–1180). Tucson, AZ.

Lamb, L., **Bishop, J. P.**, Philipp, R. A., Whitacre, I., Schappelle, B. (2016). The relationship between flexibility and student performance on open number sentences with integers. *Proceedings of the 38th Annual Conference of the North American Meeting of the International Group for the Psychology of Mathematics Education*, (pp. 171–178). Tucson, AZ.

Przybyla-Kuchek, J., Hardison, H., **Bishop, J. P.** (2015). A framework for teacher responsiveness. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th Annual Conference of the North American Meeting of the International Group for the Psychology of Mathematics Education* (p. 1176). East Lansing, MI.

Bishop, J. P., Lamb, L. L., Philipp, R. A., Schappelle, B. P. (2014). Opportunities for algebraic reasoning in the context of integers. In L. P. Steffe & K. C. Moore, & L. L. Hatfield (Eds.), *Epistemic algebraic students: Emerging models of students' algebraic knowing*, (pp. 303-316). Laramie, WY: University of Wyoming.

Carreras, A., Gomez, C. N., **Bishop, J. P.** (2013). Using metaphors to explore preservice teacher's beliefs about teaching mathematics. In M.V. Martinez & A.C. Superfine (Eds.), *Proceedings of the 35th Annual Conference of the North American Meeting of the International Group for the Psychology of Mathematics Education*, (p. 1267). Chicago, IL.

Lamb, L. L., **Bishop, J. P.**, Philipp, R. A., Whitacre, I., Stephan, M., Bofferding, L., Lewis, J., Brickwedde, J., Bagley, S. (2013). Building on the emerging knowledge base for teaching and learning in relation to integers. In M.V. Martinez & A.C. Superfine (Eds.), *Proceedings of the 35th Annual Conference of the North American Meeting of the International Group for the Psychology of Mathematics Education*, (pp. 1358–1366). Chicago, IL.

Whitacre, I., **Bishop, J. P.**, Lamb, L., Philipp, R., Schappelle, B., Lewis, M. (2012). What sense do children make of negative dollars? In L.R. Van Zoest, J. J. Lo, & J.L. Kratky (Eds.), *Proceedings of the 34th Annual Conference of the North American Meeting of the International Group for the Psychology of*

Mathematics Education, (pp. 958–964). Kalamazoo, MI: Western Michigan University.

Whitacre, I., **Bishop, J. P.**, Lamb, L. C., Philipp, R., Schappelle, B., Lewis, M. (2011). Integers: History, textbook approaches, and children's productive mathematical intuitions. In L.R. Wiest & T. Lamberg (Eds.), *Proceedings of the 33rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 913–920). Reno, NV: University of Nevada, Reno.

Bishop, J. P., Lamb, L., Philipp, R., Schappelle, B., Whitacre, I. (2010). A developing framework for children's reasoning about integers. In P. Brosnan, D.B. Erchick, & L. Flevares (Eds.), *Proceedings of the 32nd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 695–702). Columbus, OH: The Ohio State University.

Bishop, J. P., Whitacre, I. (2010). Intellectual work: The depth of mathematical discourse and its relationship to student learning. In P. Brosnan, D. B. Erchick, & L. Flevares (Eds.), *Proceedings of the 32nd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 401-409). Columbus OH: The Ohio State University.

Roschelle, J., **Pierson, J.**, Empson, S., Shechtman, N., Dunn, M., Tatar, D. (2010). Equity in scaling up SimCalc: Investigating differences in student learning and classroom implementation. In S.R. Goldman, J. Pellegrino, K. Gomez, L. Lyons, & J. Radinsky (Eds.), *Learning in the Disciplines: Proceedings of the Ninth International Conference for the Learning Sciences, Vol 1*, (pp. 333-340). Chicago, IL: University of Illinois at Chicago.

Roschelle, J., Shechtman, N., Hegedus, S., **Pierson, J.**, McLesse, M., Tatar, D. (2008). Cognitive complexity in mathematics teaching and learning: Emerging findings in a large-scale experiment. In P.A. Kirschner, J.J.G. Van Merrienboer, & T. de Jong (Eds.), *Cre8ing a Learning World: Proceedings of the Eighth International Conference for the Learning Sciences, Vol. 2*, (vol. 2, pp. 271–278). Utrecht, Netherlands.

Greenstein, S., Maldonado, L. A., **Pierson, J.** (2007). Using a computational, finite-difference model to understand the trainer-of-trainers model of teacher professional development. *Proceedings of the 13th International Conference on the Teaching of Mathematical Modeling and its Applications*, Bloomington, Indiana.

