#### **CURRICULUM VITA**

NAME: Christa Jackson

<u>CURRENT POSITION</u>: Professor

# **EDUCATION**:

2010	Ph.D.	University of Missouri-Columbia	Curriculum and Instruction, Emphasis in Mathematics Education
2003	M.S.Ed.	Missouri State University	Secondary Education, Natural Science
1995	B.S.	Evangel University	Elementary Education

# **CERTIFICATION AND LICENSURE:**

Missouri State Licensed Teacher of Elementary School, Mathematics and Science, Grades 1 – 9

# **DISSERTATION TITLE**:

A Study of Elementary Mathematics Teachers' Knowledge of Equity Committee: Kathryn Chval (Advisor), Frances Arbaugh, Óscar Chávez, John Lannin, David Bergin, and Juanita Simmons

# **POSITIONS HELD:**

2021-Present	Professor, School of Education, Saint Louis University, St. Louis, MO
2019–2021	Regents Alternative Pathway to Iowa Licensure (RAPIL) Faculty, University of Iowa, Iowa City, IA
2017–2021	Associate Professor of Mathematics Education, School of Education, Iowa State University, Ames, IA
2014–2017	Assistant Professor of Mathematics Education, School of Education, Iowa State University, Ames, IA
2010–2014	Assistant Professor of Mathematics Education, Department of STEM Education, University of Kentucky, Lexington, KY
2006–2010	Graduate Research Assistant and Teaching Assistant; Learning, Teaching, and Curriculum, College of Education and College of Engineering, University of Missouri-Columbia, Columbia, MO
1995–2006	Teacher, Springfield Public Schools District R12, Springfield, MO
2003–2006	Adjunct Faculty, Department of Education and Department of Mathematics, Evangel University, Springfield, MO.
2001–2005	Adjunct Faculty, Department of Mathematics, Ozark Technical Community College, Springfield, MO

# PROFESSIONAL RESPONSIBILITIES (%)

Year	Teaching	Research	Professional	Institutional
			Service	Service
2019–2020	15%	40%	10%	35%
2018–2019	30%	40%	10%	20%
2017–2018	30%	40%	10%	20%
2016–2017	30%	40%	10%	20%
2015–2016	40%	40%	10%	10%
2014–2015	40%	40%	20%*	
2013-2014+	52.5%	32.5%	15%*	
2012-2013+	50.8%	38.4%	10.8%*	
2011–2012+	51%	37.75%	11.25%*	
2010–2011	40%	40%	20%*	

Note: 2010–2014 was at the University of Kentucky; 2014–present was at Iowa State University

# MAJOR FIELDS OF TEACHING AND SCHOLARLY EMPHASIS:

Mathematics Education (Elementary and Middle School), Equity, Teacher Education, Students who struggle in Mathematics, Informal Learning Environments, STEM, STEM Literacy, STEM Curriculum, STEM Education

# UNDERGRADUATE COURSES TAUGHT at IOWA STATE:

<sup>\*</sup>Redesigned Course

			Average Number	Number of	
			of Students	Semesters	Years
Course Title	Catalog#	Credit	per Class	Taught	Taught
		Hours			
*Teaching Mathematics in	CI 438	2	14	2	2017, 2019
the Primary Grades					
*Pre-Student Teaching	CI 280L/CI	1	12	5	2016, 2017,
Experience I: Secondary	280J/EDUC				2018, 2019,
Education/Mathematics	280J				2020
Clinic					
*Teaching Children	CI 448	3	26	4	2014, 2015,
Mathematics					2018

# **GRADUATE COURSES TAUGHT at IOWA STATE:**

<sup>\*</sup>Redesigned Course

Course Title	Catalog#	Credit Hours	Average Number of Students per Class	Number of Semesters Taught	Years Taught
*Teaching Mathematics to Struggling Elementary Learners	CI 523	3	18	1	2016
*Geometry for K-12 Teachers	CI 509	3	18	4	2015, 2016, 2017, 2018

<sup>\*</sup>Service responsibilities (professional and institutional) were collapsed

<sup>&</sup>lt;sup>+</sup>represents an average percentage of multiple versions completed during the academic year

*Introduction to	EDUC	3	5	1	2020
Mathematics and Science	521X				
Teaching and Learning					

# COURSES TAUGHT IN THE REGENTS ALTERNATIVE PATHWAY TO IOWA LICENSURE (RAPIL) PROGRAM

<sup>+</sup>Curricular Revisions

Course Title	Catalog#	Credit Hours	Average Number of Students per Class	Number of Semesters Taught	Years Taught
<sup>+</sup> Methods of Teaching in the Secondary Classroom	EDTL 3065	3	18	2	2019, 2020

#### COURSES TAUGHT at UNIVERSITY OF KENTUCKY, LEXINGTON, KY (2010-2014)

## **Undergraduate Courses:**

- (1) \*See Blue Mathematics Clinic
- (2) <sup>+</sup>Teaching Mathematics in the Elementary School
- (3) \*Methods of Teaching Mathematics in the Middle School,
- (4) \*Applications of Teaching Mathematics in the Middle School
- (5) Experiential Education

#### Graduate Courses:

- (1) \*See Blue Mathematics Clinic
- (2) \*Equity in STEM Education
- (3) <sup>+</sup>Advanced Studies in Teaching Elementary School Mathematics

#### COURSES TAUGHT at UNIVERSITY OF MISSOURI-COLUMBIA (2006-2010)

#### College of Education:

Learning and Teaching Number and Operation in the Elementary Classroom

#### College of Engineering:

- (1) Preparing Engineering Faculty and Professionals I
- (2) Preparing Engineering Faculty and Professionals II

# COURSES TAUGHT at EVANGEL UNIVERSITY, SPRINGFIELD, MO (2003-2006)

#### Department of Education:

- (1) Methods of Teaching Elementary Mathematics
- (2) Methods of Teaching Middle School Mathematics

# Department of Mathematics:

Intermediate Algebra

# <u>COURSES TAUGHT at OZARK TECHNICAL COMMUNITY COLLEGE, SPRINGFIELD, MO (2001-2005)</u>

# Mathematics Department:

- (1) Intermediate Algebra
- (2) Basic Mathematics
- (3) Basic Technology Mathematics

<sup>\*</sup>Curricular Creations, \*Curricular Revisions

#### (4) Technical Mathematics I

## SCHOLARLY TEACHING ACTIVITIES:

## Funded Projects (\$60,000)

## \*Accomplishments at Prior Rank

- 4. Iowa State University College of Human Science Innovative Teaching Initiative Grant. Developing an online course for teaching mathematics to ELLs. Role: Co-PI. Principal Investigator: Ji Yeong I. Total Award Amount: \$25,000. January 2016–December 2017.
- 3. Iowa State University Innovative Teaching Grant. Using virtual worlds to prepare pre-service teachers to teach mathematics and science in culturally responsive ways. Role: PI Total Award Amount: \$29,000. November 2014-October 2015.
- 2. University of Kentucky SBI Subgrant. Middle school teacher education syllabus. Role: PI. Total Award Amount: \$3,000. May 2011-August 2011.
- 1. University of Kentucky SBI Subgrant. Redesign of undergraduate middle school education. Role: Co-PI. Principal Investigator: Susan Wood. Total Award Amount: \$3,000. May 2011-August 2011.

# **Teaching Mentor**

- 2. Sandra Ubben, Lecturer, EDUC 509 Geometry for K-12 Teachers, 2019–present
- 1. Denise Carlson, Lecturer, EDUC 438 Teaching Mathematics in the Primary Grades, 2019–present

#### Workshops/Seminars Taught

- 20. Catalyzing Change in Middle School Mathematics: Engaging in Critical Conversations and Planning Actionable Steps. The National Council of Teachers of Mathematics 2020 Virtual Pre-Conference Workshop. April 2021. Role: Facilitator.
- 19. Catalyzing Change in Middle School Mathematics: Engaging in Critical Conversations and Planning Actionable Steps. The National Council of Teachers of Mathematics 2020 Virtual Pre-Conference Workshop. November 2020. Role: Facilitator.
- 18. Promoting Productive Struggle Virtual Workshop. The National Council of Teachers of Mathematics, Oswalt Academy, Walnut, CA. November 2020. Role: Facilitator.
- 17. Developing and Promoting Mathematical Discourse Virtual Workshop. The National Council of Teachers of Mathematics, Oswalt Academy, Walnut, CA. September 2020. Role: Facilitator.
- 16. New York City Algebra for All. The National Council of Teachers of Mathematics, New York, NY. December 2019. Role: Facilitator.
- 15. NCTM Algebra Readiness. The National Council of Teachers of Mathematics, El Paso, TX. September 2019. Role: Facilitator.
- 14. NCTM Productive Struggle. The National Council of Teachers of Mathematics, Washington DC. August 2019. Role: Facilitator.

- 13. *New York City Algebra for All*. The National Council of Teachers of Mathematics, New York, NY. July 2019. Role: Facilitator.
- 12. New York City Algebra for All. The National Council of Teachers of Mathematics, New York, NY. May 2019. Role: Facilitator.
- 11. *New York City Algebra for All*. The National Council of Teachers of Mathematics, New York, NY. March 2019. Role: Facilitator.
- 10. *Productive Struggle*. The National Council of Teachers of Mathematics, Coralville, OR. February 2019. Role: Facilitator.
- 9. New York City Algebra for All. The National Council of Teachers of Mathematics, New York, NY. July/August 2018. Role: Facilitator.
- 8. New York City Algebra for All. The National Council of Teachers of Mathematics, New York, NY. May 2018. Role: Facilitator.
- 7. Expressions and Equations. Weeks Middle School, Des Moines, IA. February 2018. Role: Facilitator.
- 6. New York City Algebra for All. The National Council of Teachers of Mathematics, Brooklyn, NY. October 2017. Role: Facilitator.
- 5. New York City Algebra for All. The National Council of Teachers of Mathematics, Queens, NY. July 2017. Role: Facilitator.
- 4. New York City Algebra for All. The National Council of Teachers of Mathematics, Queens, NY. May 2017. Role: Facilitator.

- 3. New York City Algebra for All. The National Council of Teachers of Mathematics, Brooklyn, NY. October 2016. Role: Facilitator.
- 2. NCTM Algebra Readiness for Every Student: An NCTM Interactive Institute for Grades 6–8. The National Council of Teachers of Mathematics, Denver, CO. July 2016. Role: Facilitator.
- 1. NCTM Algebra Readiness for Every Student: An NCTM Interactive Institute for Grades 6–8. The National Council of Teachers of Mathematics, Chicago, IL. July 2015. Role: Facilitator.