Pierson, J. (2007). The impact of moment-to-moment discourse moves on opportunities to learn mathematics. In L.R. Wiest & T. Lamberg (Eds.), *Proceedings of the 29th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Stateline (Lake Tahoe), NV: University of Nevada, Reno.

Pierson, J., Maldonado, L. A., Pierson, E. L. (2007). Talking mathematics: A case study of one kindergarten teacher's practices to scaffold mathematical discourse. In L.R. Wiest & T. Lamberg (Eds.), *Proceedings of the 29th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Stateline (Lake Tahoe), NV: University of Nevada, Reno.

Schmidt, K. J., **Pierson, J.**, Campbell, M. I. (2006). A look at integrating technology into active, community-based learning. *Proceedings of the 9th International Conference on Engineering Education*, San Juan, Puerto Rico.

10. Other Works in Print:

Instructional Materials:

Bishop, J. P., Lamb, L., Whitacre, I., Philipp, R., & Schappelle, B. (2022). Getting positive about integer arithmetic. *NCTM Illuminations*. National Council of Teachers of Mathematics. Retrieved from https://www.nctm.org/Classroom-Resources/Illuminations/Lessons/Getting-Positive-About-Integer-Arithmetic/

B. Works Not in Print:

1. Papers Presented at Professional Meetings:

Bishop, J. P., & Hassay, E. (2026, June). *Letting student ideas shine through responsive interactions.* CGI 2026 National Conference. Scottsdale, AZ.

Bishop, J. P. (2026, April). *Building mathematics classroom connectedness through dialogue*. Paper presented at the 2026 Annual Meeting of the American Educational Research Association. Los Angeles, CA.

Bishop, J. P., & Whitacre, I. (2022, June). *Moving beyond the sign rules for integers.* CGI 2022 National Conference. Orlando, FL.

Hicks, M. D., Koehne, C., Bui, M., & **Bishop, J. P.** (2022, February). *Representing: Using public records to support class discussion.* Symposium presentation made at the 2022 Annual Meeting of the Association of Mathematics Teachers (AMTE) Annual Conference, Henderson, NV.

Bishop, J. P., Hardion, H., & Przybyla-Kuchek, J. (2019, April). *Key indicators of mathematically responsive classrooms.* Paper presented at the 2019 National Council of Teachers of Mathematics Research Conference. San Diego, CA.

Lamb, L., **Bishop, J. P.**, Philipp, R. A. & Whitacre, I. (2019, April). *Integer problem types and their relationship to children's thinking.* Paper presented at the 2019 National Council of Teachers of Mathematics Research Conference. San Diego, CA.

Bishop, J. P., Hardison, H., & Przybyla-Kuchek, J. (2018, April). *A closer look at teacher moves in mathematically responsive interactions*. Paper presented at the 2018 Annual Meeting of the American Educational Research Association. New York, NY.

Bishop, J. P., Przybyla-Kuchek, J., & Hardison, H. (2017, April). *Classroom responsiveness over time: A case study*. Paper presented at the 2017 National Council of Teachers of Mathematics Research Conference. San Antonio, TX.

Bishop, J. P., Przybyla-Kuchek, J., & Hardison, H. (2017, April). *Characterizing responsiveness in middle grades mathematics classrooms*. Poster presented at the Annual Meeting of the American Educational Research Association. San Antonio, TX.

Bishop, J. P., Heyd-Metzuyanim, E., Meaney, T., & Herbel-Eisenmann, B. (2016, July). *Using Gee's building tasks to analyse research on mathematics classroom discourse: trodden paths and lessons learned.* Paper presented at Mathematics Education and Contemporary Theory 3. Manchester, UK.

Kitchings, C. & **Bishop, J. P.** (2015, April). *Problem posing in mathematics classrooms.* Paper presented at the 2015 National Council of Teachers of Mathematics Research Conference. Boston, MA.

Bishop, J. P., Philipp, R., & Lamb, L. (2014, April). *Opportunities for algebraic reasoning in the context of integers.* Paper presented at the 2014 National Council of Teachers of Mathematics Research Conference. New Orleans, LA.

Lamb, L. L., **Bishop, J. P.**, Whitacre, I., & Bagley, S. (2014, February). *Using students' pre- and post-instructional conceptions of integers and the implications for teacher educators.* Presentation made at the 2014 Annual Meeting of the Association of Mathematics Teachers (AMTE) Eighteenth Annual Conference, Irvine, CA.

Siegfried, J., Philipp, R. A., Jacobs, V. J., Lamb, L. C., **Bishop, J. P.**, Nanna, R.& Hawthorne, C. (2014, February). *An analysis of mathematical content for teaching.* Presentation made at the 2014 Annual Meeting of the Association of Mathematics Teachers (AMTE) Eighteenth Annual Conference, Irvine, CA.

Stockero, S., **Bishop, J. P.**, & Conner, A. (2014, August). *Perspectives on mathematics classroom discourse.* Collaborative presentation at the Discovery Research K-12 PI Meeting, CADRE [Community for Advancing Discovery Research in Education], Washington, D.C.

Bishop, J. P. (2013, November). *Students' Integer Reasoning: Findings From a Large-Scale Study*. Working group presentation made at the 35th Annual Conference of the North American Meeting of the International Group for the Psychology of Mathematics Education, Chicago, IL.

Bishop, J. P., Lamb, L. L., Philipp, R. A., & Schappelle, B. P. (2013, June). *Opportunities for algebraic reasoning in the context of integers.* Paper presented at the Epistemic Algebra Student Conference. Athens, GA.

Bishop, J. P., Philipp, R. P., Whitacre, I., Stephan, M., & Jacobs, V. (2013, January). *Using Integers to Rethink the Role of Context in School Mathematics.* Presentation made at the 2013 Annual Meeting of the Association of Mathematics Teachers (AMTE) Seventeenth Annual Conference, Orlando, FL.

Bishop, J. P., Bird, M., & Silvas, C. (2012, February). *Tools for Improving Mathematics Discourse in Your Classroom*. Presentation at the Annual Meeting of the Greater San Diego Mathematics Council (GSDMC), San Diego, CA.

Bishop, J. P., Lamb, L. C., Philipp, R. A., Schappelle, B. P., Whitacre, I., Lewis, M. L. (2012, April). *Ways of reasoning about integers: Order, magnitude, and formalisms.* Paper presented at the poster session "Teaching and Learning Mathematics: Multiple Perspectives" at the 2012 Annual Meeting of the American Educational Research Association. Vancouver, Canada.

Lamb, L. C., **Bishop, J. P.**, Philipp, R. A., Schappelle, B. P., Whitacre, I., Lewis, M. L. (2012, April). *Children's informal conceptions of integers.* Paper presented at the 2012 Annual Meeting of the National Council of Teachers of Mathematics. Philadelphia, PA.

Lewis, M., **Bishop, J. P.**, Lamb, L. (2012, February). *Children's conceptions of and strategies with integers*. Presentation at the Annual Meeting of the Greater San Diego Mathematics Council (GSDMC), San Diego, CA.

Philipp, R. A., Jacobs, V., Lamb, L., **Bishop, J. P.**, Siegfried, J., Schappelle, B. P. (2012, April). *A Study of Teachers Engaged in Sustained Professional Development.* Paper presented at the 2012 Annual Meeting of the National Council of Teachers of Mathematics. Philadelphia, PA.

Bishop, J. P., Lamb, L., Philipp, R., Schappelle, B. & Whitacre, I. (2011, April). *An Investigation of Negative-Number Reasoning: The Case of Violet.* Paper presented at the roundtable session, "Student reasoning in mathematics" at the 2011 Annual Meeting of the American Educational Research Association. New Orleans, LA.

Bishop, J. P., Lamb, L., Philipp, R., Whitacre, I., Schappelle, B., Lewis, M. (2011, October). *Viewing Students' Integer Reasoning Through the Lens of History.* Presentation at the History and Pedagogy of Mathematics (HPM) Americas Section, West Coast Meeting, San Diego, CA.

Lamb, L., **Bishop, J. P.**, Philipp, R., Schappelle, B., Whitacre, I., & Lewis, M. (2011, January). *Understanding students' conceptions of integers and implications for teacher educators.* Presentation at the Association of Mathematics Teachers (AMTE) Fifteenth Annual Conference, Irvine, CA.

Whitacre, I., **Bishop, J. P.**, Lamb, L., Philipp, R., Schappelle, B., Lewis, M. (2011, October). *Integers: history, textbook approaches, and children's productive mathematical intuitions.* Presentation at the History and Pedagogy of Mathematics (HPM) Americas Section, West Coast Meeting, San Diego, CA.