#### RESEARCH AND SCHOLARLY/CREATIVE PROJECTS FUNDED:

\*practicing teacher

## Extramural Support – Funded (\$4,797,704)

- 24. Institute of Education Sciences Department of Education Small Business Innovation Research. Phase II: Augmented Reality-based Design Puzzle Sandbox for use in Early Elementary STEM Instruction (NEWTON). Role: PI at Iowa State University. Principal Investigator: Christopher Whitmer-CEO Parametric Studio, Co-PI: Kelley Buchheister at University of Nebraska-Lincoln. Total Award Amount: \$245,384 (Full project amount: \$900,000). July 2020–June 2022.
- 23. National Science Foundation. Designing and Assessing Curriculum to Address Professional ABET

- Learning Outcomes for Civil Engineering. **Role: Co-PI.** Principal Investigator: Cristina Poleacovschi, Co-PIs: Mollie Appelgate & Katy Swalwell. Total Award Amount: \$299,138. July 2019–June 2022.
- 22. Institute of Education Sciences Department of Education Small Business Innovation Research. Augmented Reality-based Design Puzzle Sandbox for use in Early Elementary STEM Instruction (NEWTON). Role: PI at Iowa State University. Principal Investigator: Christopher Whitmer-CEO Parametric Studio, Co-PI: Kelley Buchheister at University of Nebraska-Lincoln. Total Award Amount: \$33,333. (Full project amount: \$200,000). July 2019–February 2020.
- 21. Institute of Education Sciences. Iowa Mathematics Partnership Project for Algebra: Create a Team (IMPACT). **Role: Co-PI.** Principal Investigator: Anne Foegen, Co-PIs: Mollie Appelgate & Ji Yeong I. Total Award Amount: \$400,000. August 2019–July 2021.
- 20. Iowa Space Grant Consortium. Characterizing the STEM Interest Literature Using Confidence Intervals. **Role: PI at Iowa State University.** Principal Investigator: Jamaal Young at University of Iowa. Total Award Amount: \$8,702. (Full project amount: \$20,000). December 2018–July 2019.
- 19. National Science Foundation. Teacher Education for Equitable Mathematics Instruction: An Exploratory Study of Noyce Program Impacts (TEEM) Noyce Track 4. **Role: Advisory Board.** Principal Investigator: Rebecca McGraw. Total Award Amount: \$1,200,000. July 2018–June 2023.
- 18. National Science Foundation. SBIR Phase II: Engineering Design Instruction Software for implementing Objectives of Next (EDISON) Generation Standards in K-12. **Role: PI at Iowa State University.** Principal Investigator: Christopher Whitmer-CEO Parametric Studio. Awarded as a subcontract from Parametric Studio. Total Award Amount: \$220,000 (Full project amount: \$737,901). September 2018–February 2021.
- 17. Institute of Education Sciences Department of Education Small Business Innovation Research. Design environment for Educator Student Collaboration Allowing Real-Time Engineering-centric STEM (DESCARTES) exploration in middle grades Phase II. **Role: PI at Iowa State University.** Principal Investigator: Christopher Whitmer-CEO Parametric Studio. Co-PI: Mollie Appelgate. Awarded as a subcontract from Parametric Studio. Total Award Amount: \$310,475. (Full project amount: \$900,000). May 2017–April 2019.
- 16. Iowa Mathematics and Science Partnerships. Effectively Supporting all Students to be Successful in Algebra (ES<sup>3</sup>A). **Role: PI**. Co-PIs: Mollie Appelgate, Heather Bolles, Christi Donald, Maryann Huey, Julie Hukee, & Ji Yeong I. Total Award Amount: \$254,872. Amended funding amount of \$95,341 for a Total Award Amount: \$350,213. April 2017–September 2018.

- 15. National Science Foundation. Engineering Design Instruction Software for implementing Objectives of Next (EDISON) Generation Standards in K-12. Role: PI at Iowa State University. Principal Investigator: Christopher Whitmer-CEO Parametric Studio, Co-PI: Mollie Appelgate. Awarded as a subcontract from Parametric Studio. Award Amount: \$107,226 (Full project amount: \$225,000). July 2016–June 2017.
- 14. Institute of Education Sciences Department of Education Small Business Innovation Research. Design environment for Educator Student Collaboration Allowing Real-Time Engineering-centric STEM (DESCARTES) exploration in middle grades. Role: PI at Iowa State University. Principal Investigator: Christopher Whitmer-CEO Parametric Studio, Co-PI: Mollie Appelgate. Awarded as a

- subcontract from Parametric Studio. Award Amount: \$49,813 (Full project amount: \$149,740). May 2016-December 2016.
- 13. University of Northern Iowa Center for Educational Transformation. Using Mathematically-Focused Text Messages to Improve Connections between Linguistically-Diverse Parents and Their Child's Classroom Learning. Role: Co-PI. Principal Investigator: Mollie Appelgate. Total Award Amount: \$31,000. May 2016–July 2017.
- 12. Kentucky Department of Education (MSP). Timely Math Intervention at the Classroom Level (TMI). Role: Co-PI. Principal Investigator: Kim Zeidler-Watters, PIMSER, University of Kentucky. Total Award Amount: \$320,000. January 2014–September 2015.
- 11. Mentors & Meals. Students' Understanding Research in Realistic Explorations in Astronomical Learning (SURREAL). Role: Co-PI. Principal Investigator: Jennifer Wilhelm. Total Award Amount: \$8,200. December 2013–July 2014.
- 10. National Science Foundation (EPSCoR Track 3). Utilizing STEM Camps and STEM Clubs to Increase Interest in STEM fields Among Females and Students of Color. Role: PI. Co-PI: Margaret Mohr-Schroeder, \*Craig Schroeder, & Bruce Walcott. Total Award Amount: \$749,999. October 2013– August 2014.
- 9. National Science Foundation (EPSCoR Track 3). Utilizing STEM Camps and STEM Clubs to Increase Interest in STEM Fields Among Females and Students of Color. Role: Co-PI. Principal Investigator: Margaret Mohr-Schroeder, Co-PIs: \*Craig Schroeder & Bruce Walcott. Total Award Amount: \$749.999. September 2014-August 2019.
- 8. Center for the Study of Mathematics Curriculum. Mathematics Teacher Educators Promoting the Common Core State Standards of Mathematics in Elementary Teacher Preparation Courses. Role: PI. Co-PIs: Kelley Buchheister & Cynthia Taylor. Total Award Amount: \$10,700. November 2012–May 2013.
- 7. Center for the Study of Mathematics Curriculum. Meeting the Foci: Enactment of Common Core State Standards of Mathematics Priority Research Agenda. Role: PI. Co-PI: Sarah Kasten. Total Award Amount: \$10,260. November 2012-May 2013.
- 6. Mentors & Meals, Informal STEM Learning the REAL Way, Role: Co-PI, Principal Investigator; Jennifer Wilhelm. Total Award Amount: \$7,000. December 2012–June 2013.
- 5. NASA Kentucky Space Grant Consortium. Research to Compare Informal & Formal Environments towards Understanding how Middle Level Students Learn Math & Science. Role: Co-PI. Principal Investigator: Jennifer Wilhelm. Total Award Amount: \$10,101. January 2013–December 2013.
- 4. Kentucky Center of Mathematics. See Blue Mathematics Clinic and STEM Camp: A P20 STEM Education Lab Initiative. Role: Co-PI. Principal Investigator: Margaret Mohr-Schroeder. Total Award Amount (Renewal): \$50,059. August 2012–June 2013.
- 3. NASA Kentucky Space Grant Consortium. Researching Equity in STEM Classrooms as Middle Level Students Experience the NASA-based Realistic Explorations in Astronomical Learning Curriculum. Role: Co-PI. Principal Investigator: Jennifer Wilhelm. Total Award Amount: \$10,101. January 2012-December 2012.
- 2. National Science Foundation. REU Site: Supporting Undergraduate Research Fellows in Timely STEM Education Research via the University of Kentucky's STEM Educational Research Laboratory.

**Role: Senior Personnel.** Principal Investigator: Molly Fisher, Co-PI: Jana Bouwma-Gearhart. Total Award Amount: \$316,000. August 2012–July 2015.

1. Kentucky Center of Mathematics. See Blue Mathematics Clinic and STEM Camp: A P20 STEM Education Lab Initiative. **Role: Co-PI.** Principal Investigator: Margaret Mohr-Schroeder. Total Award Amount: \$50,000. August 2011–June 2012.

Extramural Support – Pending

## Extramural Support - Not Funded

- 47. Institute of Education Sciences Department of Education Small Business Innovation Research. A Collaborative Real-world Design Platform, Maker Portfolio, and CTE Oriented App for Project-based STEM in High Schools. **Role: PI.** Principal Investigator: Christopher Whitmer-CEO Parametric Studio. Total Amount Requested: \$66,666. Full Project Amount Requested: \$200,000. Submitted January 2021.
- 46. Spencer Foundation. A Mixed-methods Investigation of Equity in 13,000 College STEM Student Experiences During the Pandemic. **Role: Co-PI**. Principal Investigator: Ben van Dusen. Total Amount Requested: \$75,000. Submitted January 2021.
- 45. National Science Foundation. Curriculum, Achievement & Rigor Vital to Engineering education in Rural Schools (CARVERS). **Role: PI.** Total Amount Requested: \$2,078,483. Submitted October 2020.
- 44. National Science Foundation ITEST. *STEM Within*: Promoting Positive Identities through Antiracist and Gender Inclusive Virtual Integrated STEM Experiences Role: PI. Collaborative with University of Kentucky, Auburn University, Bellarmine University, Bowling Green State University, California State University Long Beach, and University of Central Florida. Total Amount Requested: \$196,264. (Full project amount requested: \$1,500,000). Submitted August 2020.
- 43. United States Department of Agriculture, National Institute of Food and Agriculture. Project-based STEM Education Tools for Distance Learning and Workforce Development in Rural Communities (MARCONI) Phase I. **Role: Consultant.** Total Amount Requested: \$10,000. (Full project amount requested: \$100,000). Submitted May 2020.
- 42. National Science Foundation. Curriculum, Achievement & Rigor Vital to Engineering education in Rural Schools (CARVERS). **Role: PI.** Total Amount Requested: \$1,996,386. Submitted November 2019.
- 41. National Science Foundation. Collaborative Research: Broadening Participation for STEM Learning: Development and Validation of Integrated STEM Literacy and Socio-Academic Identity Development Instruments. **Role: PI.** Total Amount Requested: \$1,509,323. Submitted November 2019.
- 40. Institute of Education Science. DESCARTES Effectiveness in the Elementary Classroom. **Role: PI.** Total Amount Requested: \$2,695,969. Submitted August 2019.
- 39. Office of Elementary and Secondary Education: Education Innovation and Research (EIR) Program. Curriculum, Achievement & Rigor Vital to Engineering education in Rural Schools (CARVERS). **Role: PI.** Total Amount Requested: \$2,743,473. Submitted April 2019.
- 38. National Science Foundation. NRT-FW-HTF: The Human-Technology Frontier Traineeship Program for Innovations in Rural Resilience to Transform the Future of Work. **Role: Co-PI.** Principal Investigator: David Sanders. Total Amount Requested: \$2,998,540. Submitted February 2019.