Lamb, L., Jacobs, V., **Pierson, J.**, Philipp, R., Schappelle, B., & Siegfried, J. (2010, January). *Teachers' conversations about video: Implications for professional development.* Presentation at the Association of Mathematics Teachers (AMTE) Fourteenth Annual Conference, Irvine, CA.

Lamb. L., **Pierson, J.**, Schappelle, B., & Whitacre, I. (2010, April). *Students' conceptions of integers.* Paper presented at the 2010 Annual Meeting of the National Council of Teachers of Mathematics. San Diego, CA.

Philipp, R., Siegfried, J., Schappelle, B., Jacobs, V., Lamb L. & **Pierson, J.** (2010, January). *Studying and developing productive disposition of elementary school teachers and their students*. Presentation at the Association of Mathematics Teachers (AMTE) Fourteenth Annual Conference, Irvine, CA.

Pierson, J. & Whitacre, I. (2010, May). *Interaction in the mathematics classroom: Patterns in teacher-student dialogue and their relationship to learning.* Paper presented at the American Educational Research Association. Denver, CO.

Pierson, J. (2009, April). *Responsiveness and intellectual work: Characteristics of teachers' discourse that influence student learning.* Paper presented at the American Educational Research Association. San Diego, CA.

Pierson, J., Pierson, E., & Maldonado, L. (2009, July). *Talking mathematics in kindergarten: Ways to support students' in-the-moment mathematical discourse*. Presentation at the Cognitively Guided Instruction (CGI) Fifth Biennial National Conference. San Diego, CA.

Pierson, J. (2008, March). *Identifying differences in patterns of classroom discourse and their relationship to mathematics achievement scores.* Paper presented at the American Educational Research Association. New York, NY.

Pierson, J., Maldonado, L. & Pierson, E.L. (2008, July). *Scaffolding mathematical discourse in kindergarten: A practical look at the challenges of supporting students "in-the-moment."* Paper presented at the 11th International Congress on Mathematical Education. Monterrey, Mexico.

Pierson, J. (2007, April). *"She's the smart one and I'm the dumb one": How identity, positioning, and power impact the co-construction of mathematical meaning.* Paper presented at the American Educational Research Association. Chicago, IL.

2. Invited Talks, Lectures, and Presentations:

Bishop, J. P., Hicks, M.D., Koehne, C., and Bui, M. (2025, May). *An Activity-Based Perspective on Mathematical Authority*. JRME Talks presentation for forthcoming article. Virtual talk for international audience.

Bishop, J. P. (2022, March). *Conceptualizing and Analyzing Responsiveness to Students' Mathematical Thinking.* University of Texas at San Antonio (UTSA) STEM Education Seminar. San Antonio, TX.

Bishop, J. P. (2020, February). *Conceptualizing and Operationalizing Responsiveness to Students' Thinking*. BYU Mathematics Education Colloquium Series. Provo, UT.

Bishop, J. P., & Dominguez, H. (2015, April). *Publishing dissertation-based manuscripts.* Roundtable presentation for the Graduate Student, Junior Faculty, and Researcher Mentoring Session at the 2015 National Council of Teachers of Mathematics Research Conference. Boston, MA.

Bishop, J. P., Langrall, C., & Izsák, A. (2014, April). *Writing and responding to reviews*. Presentation at the 2014 National Council of Teachers of Mathematics Research Conference. New Orleans, LA.

Philipp, R. A. & **Bishop, J. P.** (2014, February). *A CGI-approach to integers: Helping teachers structure their intuitive knowledge about children's understandings of negative numbers.* Invited plenary presentation made at the 2014 Leadership Seminar on Mathematics Professional Development sponsored by the Teachers Development Group, Portland, OR.

Bishop, J. P. (2012, April). *Witches, astrology, and negative numbers.* Invited presentation, The University of Texas at Austin, Department of Curriculum and Instruction. Austin, TX.

Bishop, J. P. (2012, April). *Witches, astrology, and negative numbers.* Invited presentation, Texas State University–San Marcos, Department of Mathematics. San Marcos, TX.

Philipp, R., Jacobs, V., Lamb, L., **Bishop, J. P.**, Siegfried, J., & Schappelle, B. (2012, May). *A study of teachers engaged in sustained professional development*. Invited presentation for the PI Lecture Series, San Diego State University Research Foundation, San Diego, CA.

Lamb, L. C., & **Bishop, J. P.** (2011, December). *Students' conceptions of negative numbers*. Invited presentation, Center for Research in Mathematics and Science Education, San Diego State University. San Diego, CA.