- 37. Big Lots Foundation. STEM InCYte Camp. Role: PI. Total Amount Requested: \$5,000. Submitted July 2019.
- 36. Institute of Education Sciences. <u>Instruments for Quantification of Understanding, Identity</u>, and <u>Reasoning</u> in Engineering Focused STEM (InQUIRES). Role: PI. Total Amount: \$1,400,000. Submitted August 2018 (Resubmission).
- 35. National Science Foundation. Collaborative Research: SPrEaD: Broadening Participation Research: Increasing Opportunity and Access for Underrepresented Learners in STEM Role: PI at Iowa State University. Collaborative Proposal. Total Amount Requested: \$375,000. (Full project amount requested: \$1,997,618). Submitted August 2018.
- 34. CPM Educational Program Research Grants for Mathematics Education. Curricular Supports for ELLs in Understanding Ratios and Proportions. Role: Co-PI. Principal Investigator: Ji Yeong I. Total Amount: \$49,945. Submitted January 2018.
- 33. Institute of Education Sciences Department of Education Small Business Innovation Research. PreK-2 Augmented-Reality Storytelling for teaching Coding, Algorithmic-Thinking, and Literacy (PASCAL) Phase I. Role: PI at Iowa State University. Subcontract from Parametric Studio, Inc. Total Amount Requested: \$33,333 (Full Project Amount Requested: \$200,000). Submitted February 2018.
- 32. National Science Foundation. SBIR Phase I: Novel PreK-2 Engineering Workspaces for Tinkering with Objects in Notional Frames in Augmented Reality (NEWTON-AR). Role: PI at Iowa State University. Subcontract from Parametric Studio, Inc. Total Amount Requested: \$36,759 (Full project amount requested: \$225,000). Submitted December 2017.
- 31. National Science Foundation. Research in Service to Practice: Informal STEM Learning through DAVinCI Club and Camp. Role: PI. Total Amount Requested: \$1,419,458. Submitted November 2017.
- 30. Institute of Education Sciences. Authentic Algebra Partnership Project for Success (AAPPS). Role: Co-PI. Principal Investigator: Anne Foegen. Total Amount Requested: \$400,000. Submitted August
- 29. National Science Foundation. Collaborative Research: Broadening Participation Research: Increasing Opportunity and Access for Underrepresented Learners in STEM. Role: PI at Iowa State University. Subcontract from University of Kentucky. Total Amount: \$395,429. (Full project amount: \$1,800,921). Submitted November 2017.
- 28. Institute of Education Sciences. Instruments for Quantification of Understanding, Identity, and Reasoning in Engineering Focused STEM (InQUIRES). Role: PI. Total Amount: \$1,400,000. Submitted August 2017.
- 27. Spencer Foundation. Noticing the Unseen. Role: PI. Total Amount: \$49,999. Submitted February 2017.
- 26. CPM Educational Program Research Grants for Mathematics Education. Curricular Supports for ELLs in Understanding Ratios and Proportions. Role: Co-PI. Principal Investigator: Ji Yeong I. Total Amount: \$50,000. Submitted January 2017.

- 25. National Science Foundation. Research in Service to Practice: DAVinCI Design Challenge Club and Camp (D<sup>2</sup>C<sup>3</sup>). **Role: PI.** Total Amount: \$770,539. Submitted November 2016.
- 24. National Science Foundation. Strategies: Using Game-based Instruction to Broaden the *Playing* Field in STEM. **Role: PI.** Total Amount: \$1,096,274. Submitted August 2016.
- 23. Institute of Education Sciences. Authentic Algebra Partnership Project for Success. **Role: Co-PI.** Principal Investigator: Anne Foegen. Total Amount Requested: \$400,000. Submitted August 2016.
- 22. CPM Educational Program Research Grants for Mathematics Education. Curricular Treatments of Proportion in US and South Korean School Mathematics Textbooks. **Role: Co-PI.** Principal Investigator: Ji Yeong I. Total Amount Requested: \$45,938. Submitted May 2016.
- 21. National Science Foundation. Strategies: Using Game-based Instruction to Broaden the *Playing* Field in STEM. **Role: PI.** Total Amount: \$1,074,089. Submitted November 2015.
- 20. William T. Grant Foundation. Exemplar Mathematics Teaching. **Role: PI.** Total Amount: \$24,995. Submitted August 2015.
- 19. Spencer Foundation. Community-based Mathematics Education. **Role: PI.** Total Amount: \$399, 917. Submitted June 2015.
- 18. National Science Foundation. collaborate2create (c2c): A STC for Optimizing Transdisciplinary STEM Efforts in Research, Teaching and Learning, and Outreach/Engagement. **Role: PI** at Iowa State University; Host Institution PI: Margaret Mohr-Schroeder University of Kentucky. Total Amount: \$21.771.927. Submitted December 2014.
- 17. National Science Foundation. GLEAMS. **Role: Co-PI.** Principal Investigator: Keisha Love. Total Amount: \$1,465,979. Submitted February 2014.
- 16. Best Buy Children's Foundation (Community Partnership Grants). See Blue STEM Camp & Robotics Club Initiative. **Role: Co-PI.** Principal Investigator: Margaret Mohr-Schroeder. Total Amount: \$8,590. Submitted July 2013.
- 15. National Science Foundation. Evaluating Middle School Students' Spatial-Scientific Performance in Earth-Space Science: A Realistic Explorations in Astronomical Learning (REAL) Project. **Role: Co-PI.** Principal Investigator: Jennifer Wilhelm. Total Amount: \$450,000. Submitted December 2013.
- 14. Time Warner Cable. Increasing middle level students' interest in STEM fields via STEM camps and STEM clubs. **Role: PI.** Total Amount: \$81,059. Submitted August 2013.
- 13. National Science Foundation (EHR Core Research). STEM PLUS: Producing Leaders for Urban/rUral Schools-A Program Evaluation. **Role: Co-PI.** Principal Investigator: Margaret Mohr-Schroeder. Total Amount: \$300,000. Submitted July 2013.
- 12. NASA. Teachers Experience Project-based STEM: Curriculum, Research, and Networks. **Role: Co-PI.** Principal Investigator: Jennifer Wilhelm. Total Amount: \$500,000. Submitted December 2012.
- 11. Spencer Foundation. Exemplary Mathematics Teaching for African American Students. **Role: PI.** Total Amount: \$38,393. Submitted February 2013.

- 10. Spencer Foundation. Exemplary Mathematics Teaching for African American Students. **Role: PI.** Total Amount: \$38,560. Submitted May 2013.
- 9. Spencer Foundation. Proportion, Ratio, and the Core: Teachers' Interacting with Curricular Elements (PRaCTICE). **Role: Senior Personnel.** Principal Investigator: Lorraine Males. Total Amount: \$49,096. Submitted May 2013.
- 8. National Science Foundation. Incorporating STEM in Informal Learning Environments. **Role: PI.** Total Amount: \$1,847,596. Submitted January 2013.
- 7. National Science Foundation. STEM PLUS: Producing Leaders for rural/suburban/Urban Schools. **Role: Co-PI.** Principal Investigator: Margaret Mohr-Schroeder. Total Amount: \$6,141,184. Submitted December 2012.
- 6. National Science Foundation (TUES). Collaborative Research: Measuring Pre-Service Teachers' Beliefs, Attitudes, and Dispositions Toward Equity and Diversity in Mathematics Education. **Role: PI.** Total Amount: \$99,976. Submitted May 2012.
- 5. National Science Foundation (MSP). STEM Plus- Producing leaders for rUral/Urban/sUrban schools. **Role: Senior Personnel.** Principal Investigator: Margaret Mohr-Schroeder. Total Amount: \$7,777,159. Submitted March 2012.
- 4. Boston University. The Intersection of Equity Research in Mathematics: A Literature Review. **Role: PI.** Total Amount: \$19,621. Submitted February 2012.
- 3. Spencer Foundation. Middle School Teachers' Knowledge of Equity in Teaching Mathematics to African American Students. **Role: PI.** Total Amount: \$39,734. Submitted July 2011.
- 2. National Science Foundation. Researching Spatial Development by Gender via ERP and fMRI Measures Pre and Post Pedagogical Intervention. **Role: Co-PI.** Principal Investigator: Jennifer Wilhelm. Total Amount: \$1,153,328. Submitted November 2010.
- 1. NASA Kentucky Space Grant Consortium. Researching Equity in STEM Classrooms as Middle Level Students Experience the NASA-based Realistic Explorations in Astronomical Learning Curriculum. **Role: Co-PI.** Principal Investigator: Jennifer Wilhelm. Total Amount: \$14,999. Submitted October 2010.

Intramural Support (Funded: \$18,029)

#### \*Accomplishments at Prior Rank

- 3. Iowa State University Foreign Travel Grant. Travel to ICME in Hamburg, Germany. Total Award Amount: \$1,029. July 2016.
- 2. Iowa State University Untenured Faculty Seed Grant. Mathematics Teaching for African American Students (MTA<sup>2</sup>). **Role: PI**. Total Award Amount: \$10,000. May 2015—September 2016.
- University of Kentucky Summer Faculty Research Fellowship. Conceptualizing Elementary Teachers'
  Knowledge of Equity in Teaching Mathematics. Role: PI. Total Award Amount: \$7,000. May 2011

   August 2011.

<u>Intramural Support – Not Funded</u>

- 4. Iowa State University Human Sciences Extension and Outreach and the College of Human Sciences Engaged Scholarship Funding Program. Broadening Students of Color and Females STEM Literacy via a STEM Club. **Role: PI.** Total Amount: \$49,976. Submitted October 2015.
- 3. University of Kentucky Support Grant. A case study of Three Middle School Mathematics Teachers' Knowledge of Equity in Teaching. **Role: PI.** Total Amount: \$17,300. Submitted March 2013.
- 2. University of Kentucky Support Grant. A Case study of Two Middle School Mathematics Teachers' Knowledge of Equity in Teaching. **Role: PI.** Total Amount: \$11,700. Submitted March 2012.
- 1. University of Kentucky SBI Subgrant. Advanced Prep Teacher Leader Program. **Role: Co-PI.** Principal Investigator: Susan Wood. Total Amount: \$3,000. Submitted May 2011.

#### **PUBLICATIONS:**

#### National Policy Books

1. National Council of Teachers of Mathematics. (2020). *Catalyzing change in middle mathematics: Initiating critical conversations*. Reston, VA: NCTM. **Lead writer and member of the task force** for the book, which is an official position of the Council (119 pages).

# <u>Peer-reviewed Journal Papers – Published</u>

- <sup>+</sup> indicates work with graduate student(s); ^ indicates work with undergraduate student(s); #indicates work with practicing teacher(s)
- 33. **Jackson, C.,** Mohr-Schroeder, M., Bush, S. B., Maiorca, C., Roberts, T., 'Yost, C., & 'Fowler, A. (2021). Equity-based conceptual framework for STEM literacy. *International Journal of STEM Education*, 8(38), https://doi.org/10.1186/s40594-021-00294-z
- 32. Buchheister, K., **Jackson, C.,** & Taylor, C. E. (2021). Using the What-How-Who structure to plan an equitable mathematics lesson. *Teaching Equity and Excellence in Mathematics*, 12(2), 16-24.
- 31. I, J., **Jackson, C.,** Martinez, R. (2020). Impact of an online course of teaching emergent bilinguals mathematics on teacher perspectives. *Mathematics Teacher Education Development*, 22(1).
- 30. Maiorca, C., Roberts, T., **Jackson, C.**, Bush, S., <sup>+</sup>Delaney, A., Mohr-Schroeder, M., & <sup>+</sup>Yao, S. (2020). Informal learning environments and impact on interest in STEM careers. *International Journal of Science and Mathematics Education*. doi:10.1007/s10763-019-10038-9.
- 29. Buchheister, K., **Jackson, C.,** & Taylor, C. E. (2019). "Sliding" into an equitable lesson. *Teaching Children Mathematics*, 25(4), 224-231. doi:10.5951/teacchilmath.25.4.0224.
- 28. Buchheister, K., **Jackson, C.,** & Taylor, C. E. (2019). What-how-who: Developing mathematical discourse. *Mathematics Teaching in the Middle School*, 24(4), 202-209. doi:10.5951/mathteacmiddscho.24.4.0202.
- 27. **Jackson, C.**, & Mohr-Schroeder, M. J. (2018). Increasing STEM literacy via an informal learning environment. *Journal of STEM Teacher Education*, *53*(1), 43-52.

- 26. **Jackson, C.,** Mohr-Schroeder, M. J., <sup>+</sup>Cavalcanti, M., <sup>^</sup>Albers, S., <sup>^</sup>Poe, K., <sup>+</sup>Delaney, A., <sup>^</sup>Chadd, E., <sup>^</sup>Williams, M. & Roberts, T. (2018). Prospective mathematics teacher preparation: Exploring the use of service learning as a field experience. *Fields Mathematics Education Journal*, *3*(5). doi:10.1186/s40928-018-0010-5.
- 25. Appelgate, M. H., **Jackson, C.,** \*Jurgenson, K., & \*Delaney, A. (2018). Introducing mathematics concepts using STEM connections. *Teaching Children Mathematics*, 24(6), 394-397.
- 24. Roberts, T., **Jackson, C.,** Mohr-Schroeder, M., Bush, S., Maiorca, C., <sup>+</sup>Cavalcanti, M., <sup>#</sup>Schroeder, C., <sup>+</sup>Delaney, A., <sup>^</sup>Putnam, L., & <sup>^</sup>Cremeans. (2018). Students' perceptions of STEM learning after participating in a summer informal learning experience. *International Journal of STEM Education*, 5(35). doi:10.1186/s40594-018-0133-4
- 23. Mohr-Schroeder, M., Bush, S., & **Jackson, C.** (2018). K12 STEM education: Why does it matter and Where are we now? *Teachers College Record*. http://www.tcrecord.org. ID Number: 22288
- 22. **Jackson, C.**, & Jong, C. (2017). Reading and reflecting: Elementary preservice teachers' conceptions about teaching mathematics for equity. *Mathematics Teacher Education and Development*, 19(1),66-81.
- 21. **Jackson, C.,** & Roberts, S. (2017). Dimensions of equity within preservice teachers' responses to equity quotes. *Teaching Excellence and Equity in Mathematics*, 8(1), 6-14.
- 20. Buchheister, K., **Jackson, C.,** Taylor, C. E. (2017). Maths games: A universal design approach to mathematical reasoning. *Australian Primary Mathematics Classroom*, 22(4), 7-12.
- 19. Mohr-Schroeder, M. J., **Jackson, C.**, \*Cavalcanti, M., Jong, C., \*Schroeder, D.C., & Speler, L. (2017). Parents' attitudes toward mathematics and their influence on their students' attitudes towards mathematics: A quantitative study. *School Science and Mathematics*, 117(5), 214-222.

- 18. Jong, C., & **Jackson, C.** (2016). Teaching mathematics for social justice: Examining preservice teachers' conceptions. *Journal of Mathematics Education at Teachers College*, 7(1), 27–34.
- 17. **Jackson, C.,** Wilhelm, J., <sup>+</sup>Lamar, M., & +Cole, M. (2015). Gender and racial differences: Development of sixth grade students' geometric spatial visualization within an earth/space unit. *School Science and Mathematics*, 115(7), 330–343.
- 16. Buchheister, K., **Jackson, C.,** & Taylor, C. (2015). An inside track: Fostering mathematical practices. *Teaching Children Mathematics*, 22, 28–35.
- 15. **Jackson, C.,** Mohr-Schroeder, M. J., & <sup>+</sup>Little, D. L. (2014). Using informal learning environments to prepare preservice teachers. *Teacher Education & Practice*, 27(2/3), 445–463.
- 14. Buchheister, K., **Jackson, C.,** & Taylor, C. (2014). Integrating universal design and response to intervention in methods courses for general education mathematics teachers. *Journal of Mathematics Education at Teachers College*, *5*(2), 63–71.
- 13. Mohr-Schroeder, M. J., **Jackson, C.,** \*Schroeder, D., \*Miller, M., Walcott, B., \*Little, D., \*Speler, L., & \*Schooler, W. (2014). Developing middle school students' interests in STEM via summer learning

- experiences: The See Blue STEM Camp. School Science and Mathematics, 114(6), 291-301.
- 12. Kasten, S. E., Austin, C., & **Jackson, C.** (2014). Am I a mathematics teacher who teaches middle grades or a middle grades teacher who teaches mathematics? Untangling the multiple identities of preservice teachers? *Middle Grades Research Journal*, 9(2), 127–140.
- 11. Taylor, C., Buchheister, K., & **Jackson, C.** (2014). What is the best option? *Teaching Children Mathematics*, 21(4), 203.
- 10. **Jackson, C.** (2013). Elementary mathematics teachers' knowledge of equity pedagogy. *Current Issues in Education*, 16(1), 1–14.
- 9. **Jackson, C.**, Taylor, C., & Buchheister, K. (2013). Bingo! Select games for mathematical thinking. *Mathematics Teaching in the Middle School*, 18(7), 424–429.
- 8. Wilhelm, J., **Jackson, C.,** \*Sullivan, A., & Wilhelm, R. (2013). Examining differences between pre-teen groups' spatial-scientific understandings: A quasi-experimental study. *Journal of Educational Research*, 106(5), 337–351.
- 7. Taylor, C., Buchheister, K., & **Jackson, C.** (2013). What is the best option? *Teaching Children Mathematics*, 20(4), 216–220.
- 6. van Garderen, D., Scheuermann, A., & **Jackson, C.** (2013). Examining how students of diverse abilities use diagrams to solve mathematics word problem. *Learning Disability Quarterly*, *36*(3), 145–160.
- 5. Lannin, J. K., van Garderen, D., Switzer, J. M., Buchheister, K., Hill, T., & **Jackson, C**. (2013). The mathematical development in number and operation for struggling first graders. *Investigations in Mathematical Learning*, 6(2), 19–47.
- 4. **Jackson, C.** (2012). Elementary teachers' beliefs about African Americans in the mathematics classroom. *Journal of Mathematics Education at Teachers College, 3*(2), 90–96.
- 3. van Garderen, D., Scheuermann, A., & **Jackson, C.** (2012). Developing representational ability in mathematics for students with disabilities: A content analysis of sixth and seventh grade textbooks. *Learning Disability Quarterly*, *35*(1), 24–38.
- 2. Mohan, A., Merle, D., **Jackson, C.,** Lannin, J., & Nair, S. (2009). Professional skills in engineering curriculum. *IEEE Transactions on Education*, *53*(4), 562–571.
- 1. van Garderen, D., Scheuermann, A., **Jackson, C.**, & Hampton, D. (2009). Supporting the collaboration of special educators and general educators to teach students who struggle with mathematics: An overview of the research. *Psychology in the Schools*, 46(1), 56–77.

#### Peer-reviewed Article Length Proceedings

- <sup>+</sup> indicates work with graduate student(s); ^ indicates work with undergraduate student(s); not relisted under Juried Scholarly Presentations
- 27. Appelgate, M., **Jackson, C.**, & 'Jurgenson, K. (2021, July). Using mathematically-focused text messages to connect families with their child's learning. Proceedings paper to be presented at the *14<sup>th</sup> International Congress on Mathematical Education*, ICME14, Shanghai, China.
- 26. I, J., Jackson, C., & Martinez, R. (2021, July). Impact of an online course of teaching mathematics to

- emergent bilinguals on teacher perspective. Proceedings paper to be presented at the 14<sup>th</sup> International Congress on Mathematical Education, ICME14, Shanghai, China.
- 25. Roberts, T., **Jackson, C.,** Mohr-Schroeder, M., Bush, S. B., Maiorca, C., & <sup>†</sup>Delaney, A. (November, 2019). Exploring applications of school mathematics: Students' perceptions of informal learning experiences. Proceedings included in S. Otten, Z. de Araujo, A. Candela, C. Munter, & C. Haines (Eds.), *Proceedings of the 41<sup>st</sup> annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. St. Louis, MO: University of Missouri-Columbia.
- 24. **Jackson, C.,** Appelgate, M., <sup>†</sup>Delaney, A., & <sup>†</sup>Jurgenson, K. (2018). Influence of integrated STEM curricula on instruction. Proceedings included in T. Hodges, G. Roy, & A. Tyminski (Eds.), *Proceedings of the 40th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. Greenville, SC: South Carolina University.
- 23. Appelgate, M., **Jackson, C.,** \*Jurgenson, K., & \*Delaney, A. (2018). Using text messages to connect linguistically diverse families with their child's mathematics classroom learning. Proceedings included in T. Hodges, G. Roy, & A. Tyminski (Eds.), *Proceedings of the 40th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. Greenville, SC: South Carolina University.
- 22. \*Delaney, A., \*Calvalcanti, M., **Jackson, C.**, & Mohr-Schroeder, M. (2017). Opening access to all students: STEMing self-efficacy. Proceedings included in J. Newton, & E. Calindo (Eds.), *Proceedings of the 39th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. Indianapolis, IN: Purdue University.
- 21. \*Delaney, A., **Jackson, C.**, & Mohr-Schroeder, M. (2017). Developing STEM literacy via an informal learning environment. Proceedings included in J. Newton, & E. Calindo (Eds.), *Proceedings of the 39th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education.* Indianapolis, IN: Purdue University.

- 20. **Jackson, C.,** & <sup>†</sup>Delaney, A. (2016, November). Teachers' beliefs: How they are enacted in the classroom. Proceedings included in M. Wood, E. Turner, & M. Civil (Eds.), *Proceedings of the 38th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. Tucson, AZ: University of Arizona.
- 19. **Jackson, C.,** Austin, C., & Kasten, S. (2016, November). Preservice teachers use of mathematical explanations. Proceedings included in M. Wood, E. Turner, & M. Civil (Eds.), *Proceedings of the 38th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. Tucson, AZ: University of Arizona.
- 18. **Jackson, C.,** Appelgate, M., Seiler, G., Sheth, M., & Nadolny, L. (2016, November). Using a virtual environment to uncover biases, assumptions, and beliefs and implications for mathematics teaching. Proceedings included in M. Wood, E. Turner, & M. Civil (Eds.), *Proceedings of the 38th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. Tucson, AZ: University of Arizona.
- 17. **Jackson, C.**, & Mohr-Schroeder, M. (2016, July). Increasing STEM literacy via an informal learning environment. Proceedings paper presented at the *13<sup>th</sup> International Congress on Mathematical Education*, ICME13, Hamburg, Germany.