Pierson, J. (2010, February). *But when are we actually going to teach? Reconceiving what it means to teach in light of children's thinking.* Invited presentation, SRI, International, Center for Teaching and Learning. Menlo Park, CA.

5. Other Works not in Print:

c. Other Works Not in Print:

Keynote / Plenary Addresses:

Philipp, R. A. & **Bishop, J. P.** (2014, February). *A CGI-approach to integers: Helping teachers structure their intuitive knowledge about children's understandings of negative numbers.* Invited plenary presentation made at the 2014 Leadership Seminar on Mathematics Professional Development sponsored by the Teachers Development Group, Portland, OR.

Posters:

Bishop, J. P., Hardison, H., Przybyla-Kuchek, J. (2016, June). *Characterizing critical aspects of productive mathematics classroom discourse: A focus on responsiveness*. Poster presented at the Discovery Research K-12 PI Meeting, Education Development Center, Inc. Washington, DC, United States.

Lamb, L., **Bishop, J. P.**, & Philipp, R. (2014, August). *Project Z: Mapping developmental trajectories of students' conceptions of integers.* Poster presented at the Discovery Research K-12 PI Meeting, Education Development Center, Inc., Washington, D.C.

Lamb, L., **Pierson, J.**, & Philipp, R. (2009, November). *Project Z: Mapping developmental trajectories of students' conceptions of integers.* Poster presented at the Discovery Research K-12 PI Meeting, Education Development Center, Inc., Washington, D.C.

Reports:

Bishop, J. P. (2023 – 2026). MCA: *Toward analyses of mathematics classroom discourse at scale: Annual Report, Years 1-4*

Bishop, J. P. (2020). *Characterizing Critical Aspects of Productive Mathematics Classroom Discourse: Final Report*.

Bishop, J. P. (2013 - 2019). *Characterizing Critical Aspects of Productive Mathematics Classroom Discourse: Annual Report, Years 1–7*.

Lamb, L. C., Philipp, R. A., **Bishop, J. P.** (2015). *Mapping Developmental Trajectories of Students' Conceptions of Integers: Final Report*.

Lamb, L. C., Philipp, R. A., **Bishop, J. P.** (2010 - 2012). *Mapping Developmental Trajectories of Students' Conceptions of Integers: Annual Report, Years 1 - 3*.

C. Scholarly / Creative Grants and Contracts:

1. Funded External Grants and Contracts:

Bishop, Jessica P. (Principal Investigator). National Science Foundation, *MCA: Toward analyses of mathematics classroom discourse at scale using tools from applied mathematics.* NSF MCA & BCSER solicitations, Division of Undergraduate Education (DUE), EDU Directorate, $351,072. (Funded: January 2023 – December 2026). Grant.

Bishop, Jessica P. (Principal Investigator). National Science Foundation, *CAREER: Characterizing Critical Aspects of Mathematics Classroom Discourse*, Faculty Early Career Development [CAREER] Program, Discovery Research K-12 (DRK-12), $672,846.00. (Funded: 2012 – May 31, 2021) Grant.

The Faculty Early Career Development (CAREER) Program offers NSF's most prestigious awards in support of early career faculty who have the potential to serve as academic role models in research and education and to lead to advances in the mission of their department or organization.

Bishop, Jessica P. (Co-Principal Investigator). National Science Foundation, *Mapping Developmental Trajectories of Students' Conceptions of Integers*, Discovery Research K-12 (DRK-12), $1,684,316.00. (Funded: 2009 - 2014). Grant.

Additional Comments: Principal Investigator: Lisa Lamb, Co-principal Investigators: Jessica Bishop & Randolph Philipp.

Bishop, Jessica P. (Faculty researcher). National Science Foundation, *Studying Teachers' Evolving Perspectives: A Cross-Sectional Snapshot of Teachers Engaged in Sustained Professional Development Focused on Children's Mathematical Thinking*, National Science Foundation, $2,500,000.00. (Funded: 2005 - 2010). Grant.

Additional Comments: Principal Investigator: Randolph Philipp, Co-PI: Victoria Jacobs

Bishop, Jessica Pierson (Consultant). National Science Foundation, *Working with Teachers and Leveraging Technology to Scale Opportunities to Learn More Complex and Conceptually Difficult Middle School Mathematics*, (NSF-IERI 04-37861), National Science Foundation. (Funded: 2004 - 2008). Grant.