- 16. Jackson, C., Taylor, C. E., & Buchheister, K. (2015, November). What is equity? Ways of seeing. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), Proceedings of the 37th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education (pp. 510–517). East Lansing, MI: Michigan State University.
- 15. Appelgate, M., **Jackson, C.** (2015, November). Using a virtual environment to prepare prospective teachers to teach equitably. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. East Lansing, MI: Michigan State University.
- 14. Huey, M., & **Jackson, C.** (2015, November). A framework for analyzing informal inferential reasoning tasks in middle school textbooks. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education* (pp. 431–438). East Lansing, MI: Michigan State University.
- 13. Thomas, J., **Jackson, C.,** & Kasten, S. (2015, November). Teachers' perceptions of mathematics standards: A comparison of PSSM and CCSSM. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th annual meeting of the North American Chapter of the International Groups for the Psychology of Mathematics Education*. East Lansing, MI: Michigan State University.
- 12. **Jackson, C.,** <sup>†</sup>Cavalcanti, M., Mohr-Schroeder, M., & Schroeder, C. (2015, October). Bolstering teachers' STEM literacy via informal learning experiences. In Mohr-Schroeder, M., & Thomas, J. (Eds.), *Proceedings of the 2015 annual meeting of the School Science and Mathematics Association*. Oklahoma City, OK.
- 11. **Jackson, C.**, & Mohr-Schroeder, M. (2014, July). Preparing prospective mathematics teachers to work with students who struggle. In Liljedahal, P., Nicol, C., Oesterle, S., & Allan, D. (Eds.), *Proceedings of the 38th Conference of the International Group for the Psychology of Mathematics Education and the 36th Annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Vancouver, Canada: PME.*
- 10. Wilhelm, J., & **Jackson**, C. (2014, July). STEM education in formal and informal environments: The REAL way. In Liljedahal, P., Nicol, C., Oesterle, S., & Allan, D. (Eds.). *Proceedings of the 38th Conference of the International Group for the Psychology of Mathematics Education and the 36th Annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Vancouver, Canada: PME.*
- 9. **Jackson, C.,** Wilhelm, J., <sup>†</sup>Peake, J. (2013, November). Gender differences: Examining sixth grade students' understanding of geometric spatial visualization. In Martinez, M. & Castro Superfine, A (Eds.). *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Chicago, IL: University of Illinois at Chicago.
- 8. Jong, C., & **Jackson, C.** (2013, November). Examining preservice teachers' conceptions about teaching mathematics for social justice. In Martinez, M. & Castro Superfine, A (Eds.). *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 789–792). Chicago, IL: University of Illinois at Chicago.

- 7. Salinas, A., **Jackson, C.,** & Roberts, S. (2013, November). Preservice teachers' emergent conceptions of equity. In Martinez, M. & Castro Superfine, A (Eds.). *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education,* (pp. 865–868). Chicago, IL: University of Illinois at Chicago.
- 6. \*Russey, C., Wilhelm, J., & **Jackson, C.** (2013, November). Middle school students' mathematical comprehension of latitude and longitude. In Martinez, M. & Castro Superfine, A (Eds.). *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Chicago, IL: University of Illinois at Chicago.
- 5. <sup>+</sup>Cole, M., Wilhelm, J., **Jackson, C.,** & Yang, H. (2013, November). Exploring the relationships between student moon observations and spatial-scientific reasoning. In Martinez, M. & Castro Superfine, A (Eds.). *Proceedings of the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Chicago, IL: University of Illinois at Chicago.
- 4. **Jackson, C.,** Roberts, S., & Salinas, A. (2012, November). Secondary pre-service mathematics teachers' conceptions of equity. In L.R. Van Zoest, J.J. Lo, & J. L. Kratky (Eds.), *Proceedings of the Thirty-fourth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 363–366). Kalamazoo, MI: Western Michigan University.
- 3. **Jackson, C.,** Wilhelm, J., \*Sullivan, A., &Wilhelm, R. (2012, November). Gender differences of high and low performing students' spatial reasoning. In L.R. Van Zoest, J.J. Lo, & J. L. Kratky (Eds.), *Proceedings of the Thirty-fourth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Kalamazoo, MI: Western Michigan University.
- 2. Wilhelm, J., **Jackson, C.,** \*Sullivan, A., & Wilhelm, R. (2012, November). Factors influencing middle school students' spatial mathematics development while participating in an integrated STEM unit. In L.R. Van Zoest, J.J. Lo, & J. L. Kratky (Eds.), *Proceedings of the Thirty-fourth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 311–318). Kalamazoo, MI: Western Michigan University.
- 1. **Jackson, C.** (2011, October). Mrs. Thomas: A case conceptualizing a teacher's knowledge of equity in teaching mathematics. In the *Proceedings of the Thirty-Third Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 938–946). Reno, NV: University of Nevada, Reno.

#### Peer-reviewed Journal Papers – Accepted/In Press

+ indicates work with graduate student(s); ^ indicates work with undergraduate student(s)

#### Peer-reviewed Journal Papers – Submitted for Review

- + indicates work with graduate student(s); ^ indicates work with undergraduate student(s)
- 2. \*Kebreab, L., Bush, S. B., & **Jackson, C.** (Revise and Resubmit). The role of intersectionality in mathematics education: Leveraging students' strengths and striving for excellence. Submitted to *School Science and Mathematics*.
- 1. **Jackson, C.,** Buchheister, K., & Taylor, C. E. (Revise and Resubmit). Attending to what prospective teachers notice: An equitable approach. Submitted to *Journal for Research in Mathematics Education*.

# Peer-reviewed Book Chapters-Published

- \*indicates invited; + indicates work with graduate student(s); ^ indicates work with undergraduate student(s); #indicates work with practicing teacher(s)
- 9. **Jackson, C.,** & <sup>†</sup>Delaney, A., (2020). Shifting toward productive beliefs for Black students in the mathematics classroom. In S. L. Stacki, M. M. Caskey, & S. B. Mertens (Eds.), *Curriculum, instruction, and assessment: Intersecting new needs and new approaches* (pp. 185-222). Charlotte, NC: Information Age Publishing.
- 8. **Jackson, C.,** Tank, K., Appelgate, M., <sup>+</sup>Jurgenson, K., <sup>+</sup>Delaney, A., & <sup>+</sup>Erden, C. (2020). History of integrated STEM curriculum. In C. C. Johnson, M. J. Mohr-Schroeder, T. J. Moore, & L. D. English (Eds.), *Handbook on research in STEM education* (pp. 169-183). New York, NY: Routledge.
- 7. Mohr-Schroeder, M., **Jackson, C.,** \*Schroeder, D. C., & Wilhelm, J. (2019). Developing a STEM education teacher preparation program to help increase STEM literacy among preservice teachers. In P. M. Jenlink & K. E. Jenlink. (Eds.). *The next generation of STEM teachers: An interdisciplinary approach to meet the needs of the future* (pp. 93-112). Lanham, MD: Rowman & Littlefield.
- 6. \*Jackson, C., Taylor, C. E, & Buchheister, K. (2018). Seeing mathematics through different eyes: An equitable approach to use with prospective teachers. In T. G. Bartell (Ed), *Toward equity and social justice in mathematics education* (pp. 263-85). Cham, Switzerland: Springer.
- 5. Mohr-Schroeder, M. J., **Jackson, C.**, <sup>+</sup>Cavalcanti, M, & <sup>+</sup>Delaney, A. (2018). Gaining valuable field experience through the use of informal learning environments. In M. E. Strutchens, R. Huang, D. Potari, & L. Losano. (Eds.), *Educating prospective secondary mathematics teachers* (pp. 63-82). ICME-13 Monographs. Cham, Switzerland: Springer. doi:10.1007/978-3-319-91059-8\_5.
- 4. \*Jackson, C., & \*Delaney, A. (2017). Mindsets and practices: Shifting to an equity-centered paradigm. In A. Fernandes, S. Crespo, & M. Civil (Eds.), *Access and equity: Promoting high quality mathematics in grades 6-8* (pp. 143-155). Reston, VA: National Council of Teachers of Mathematics.
- 3. Buchheister, K., **Jackson, C.,** & Taylor, C. (2017). Defining effective learning tasks for all. In C. Martin & D. Polly (Eds.), *Handbook of research on teacher education and professional development* (pp. 561-581). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-1067-3.
- 2. van Garderen, D., <sup>+</sup>Poch, A., **Jackson, C.,** & Roberts, S. (2017). Teaching mathematics to students with disabilities from diverse backgrounds. In M. T. Hughes & E. Talbott (Eds.), *The handbook of research on diversity in special education* (pp. 209-230). West Sussex, UK: John Wiley & Sons.

## \*Accomplishments at Prior Rank

1. \*Jackson, C. (2016). Equitable mathematics teaching for *all* students—A commentary on Crespo's case. In D. White, S. Crespo, & M. Civil. (Eds.), *Cases for teacher educators: Facilitating conversations about inequities in mathematics classrooms* (pp. 75-78). Charlotte, NC: Information Age Publishing.

#### Peer-reviewed Book Chapters-In press

\*indicates invited; + indicates work with graduate student(s); ^ indicates work with undergraduate student(s)

1. I, J., Martinez, R., & **Jackson, C.** (accepted). Online learning to teach mathematics for Emergent Bilinguals.

#### Peer-reviewed Book Chapters-Submitted for Review

\*indicates invited; + indicates work with graduate student(s); ^ indicates work with undergraduate student(s)

## Peer-reviewed Books-In Progress

\*indicates invited; + indicates work with graduate student(s); ^ indicates work with undergraduate student(s)

- 5. \*Jackson, C., del Rosario Zavala, M., de Araujo, Z., & Frank, T. (in preparation). *Powerful Mathematicians who Changed the World Federico Ardila 9-12 Grade Band Book 1*. National Council of Teachers of Mathematics.
- 4. \*Jackson, C., Jessup, N., & Thanheiser, E. (in preparation). *Powerful Mathematicians who Changed the World Marcia Ascher 3-5 Grade Band Book 1*. National Council of Teachers of Mathematics.
- 3. \*Jackson, C., Buchheister, K, & Napoli, A. (in preparation). *Powerful Mathematicians who Changed the World Talithia Williams PK-2 Grade Band Book 1*. National Council of Teachers of Mathematics.
- 2. \*Jackson, C., Taylor, C., †Jurgenson, K., & †Stagg, J. (in preparation). *Powerful Mathematicians who Changed the World Agnes Meyer Driscoll 6-8 Grade Band Book 1*. National Council of Teachers of Mathematics.
- 1. \*Jackson, C., Buchheister, K., Taylor, C., \*Jurgenson, K., \*Stagg, J., & \*Howard, V. (in preparation). *Powerful Mathematicians who Changed the World from A to Z.* National Council of Teachers of Mathematics.

#### Other Publications

2. Whitmer, C. E., **Jackson, C.,** & Appelgate, M. (2017). "Engineering Design Instruction Software for implementing Objectives of Next generation standards (EDISON), NSF STTR Phase I Final Report (#IIP-1622875)."

# \*Accomplishments at Prior Rank

1. Whitmer, C. E., **Jackson, C.,** & Appelgate, M. (2016). "Design Environment for Educator-Student Collaboration Allowing Real-Time Engineering-centric, STEM (DESCARTES) Exploration in Middle Grades". Department of Education SBIR Phase I Final Report (#ED-IES-16-C-0010).

## Manuscripts in Preparation

- <sup>+</sup> indicates work with graduate student(s); ^ indicates work with undergraduate student(s)
- 9. Appelgate, M., **Jackson, C.,** <sup>+</sup>Jurgenson, K., & Delaney, A. (in preparation). Using mathematically-focused text messages to connect linguistically diverse families with their child's school mathematics learning. To be submitted *School Science and Mathematics*.
- 8. Appelgate, M., **Jackson, C.,** <sup>+</sup>Jurgenson, K., & Delaney, A. (in preparation). Evolution of teachers' perceptions of STEM over three years of implementing an integrated STEM curriculum. To be submitted to *International Journal of STEM Education*.
- 7. **Jackson, C.,** Appelgate, M., <sup>+</sup>Jurgenson, K., & <sup>+</sup>Erden, C. (in preparation). Influence of an integrated STEM curriculum on student outcomes. To be submitted to *Journal of Education Research*.

- 6. **Jackson, C.,** Buchheister, K., & Taylor, C. E. (in preparation). Conceptualizing equity noticing framework. To be submitted to *Journal of Teacher Education*.
- 5. **Jackson, C.,** Buchheister, K., & Taylor, C. E. (in preparation). Seeing mathematics culture and identity with children's literature. To be submitted to *Mathematics Teacher: Learning and Teaching PK-12*.
- 4. Buchheister, K., **Jackson, C.,** & Taylor, C. E. (in preparation). Students questions: Creating equitable tasks. To be submitted to *Journal of Early Childhood Teacher Education*.
- 3. Buchheister, K., **Jackson, C.,** & Taylor, C. E. (in preparation). What-how-who planning to notice. To be submitted to *Journal of Mathematics Teacher Educators*.
- 2. Taylor, C. E., Buchheister, K., & **Jackson**, C. (in preparation). Teacher educator actions in mathematics methods (TEAM^2). To be submitted to *Teacher and Teacher Education*.
- 1. **Jackson, C.,** Buchheister, K., Taylor, C. E., & Roberts, O.T. (in preparation). Prospective teachers' noticing equity in mathematics teaching and learning. To be submitted to *Journal of Teacher Education*.

#### **Creative Contributions**

- 5. **Jackson, C.,** Buchheister, K., & Whitmer, C. (2019). NEWTON Integrated STEM Curriculum for Primary Grades.
- 4. **Jackson, C.,** Appelgate, M., & Whitmer, C. (2018). DESCARTES Integrated STEM Curriculum for Upper Elementary–Submarine.
- 3. **Jackson, C.,** Appelgate, M., & Whitmer, C. (2017). EDISON Integrated STEM Curriculum for Middle Grades–Bridges.
- 2. **Jackson, C.,** Appelgate, M., & Whitmer, C. (2017). DESCARTES Integrated STEM Curriculum for Upper Elementary–Boats.

#### \*Accomplishments at Prior Rank

1. Richardson Bruna, K., **Jackson, C.,** Hamilton, K. (2016). DAVinCI flight: Design challenge camp curriculum.

#### JURIED SCHOLARLY PRESENTATIONS AT PROFESSIONAL MEETINGS:

# Regional, National or International

- <sup>+</sup> indicates work with graduate student(s); ^ indicates work with undergraduate student(s); <sup>#</sup>indicates work with practicing teacher(s)
- 107. **Jackson,** C., Mohr-Schroeder, M., Roberts, T., Maiorca, C. (2021, April). *Students' perceptions of mathematics and science: Promoting equity through effective informal STEM learning environments.*Paper presented at the annual American Educational Research Association, Virtual Conference.
- 106. **Jackson, C.,** Roberts, T., Taylor, C. E., & Buchheister, K. (2021, April). *Using classroom vignettes to reveal what prospective teachers notice: Conceptualizing Teacher Noticing in Research on Teaching and Teacher Learning.* Paper presented at the annual American Educational Research Association, Virtual Conference.

- 105. Lee, J., Zelkowski, J., **Jackson, C.** (2021, February). *A Collective journey on mental health: Entering, surviving & thriving in the academy*. Session presented at the annual Association of Mathematics Teacher Educators, Virtual Conference.
- 104. Sarker, T., Poleacovschi, C., Appelgate, M., Swalwell, K., **Jackson, C.,** Cetin, K. *Consciousness and identity: Assessing students' critical perspectives in engineering university settings*. Session to be presented at the 2021 American Society for Engineering Education Conference & Exposition.
- 103. Sarker, T., Poleacovschi, C., Appelgate, M., Swalwell, K., **Jackson, C.,** Cetin, K. *Developing a critical consciousness scale for civil engineering students*. Session to be presented at the 2021 American Society for Engineering Education Conference & Exposition.
- 102. Poleacovschi, C., Appelgate, M., Swalwell, K., **Jackson, C.,** Cetin, K., & Sarker, T. *Development and testing of a critical consciousness scale for civil engineering students*. Session to be presented at the American Society for Engineering Education Conference.
- 101. Motshubi, R., Poleacovschi, C., Appelgate, M., **Jackson, C.,** Swalwell, K., & Cetin, K. *Development of a critical consciousness instrument for civil engineers*. Session to be presented at the Engineering Project Organizations Conference.
- 100. Jurgenson, K., **Jackson, C.,** Delaney, A. (2020, November). *Effect of an integrated STEM unit on content knowledge and STEM efficacy*. Session presented at the 2020 School Science and Mathematics Association Convention, Minneapolis, MN (Virtual Conference).
- 99. Maiorca, C., Roberts, T., **Jackson, C.,** Bush, S., & Mohr-Schroeder, M. (2020, November). *Raising STEM career awareness through informal STEM*. Session presented at the 2020 School Science and Mathematics Association Convention, Minneapolis, MN (Virtual Conference).
- 98. Mohr-Schroeder, M., Yost, C., Fowler, A., Roberts, T., Maiorca., & **Jackson, C.** (2020, November). *M*<sup>2</sup>: *Modeling and mathematics in STEM*. Session presented at the Regional Conference & Expositions National Council of Teachers of Mathematics, Tampa, FL (Virtual Conference).
- 97. Buchheister, K., & **Jackson, C.** (2020, November). *Using students' questions to build equitable tasks and demonstrate responsive teaching*. Session presented at the Regional Conference & Expositions National Council of Teachers of Mathematics, Tampa, FL (Virtual Conference).
- 96. Bush, S. B., & **Jackson, C.** (2020, November). *Catalyzing change in middle school mathematics: Engaging in the four key recommendations*. Session presented at the Regional Conference & Expositions National Council of Teachers of Mathematics, Tampa, FL (Virtual Conference).
- 95. Thanheiser, E., Harper, F., **Jackson, C.,** Jessup, N., Kalinec-Craig, C., Yeh, C., & Asugio, M. (2020, October). *New working group: Teaching mathematics for social justice in the context of university mathematics content and methods courses*. Working group at the North American Chapter of the International Group for the Psychology of Mathematics Education, Mazatlán, México.
- 94. I, J., **Jackson, C.,** Appelgate, M., Foegen, A., & Araujo Grando, B. (2021, April). *High school Algebra 1 classes in an urban district: Perceptions of Black males and their peers*. Session to be presented at the annual National Council of Teachers of Mathematics, St. Louis, MO. (Conference original scheduled October 2020)
- 93. Buchheister, K., Jackson, C., & Taylor, C. (2021, April). Students' questions: The answer to building

- equitable tasks and demonstrating responsive teaching. Session presented at the annual National Council of Teachers of Mathematics, St. Louis, MO. (Conference original scheduled October 2020)
- 92. **Jackson, C,** & Roy, G. J. (2021, April). *Catalyzing change in middle school mathematics: Broadening the purposes of learning mathematics and dismantling inequitable structures.* Session presented at the annual National Council of Teachers of Mathematics, St. Louis, MO. (Conference original scheduled October 2020)
- 91. Bush, S. B., & **Jackson, C.** (2021, April). *Catalyzing change in middle school mathematics: Engaging in critical conversations and planning actionable steps*. Pre-conference workshop at the annual National Council of Teachers of Mathematics, St. Louis, MO. (Conference original scheduled October 2020)
- 90. Bush, S. B., **Jackson, C.,** Roy, G. J., Milou, E. (2020, May). *Catalyzing change in middle school mathematics: Initiating critical conversations centered on the 4 key recommendations*. Webinar presentation at NCTM 100 Days of Professional Learning.
- 89. **Jackson, C.,** Buchheister, K., & Taylor, C. E. (2020, April). *Conceptualization of an equity noticing framework: Expanding/rupturing ideologies in mathematics teacher noticing.* Paper to be presented at the annual American Educational Research Association, San Francisco, CA. (Conference canceled)
- 88. Roy, G. J., & **Jackson, C.** (2020, April). Catalyzing change in middle school mathematics: Broadening the purposes of learning mathematics and dismantling inequitable structures. Session to be presented at the annual National Council of Teachers of Mathematics, Chicago, IL. (Conference canceled)
- 87. Taylor, C. E., **Jackson, C.,** & Buchheister, K. (2020, April). *A framework to open dialogue and self-reflection on equitable mathematics instruction*. Paper to be presented at the annual National Council of Teachers of Mathematics, Chicago, IL. (Conference canceled)
- 86. Buchheister, K., **Jackson, C.,** & Taylor, C. E. (2020, April). *Starting the conversation: using video cases to reflect on equitable mathematics instruction.* Paper to be presented at the annual National Council of Supervisors of Mathematics, Chicago, IL. (Conference canceled)
- 85. **Jackson, C.,** Buchheister, K., & Taylor, C. E. (2020, February). *Equity noticing framework-a tool for mathematics teacher educators*. Paper presented at the annual Association of Mathematics Teacher Educators, Phoenix, AZ.
- 84. Appelgate, M., **Jackson, C.,** & <sup>+</sup>Jurgenson, K. (2020, February). *Developing an integrated STEM curriculum in partnership with engineers and teachers*. Paper presented at the annual Association of Mathematics Teacher Educators, Phoenix, AZ.
- 83. <sup>†</sup>Jurgenson, K., **Jackson, C.,** & Appelgate, M. (2020, February). *The evolution of teachers' perceptions of integrated STEM education over three years*. Paper presented at the annual Association of Mathematics Teacher Educators, Phoenix, AZ.
- 82. Buchheister, K., **Jackson**, C., & Taylor, C. E. (2019, November). *Using children's literature as a foundation for rigorous mathematics tasks*. Paper presented at the annual convention of the School Science and Mathematics Association, Salt Lake City, UT.