Additional Comments: Principal Investigator: Jeremy Roschelle, Co-PIs: Jim Kaput, Bill Hopkins, Deborah Tartar, & Susan Empson; Research Consultant for SRI International: Jessica Bishop

3. Submitted, but not Funded, External Grants and Contracts:

Pierson, Jessica. National Science Foundation, *Mapping the Nature of ELLs' Participation in Environments with Mathematically-Rich Representational Technologies*, National Science Foundation (NSF) Discovery Research K-12 (DRK-12), $3,300,000.00. (Submitted: 2010). Grant.

Additional Comments: Principal Investigator: Phil Vahey, Co-PI: Jessica Pierson.

4. Funded Internal Grants and Contracts:

Pierson, Jessica (Principal Investigator). San Diego State University, University Grant Program, *Students' Mathematical Talk: The Relationship Between Student Discourse Patterns and Math Learning*, $8,702.00. (Funded: 2009 - 2010). Grant.

D. Scholarly / Creative Fellowships, Awards, Honors:

Award / Honor Recipient: Outstanding Paper Award for the 46th Annual PME-NA Conference, November 2024

Award / Honor Recipient: Excellence in Scholarly/Creative Activity at the Professor/Associate Professor Level, Department of Mathematics, December 2022

Award / Honor Recipient: College Achievement Award for Excellence in Scholarly/Creative Activity at the Professor/Associate Professor Level, College of Science & Engineering, 2018

Award / Honor Recipient: Excellence in Scholarly/Creative Activity at the Professor/Associate Professor Level, Department of Mathematics, December 2017

Award / Honor Recipient: Recognition of Merit, Outstanding Doctoral Dissertation Award, Phi Delta Kappa, 2009

IV. SERVICE

A. Institutional

1. University:

Texas State University
Member, Graduate College Outstanding Dissertation Award Committee, The Graduate College, (June 2018).

While at the University of Georgia
Panel Member for Writing a Winning NSF Career Award Application, Office of the Vice President for Research, University of Georgia. (March 2013).

While at San Diego State University
Judge and Faculty Sponsor, San Diego State University Student Research Symposium, San Diego State University. (February 2011).

2. College:

Texas State University
Research Enhancement Program (REP) Representative, College of Science & Engineering, (2020–2021)

Member, Grant Proposal Review Committee for Grant Writing Workshop Series. (November 2018).

While at San Diego State University
Secretary, College of Education Policy Council, San Diego State University. (2011 - 2012).

Member, College of Education Policy Council, San Diego State University. (2009 - 2012).

3. Department/School:

Texas State University
Member, Budget Committee, Department of Mathematics (August 2026 – current)

Chair, Faculty of Instruction & Lecturer Hiring Committee, Department of Mathematics (January 2025 – June 2026), ~130 hrs/yr

Chair, Lecturer Hiring Committee, Department of Mathematics (May 2024 – August 2024)

Member, Search Committee for Department Chair, Department of Mathematics, Texas State University. (Spring 2025).

Member, Committee on Committees, Department of Mathematics (August 2023 – June 2026)

Teaching Forum Leader MATH 2311/2312 (long-term), Department of Mathematics (August 2023 – current)

Member, Lecturer Hiring Committee, Department of Mathematics (August 2021 – May 2024)

Chair, Lecturer Renewal Committee, Department of Mathematics (August 2020 – August 2021)

Member, Lecturer Renewal Committee, Department of Mathematics (August 2018 – August 2021)

Member, Library Committee, Department of Mathematics (August 2020 – August 2021)

Member, Graduate Committee, Department of Mathematics, (August 2017-August 2020)

Member, Mathematics PhD Proposal Committee, Department of Mathematics, Texas State University. (August 2019 – May 2020)

Member, Awards Committee, Department of Mathematics, (August 2016 - 2018).

Member, Mathematics Education Qualifying Exam Committee, Department of Mathematics, (January 2017 – June 2021).

Served on Jan 2017, Aug 2017, Jan 2018, Aug 2018, Aug 2019, Aug 2020, Jan 2021, June 2021 committees to write and score qualifying exam questions

Member, Strategic Planning Committee, Department of Mathematics, (Fall 2016 – Spring 2017).

Member, Search Committee, Department of Mathematics, Texas State University. (Fall 2017 & Fall 2016).