- 81. <sup>+</sup>Jurgenson, K., **Jackson, C.,** Appelgate, M., & <sup>+</sup>Delaney, A. (2019, November). *Effect of an integrated STEM unit on content knowledge and STEM efficacy*. Paper presented at the annual convention of the School Science and Mathematics Association, Salt Lake City, UT.
- 80. Roberts, T., **Jackson, C.,** Maiorca, C., \*\*Schroeder, D. C., Mohr-Schroeder, M., \*Delaney, A., & Bush, S. (2019, November). *Students' perceptions of STEM learning after participating in an informal learning experience*. Paper presented at the annual convention of the School Science and Mathematics Association, Salt Lake City, UT.
- 79. **Jackson, C.,** Buchheister, K., & Taylor, C. E. (2019, April). *Identifying equitable mathematics instruction*. Paper presented at the annual meeting of the National Council of Teachers of Mathematics, San Diego, CA.
- 78. Taylor, C. E., **Jackson, C.**, & Buchheister, K. (2019, April). *What-how-who: Structuring mathematical discourse*. Paper presented at the annual meeting of the National Council of Teachers of Mathematics, San Diego, CA.
- 77. <sup>†</sup>Delaney, A., & **Jackson, C.** (2019, April). *Coding and logic: Play-based spatial reasoning and computational thinking in PK-2*. Gallery workshop presented at the annual meeting of the National Council of Teachers of Mathematics, San Diego, CA.
- 76. **Jackson, C.,** I, J., Huey, M., <sup>+</sup>Jurgenson, K., & Appelgate, M. (2019, February). *Evolution of teachers'* beliefs and attitudes towards teaching black and emerging bilingual students. Paper presented at the annual Association of Mathematics Teacher Educators, Orlando, FL.
- 75. Taylor, C. E., **Jackson, C.,** Buchheister, K. (2019, February). *Oh, say can you see? A vision of equitable instruction.* Paper presented at the annual Association of Mathematics Teacher Educators, Orlando, FL.
- 74. **Jackson, C.,** Buchheister, K., & Taylor, C. (2018, October). *Do you see what I see? Developing a new frame of reference*. Paper presented at the annual convention of the School Science and Mathematics Association, Little Rock, AR.
- 73. **Jackson, C.**, <sup>+</sup>Cavalcanti, M., <sup>+</sup>Dueber, D., Maiorca, C., Roberts, T., <sup>+</sup>Delaney, A., Bush, S., Mohr-Schroeder, M., & <sup>#</sup>Schroeder, D. C. (2018, October). *Operationalizing equity-based STEM literacy in designing quantitative surveys*. Paper presented at the annual convention of the School Science and Mathematics Association, Little Rock, AR.
- 72. \*Schroeder, D. C., Maiorca, C., Jackson, C., Roberts, T., \*Delaney, A., Bush, S., Cavalcanti, M., & Mohr-Schroeder, M. (2018, October). *Motivating and inspiring elementary and middle level students' interest in STEM*. Paper presented at the annual convention of the School Science and Mathematics Association, Little Rock, AR.
- 71. Roberts, T., & **Jackson, C.** (2018, February). *Preservice elementary teachers' conceptions of equitable math teaching*. Paper presented at the annual meeting of the Research Council on Mathematics Learning, Baton Rouge, LA.
- 70. **Jackson, C.,** Appelgate, M., Whitmer, C., <sup>†</sup>Delaney, A., & <sup>†</sup>Jurgenson, K. (2018, April). *Why boats float: It speaks volumes about mathematics*. Gallery workshop presented at the annual meeting of the National Council of Teachers of Mathematics, Washington D.C.
- 69. Appelgate, M., Jackson, C., 'Jurgenson, K., & 'Delaney, A. (2018, April). Using mathematically-

- focused text messages to communicate with parents. Presentation at the National Council of Teachers of Mathematics Research Conference, Washington D.C.
- 68. I, J., \*Martinez, R., & **Jackson, C.** (2018, April). *Preservice teachers' perceptions on mathematical modeling used for emergent bilinguals*. Paper presented at the annual meeting of American Educational Research Association, New York, NY.
- 67. Taylor, C., Buchheister, K., & **Jackson, C.** (2018, April). *Through the looking glass—Using literature as windows into equity in early mathematics*. Presentation at the annual meeting of the National Council of Teachers of Mathematics, Washington D.C.
- 66. Whitmer, C.E., **Jackson, C.**, Appelgate, M., & Robideau, D. (2018, January). *The Development and pilot testing of DESCARTES an engineering instruction, project, and curricula platform for STEM instruction in grades 3-6*. Poster session at IES PI Conference, Washington D.C.
- 65. Cavalcanti, M., Mohr-Schroeder, M., **Jackson, C.,** Maiorca, C., <sup>†</sup>Delaney, A., & Roberts, T. (2018, February). *Going beyond the framework: Operationalizing an equity framework in designing quantitative surveys.* Paper presented at the annual Association of Mathematics Teacher Educators, Houston, TX.
- 64. <sup>+</sup>Delaney, A., & **Jackson, C.** (2018). *The STEM princess: engaging young females in STEM*. Workshop presented at the annual convention of the School Science and Mathematics Association, Lexington, KY.
- 63. Mohr-Schroeder, M. J., **Jackson, C.**, & \*Schroeder, D. C., Thomas, J. N. (2017, April). *Connecting the "M" in STEM*. Gallery workshop presented at the annual meeting of the National Council of Teachers of Mathematics, San Antonio, TX.
- 62. **Jackson, C.,** Buchheister, K., & Taylor, C. (2017, January). *Seeing what was once seen*. Paper presented at the annual Association of Mathematics Teacher Educators, Orlando, FL.
- 61. Appelgate, M., & **Jackson, C.** (2017, January). *Using preservice teacher designed video lessons to promote conceptual understanding and collaboration with middle-grade students*. Paper presented at the annual Association of Mathematics Teacher Educators, Orlando, FL.
- 60. Mohr-Schroeder, M. J., **Jackson, C.**, <sup>+</sup>Cavalcanti, M., & <sup>+</sup>Delaney, A. (2017, January). *Increasing STEM literacy of preservice and inservice teachers via an informal learning environment*. Paper presented at the annual Association of Mathematics Teacher Educators, Orlando, FL.

- 59. \*Schroeder, C., **Jackson, C.,** Mohr-Schroeder, M., \*Calvacanti, M., & \*Williams, M. (2016, October). *Motivating and inspiring students' interest in STEM*. Paper presented at the annual convention of the School Science and Mathematics Association, Phoenix, AZ.
- 58. Taylor, C. E., **Jackson, C.,** & Buchheister, K. E. (2016, April). *Visualizing instructional equity*. Presentation at the annual meeting of the National Council of Teachers of Mathematics, San Francisco, CA.
- 57. Buchheister, K. E., Taylor, C. E., **Jackson, C**. (2016, April). *Discerning geometric patterns and structure through games*. Presentation at the annual meeting of the National Council of Teachers of Mathematics, San Francisco, CA.

- 56. Albers, S., Williams, M., Mohr-Schroeder, M., & **Jackson, C.** (2016, April). A summer in STEM: Increasing middle school students' interest and engagement in STEM through a one-week summer camp. Paper presented at the annual meeting of the National Council for Undergraduate Research, Asheville, NC.
- 55. Mohr-Schroeder, M, & **Jackson, C.** (2016, January). *Informal learning environments: Unique approaches to preparing preservice teachers.* Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- 54. Huey, M., **Jackson, C.,** & Males, L. (2016, January). A framework for increasing teachers' knowledge needed to teach statistics through analyzing grade 7 tasks. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- 53. **Jackson, C.,** Sheth, M., Seiler, G., Appelgate, M., & Nadolny, L. (2015, October). *Using virtual worlds to prepare pre-service teachers to teach mathematics and science in culturally responsive ways.*Presentation at the annual meeting of the National Association of Multicultural Education. New Orleans, LA.
- 52. Mohr-Schroeder, M. J., **Jackson, C.**, \*Schroeder, D. C., \*Cavalcanti, M., \*Blyman, K., \*Roberts, O., & \*Lemmon, M. (2015, October). *Bolstering preservice teachers' STEM literacy via informal learning experiences*. Paper presented at the annual convention of the School Science and Mathematics Association, Oklahoma City, OK.
- 51. **Jackson, C.**, & Schroeder, M. (2015, May). *Using informal learning environments to prepare preservice teachers to work with struggling mathematics learners*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- 50. **Jackson, C.,** Roberts, S., & Salinas, A. (2015, May). *Prospective mathematics teachers' conceptions of equitable mathematics teaching*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- 49. **Jackson, C.,** Safi, Farshid, S., Yee, S., & Jansen, M. (2015, May). *STaR panel question and answer session*. Presentation at the STaR follow-up session prior to annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- 48. Reys, R., Dollard, C., **Jackson, C.,** Krupa, E., Moore, K., Spangler, D., Wanko, J. (2015, May). *An opportunity for new doctorates and something senior mathematics educators should know about.*Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- 47. Mohr-Schroeder, M. J., \*Schroeder, D. C., Walcott, B., **Jackson, C.,** \*Evans, M., & \*Cavalcanti, M. (2015, May). *Informal STEM learning communities to broaden participation of underrepresented populations in STEM*. Poster presented at the annual Kentucky EPSCoR Conference, Lexington, KY.
- 46. \*Schroeder, D. C., **Jackson, C.,** Mohr-Schroeder, M. J., \*Powers, L. B., ^Albers, S., ^Poe, K., \*Roberts, O. T., \*Blyman, K., & \*Cavalcanti, M. (2015, April). *Tapping the potential of struggling learners of mathematics: Instructional strategies*. Gallery workshop presented at the annual meeting of the National Council of Teachers of Mathematics, Boston, MA.
- 45. **Jackson, C.,** Mohr-Schroeder, M., \*Schroeder, C., \*Powers, B., & Jackson, M. (2014, April). *Instructional strategies for students who are struggling in mathematics.* Presentation at the annual meeting of the National Council of Teachers of Mathematics, New Orleans, LA.