Member, Search Committee, Department of Curriculum & Instruction, Texas State University. (2017-2018) (Searches to fill 2 open positions)

Faculty Mentor, Dr. Hwa Young Lee (August 2017 – current)

Graduate Student Teaching Mentor

Anchal LNU (January 2026 – May 2026)
Dai Duong Le (August 2025 – May 2026)
Maxwell Sarpong (August 2024 – May 2025)
Dharmanie Gamage (August 2024 – Dec 2025)
Callie Angel (August 2023 – May 2024)
Mai Bui (August 2022 – May 2026)
Micah Swartz (August 2021 – May 2025)
Anthony Tucci (August 2020 – May 2021)
Elizabeth Lambert (January 2019 – August 2022)
Holly Zolt (August 2019 – May 2020)
Kwangae Gina Park (August 2017 – May 2019)
Sindura Suby Kandasamy (August 2017 - May 2018)
Megan Fairchild (January 2017 - May 2017)

Facilitate Teaching Apprenticeship, MATH 2311

Spring 2020: Elizabeth Lambert & Christina Koehne
Fall 2021: Micah Swartz, Anthony Tucci, Holly Zolt, Carlos Acevedo
Spring 2025: Dai Duong Le & Omkar Devlekar

I led a teaching apprenticeship for doctoral students teaching MATH 2311 to support their professional growth and to help ensure the quality of instruction in this course. Doctoral students observed my section of 2311, and we collaborated to plan content and classroom activities and discussed ways of supporting classroom interaction and student engagement.

Facilitate Teaching Apprenticeship, MATH 2312

Spring 2022: Micah Swartz, Mai Bui
Fall 2023: Elizabeth Wrightsman
Fall 2025: Dai Duong Le

I led a teaching apprenticeship for doctoral students teaching MATH 2312 to support their professional growth and to help ensure the quality of instruction in this course. Doctoral students observed my section of 2312, and we collaborated to plan content and classroom activities and discussed ways of supporting classroom interaction and student engagement.

Organizer, Redesign of Mathematics Education Qualifying Exam. (May 2018 - December 2018).

Led efforts to redesign the mathematics education qualifying exam

Organizer, Mathematics Education Website Redesign. (2017 - 2018).

Led efforts to redesign the mathematics education website

Mathematics Department Colloquium Series Host (Vicki Jacobs March 2017, Dorothy White March 2021, Beth Herbel-Eisenmann September 2021)

Speaker, Mathematics Department Open House, (November 2019)

Moderator, Graduate Student Panel, Mathematics Department Open House. (November 2018).

Speaker, Mathematics Department Open House, (November 2017).

Keynote Speaker, Mathematics Department Open House, (November 2016).

Speaker, Mathematics Education Seminar

August 2025, Building Mathematics Classroom Connectedness Through Dialogue
April 2025, An Activity-Based Perspective on Mathematical Authority for JRME Talks
August 2020, The mathematical preparation of elementary school teachers: A cross-college collaboration
September 2019, Publishing manuscripts workshop
April & May 2019, Student research presentations
September 2017, Problem types, ways of reasoning and flexibility: A cross-sectional study of students' integer reasoning
April 2017, Classroom responsiveness over time: A case study

Speaker, Statistics Seminar

March 2022, Using quantitative approaches to better understand the teaching and learning of mathematics

<u>While at the University of Georgia</u>

Member, Master of Education Comprehensive Exam Committee, Department of Mathematics & Science Education, University of Georgia. (2015).

Chair, K–8 Mathematics Education Committee, Department of Mathematics & Science Education, University of Georgia. (2014 - 2015).

Member, Graduate Committee, Department of Mathematics & Science Education, University of Georgia. (2014 - 2015).

While at San Diego State University
Member, Curriculum Committee, School of Teacher Education, San Diego State University. (2010 - 2012).

Member, Single Subject Credential Admissions and Retention Committee, School of Teacher Education, San Diego State University. (2008 - 2010).

B. Professional:

Grant Evaluator, National Science Foundation (NSF), *Theorizing and Advancing Teachers' Responsive Decision Making in the Domain of Rational Numbers*, Discovery Research K-12 (DRK-12). (2013 – 2021).
Principal Investigator: Susan Empson, Co-PI: Victoria Jacobs

Advisory Board Member, National Science Foundation (NSF), *Pathways to Conceptual Knowledge of Decimals*, ECR-EDU Core Research. (Aug 2023 – current).
Principal Investigator: Jing Tian, Co-PIs: Kristie Newton, Elizabeth Gunderson

Advisory Board Member, National Science Foundation (NSF), *CAREER: Reframing Students' Graph Literacy with a Focus on Students' Thinking*, Discovery Research K-12 & ECR-EDU Core Research. (Feb 2023 – current/Jan 2028).
Principal Investigator: Hwa Young Lee

Advisory Board Member, National Science Foundation (NSF), *Building on MOSTs: Investigating productive use of high-leverage student mathematical thinking*, Discovery Research K-12 (DRK-12). (2017 - 2023).
Principal Investigator: Keith Leatham, Co-PIs: Blake Peterson, Shari Stockero, Laura Van Zoest

Grant Panel Reviewer, National Science Foundation, January 2024

Grant Panel Reviewer, National Science Foundation, January 2021

Participant, Journal for Research in Mathematics Education Reviewing Mentorship Program, 2021.

Co-Chair, Annual Meeting of the American Educational Research Association (AERA), Division C (Learning), Mathematics, 2010 Annual Meeting, Denver, CO. (May 2010).

Recipient, Outstanding Reviewer 2017, Journal for Research in Mathematics Education. (2017).

Editorial Board Member, Mathematical Thinking and Learning. (July 2019 – March 2026).

Reviewer / Referee, Journal for Research in Mathematics Education. (2009 - Present).

Reviewer / Referee, Mathematical Thinking and Learning. (2014 - Present).

Reviewer / Referee, Journal of Mathematics Teacher Education. (2017 - Present).

Reviewer / Referee, Mathematics Teacher: Learning and Teaching PreK-12. (2018 - Present).

Reviewer / Referee, Occasional
AERJ (March 2024)
Curriculum & Instruction (April 2021, Dec 2022)
Research in Mathematics Education (Dec 2020, Oct 2021, March 2022)
For the Learning of Mathematics (August 2020, Dec 2024, March 2025, April 2025)
Journal of Mathematical Behavior (Jan 2020, Sept 2022; April 2023)
Educational Studies in Mathematics (July 2019, June 2024, Dec 2024)
ZDM–The International Journal on Mathematics Education (Jan 2009, Dec 2018)
Mathematics Education Research Journal (Feb 2024)
Mathematics Teaching in the Middle School (June 2018)
Teaching Children Mathematics (June 2018)
MAA Convergence. (May 2017)
Journal of Humanistic Mathematics (June 2015, August 2016)
Journal of the Learning Sciences (June 2009)

Reviewer / Referee, National Council of Teachers of Mathematics Research Conference. (2010 – 2019, 2023).

Reviewer / Referee, American Educational Research Association, Division C & Mathematics and Special Interest Group on Research on Mathematics Education. (2009 - 2018).

Reviewer / Referee, North American Meeting of the International Group for the Psychology of Mathematics Education. (2016, 2019, 2023, 2024).

Reviewer / Referee, Association of Mathematics Teacher Educators. (2012 - 2013).

Discussion Table Facilitator, Annual Meeting of the Association of Mathematics Teacher Educators, Orlando, FL. (January 2013).
Topic: Discourse in the mathematics classroom, continuing the discussion

C. Community:

Organized Formative Assessment of Children's Mathematical Thinking
Hernandez Elementary School, San Marcos, TX. (March – April, 2025; March – May 2024; October – November 2023).
Ruth Barron Elementary School, Pflugerville, TX. (March – May 2022).
Regents School, Austin, TX. (March – May 2021; October – November 2021).
De Zavala Elementary School, San Marcos, TX. (March 2020, October 2019, March 2018–May 2018, March 2017–May 2017).

Additional Comments: Organized and oversaw assessment of children's mathematical thinking in different content domains at various local elementary schools. I trained both undergraduate preservice teachers and doctoral students to administer formative assessments (in the form of a clinical interview) and analyze assessment data to identify trends and patterns. Results of analysis were shared with teachers, principals, and math coordinators/coaches to help support and improve instruction.

Academy 4 Mentor, McBee Elementary School, August 2023 – Present.

Speaker, Lake Oconee Academy Math Night Presentation with Martie Hutchens, Northeast Georgia RESA, presentation focused on the benefits of problem solving and students' invented strategies. (Greensboro, GA, September 25, 2012).

D. Organization Memberships:

American Educational Research Association

Association of Mathematics Teacher Educators

International Group for the Psychology of Mathematics Education--North America (PMENA)

National Council of Teachers of Mathematics.

E. Service Honors and Awards:

Award / Honor Recipient: College Achievement Award for Excellence in Service at the Professor/Associate Professor Level, Department of Mathematics.
August 2019

Award / Honor Recipient: Excellence in Service at the Professor/Associate Professor Level, Department of Mathematics.
December 2018