- 44. Roberts, S., **Jackson, C.,** Salinas, A. (2014, April). *Defining and characterizing worthwhile equitable pedagogies in mathematics tasks*. Presentation at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- 43. Taylor, C. E., **Jackson, C.,** & Buchheister, K. (2014, April). *Actions addressing the common core in elementary methods/content courses*. Poster presented at the Research Pre-session of the annual meeting of National Council of Teachers of Mathematics, New Orleans, LA.
- 42. Taylor, C., **Jackson, C.,** Buchheister, K. (2014, April). *Developing prospective teachers' awareness of the common core in elementary methods and content courses.* Presentation at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- 41. Cameron, S., Pardee, R., & **Jackson, C.** (2014, April). *Questioning and mathematical classroom discourse in three middle level science classroom*. Paper presented at the 2014 National Conference on Undergraduate Research (NCUR), Lexington, KY.
- 40. Reys, R., Glasgow, R., & **Jackson, C.** (2014, April). *Doctorates in mathematics education: Jobs available in higher education institutions.* Presentation at the annual meeting of the National Council of Teachers of Mathematics, New Orleans, LA.
- 39. Wilhelm, J., Toland, M., **Jackson, C.,** \*Cole, M. (2014, April). *How instruction, gender, and race affect students' spatial-scientific learning*. Presentation at the annual meeting of National Association for Research in Science Teaching, Pittsburgh, PA.
- 38. **Jackson, C.,** Mohr-Schroeder, M., \*Schroeder, C., \*Roberts, O., \*Blyman, K., & \*Cavalcanti, M. (2014, February). *Preparing teachers to work with students who struggle in mathematics*. Paper presented at the annual convention of the School Science and Mathematics Association, Jacksonville, FL.
- 37. Salinas, A., **Jackson, C.,** & Roberts, S. (2014, February). Evolving prompts to elicit preservice teachers' conceptions of equity in mathematics education. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- 36. Schroeder, C., **Jackson, C.,** Mohr-Schroeder, M., <sup>†</sup>Blyman, K., <sup>†</sup>Roberts, O., & <sup>†</sup>Cavalcanti, M. (2014, February). *Motivating and inspiring middle level students' interest in STEM via STEM Camp.* Paper presented at the annual convention of the School Science and Mathematics Association, Jacksonville, FL.
- 35. Speler, L., Schooler, W., **Jackson, C.,** Mohr-Schroeder, M. (2014, February). *Getting middle school students interested in STEM*. Paper presented at the 2014 National Conference on Undergraduate Research, Lexington, KY.
- 34. Taylor, C., Buchheister, K., & **Jackson, C.** (2014, February). *Actions elementary mathematics teacher educators use to develop prospective teachers' awareness of the CCSSM*. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- 33. \*Bean, W., \*Peake, J. R., Wilhelm, J., & **Jackson, C.** (2014, February). *Impact of student motivation on learning mathematics in an informal setting.* Paper presented at the annual convention of the School Science and Mathematics Association, Jacksonville, FL.
- 32. **Jackson, C.,** Mohr-Schroeder, M., \*Schroeder, C. (2013, November). *Tapping the mathematical potential of students who struggle: Instructional Strategies*. Presentation at the regional meeting of

- the National Council of Teachers Mathematics, Louisville, KY.
- 31. **Jackson, C.,** Mohr-Schroeder, M., \*Schroeder, C., \*Powers, B., `Speler, L., & `Schooler, W. (2013, November). *Tapping the mathematical potential of students who struggle: Instructional strategies*. Gallery workshop presentation at the regional meeting of the National Council of Teachers of Mathematics, Louisville, KY.
- 30. Jong, C., **Jackson, C.,** & \*Miller, M. (2013, November). *Understanding preservice teachers' conceptions about teaching mathematics for social justice*. Presentation at the regional meeting of National Council of Teachers of Mathematics, Louisville, KY.
- 29. Mohr-Schroeder, M., **Jackson, C.,** \*Schroeder, D. C., & \*Little, D. (2013, November). *Informal learning environments in STEM education*. Paper presented at the annual convention of the School Science and Mathematics Association, San Antonio, TX.
- 28. Jong, C., **Jackson, C.,** & \*Miller, M. (2013, November). *Understanding preservice teachers' conceptions about teaching mathematics for social justice*. Presentation at the regional meeting of the National Council of Teachers Mathematics, Louisville, KY.
- 27. Wilhelm, J., **Jackson, C.**, Toland, M. D., <sup>+</sup>Cole, M., & Wilhelm, R. (2013, June). *Evaluating middle school students' spatial-scientific performance in Earth-space science*. Paper presented at the 222<sup>nd</sup> meeting of the American Astronomical Society, Indianapolis, IN.
- 26. <sup>+</sup>Cole, M., Wilhelm, J., **Jackson, C.**, Hongwei, Y., & Wilhelm, R. (2013, June). *Exploring the relationships between student moon observations and spatial-scientific reasoning*. Poster presented at the 222<sup>nd</sup> meeting of the American Astronomical Society, Indianapolis, IN.
- 25. **Jackson, C.**, Wilhelm, J., \*Sullivan, A., \*Peake, J., & Wilhelm, R. (2013, April). *Gender differences: Development of sixth grade students' geometric spatial visualization within an Earth/space unit.*Paper presented at the annual meeting of the National Association for Research in Science Teaching, Puerto Rico.
- 24. Reys, R., Glasgow, R., & **Jackson, C.** (2013, April). *Doctorates in mathematics education: A shortage continues and jobs exist.* Presented at the annual meeting of the National Council of Teachers of Mathematics, Denver, CO.
- 23. **Jackson, C.,** & Jong, C. (2013, January). *Preservice elementary teachers' understanding of equity in teaching mathematics*. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- 22. Mohr-Schroeder, M., **Jackson, C.,** & <sup>+</sup>Little, D. (2012, November). *Tapping the potential of struggling mathematics learners: The See Blue Mathematics Clinic*. Presentation at the annual convention of the School Science and Mathematics Association, Birmingham, AL.
- 21. **Jackson, C.,** Wilhelm, J., <sup>†</sup>DeMore, A., & Wilhelm, R. (2012, April). *Gender differences of high and low performing students' spatial reasoning and understanding of lunar phases.* Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia, Canada.
- 20. Wilhelm, J., **Jackson, C.,** <sup>†</sup>DeMore, A., & Wilhelm, R. (2012, April). *Exploring variables that affect students' scientific and spatial understanding as they engage in earth-space science*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British

- Columbia, Canada.
- 19. Reys, R., Glasgow, R., & **Jackson, C.** (2012, April). *A doctorate in mathematics education: A shortage continues and jobs exist.* Presentation at the annual meeting of the National Council of Teachers of Mathematics, Philadelphia, PA.
- 18. Reys, R., & **Jackson, C.** (2012, February). *STaR-Service, teaching and research- An opportunity for new doctorates in mathematics education*. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Fort Worth, TX.
- 17. **Jackson, C.,** & Kasten, S. (2012, February). A comparative analysis of verb use and voice between the common core standards for mathematics and the principles and standards for school mathematics. Poster presented at the annual meeting of the Association of Mathematics Teacher Educators, Fort Worth, TX.
- 16. **Jackson, C.,** Roberts, S., & Salinas, A. (2012, February). *Assessing pre-service teachers' understanding of equity in the teaching of mathematics*. Poster presented at the annual meeting of the Association of Mathematics Teacher Educators, Fort Worth, TX.
- 15. **Jackson, C.** (November, 2011). *Conceptualizing mathematics teachers' knowledge of equity in teaching.* Presentation at the annual meeting of the Appalachian Association of Mathematics Teacher Educators, Huntington, WV.
- 14. **Jackson, C.** (October, 2011). *Teachers' knowledge of equity in teaching mathematics*. Presentation at the regional meeting of the National Council of Teachers of Mathematics, St. Louis, MO.
- 13. Reys, R., Glasgow, R., & **Jackson, C.** (October, 2011). Are you interested in a Ph.D in mathematics education? An acute shortage and jobs exist! Presentation at the regional meeting of the National Council of Teachers of Mathematics, St. Louis, MO.
- 12. van Garderen, D., Scheuermann, A., & **Jackson, C**. (2011, April). *How students of diverse abilities use diagrams to solve problems*. Poster presented at the Research Pre-session of the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
- 11. Reys, R., Glasgow, R., & **Jackson, C.** (2011, April). A doctorate in mathematics education: An acute shortage exists, and jobs are available. Presentation at the annual meeting of the National Council of Teachers of Mathematics, Indianapolis, IN.
- 10. **Jackson, C.,** van Garderen-Anderson, D., Scheuermann, A. (2011, March). *How students of diverse abilities solve mathematics problems.* Presentation at the annual meeting of the Research Council on Mathematics Learning, Cincinnati, OH.
- 9. Switzer, J. M., Lannin, J., van Garderen, D., Buchheister, K., Davis, J., **Jackson, C.** (2010, July). *First-grade student misconceptions with cardinality and ordinality*. Poster presentation at the annual meeting of the Mathematics Education Research Group of Australasia (MERGA) 33: Fremantle, WA, Australia.
- 8. van Garderen, D., Scheuermann, A., & **Jackson, C.** (2010, April). *Understanding how students of diverse abilities use diagrams to solve mathematics problems.* Presentation at the annual meeting of the American Educational Research Association, Denver, CO.
- 7. Arbaugh, F., Chval, K., Lannin, J., Jackson, C., Webb, M., & Hicks, S. (2010, April). Delineating the

- pedagogical content knowledge of beginning secondary mathematics teachers. Presentation at the Research Pre-session of the annual meeting of the National Council of Teachers of Mathematics, San Diego, CA.
- 6. van Garderen, D., Lannin, J., **Jackson, C.,** Buchheister, K., Switzer, J.M. (2009, April). *Assessing mathematical understanding of struggling learners in number and operations*. Presentation at the annual meeting of the National Council of Mathematics Teachers, Washington, D.C.
- 5. Lannin, J., van Garderen, D., **Jackson, C.,** Buchheister, K., Switzer, J.M. (2009, April). *The numeric development of struggling first grade students*. Poster presented at the Research Pre-session of the annual meeting of the National Council of Teachers of Mathematics, Washington, D.C.
- 4. Arbaugh, F., Chval, K., **Jackson, C.,** Webb, M., & Regis, T. (2009, April). *The growth mathematics teachers' knowledge related to instruction*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- 3. Lannin, J. K., van Garderen, D., **Jackson, C.,** Buchheister, K., Switzer, J. M. (2009, April). *The mathematical development of struggling first grade students*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- 2. Pomerenke, S., Webb, M. M., **Jackson, C.**, Regis, T. P., & Chval, K. B. (2008, January). *Examining and discussing preservice mathematics teachers' orientations*. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Tulsa, OK.
- 1. Chval, K. B, Lannin, J. K., Sutter, A. D., Regis, T. P., & **Jackson, C. D.** (2007, January). *Using video and written cases to prepare future mathematics teacher educators*. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.

#### State and Local

<sup>+</sup> indicates work with graduate student(s); ^ indicates work with undergraduate student(s); <sup>#</sup>indicates work with practicing teacher(s)

- 14. **Jackson, C.** (2015, February). *Prospective mathematics teachers' conceptions of equity.* Presentation at the annual meeting of the Iowa Association of Mathematics Teacher Educators, Cedar Falls, IA.
- 13. <sup>+</sup>Cole, M., Wilhelm, J., **Jackson, C.,** & Wilhelm, R. (2013, October). *Informal STEM education: The REAL way.* Poster presented at The EPSCoR Conference, Louisville, KY.
- 12. Wilhelm, J., Fisher, M., **Jackson, C.,** Jong, C., Krall, R., Mohr-Schroeder, M., & Criswell, B. (2013, October). *STEM education: Bridging disciplines, bridging generations, bridging cultures*. Presentation at the Innovate to Learn Institute, Lexington, KY.
- 11. Kasten, S., **Jackson, C.,** Thomas, J., Austin, C., & Noblitt, B. (2013, February). *Preservice teacher preparation (PTP) working group.* Presentation at the annual conference at the Kentucky Center for Mathematics, Lexington, KY.
- 10. Mohr-Schroeder, M., **Jackson, C.,** & \*Schroeder, C. (2013, February). *Tapping the potential of struggling learners*. Presentation at the annual conference at the Kentucky Center for Mathematics, Lexington, KY.

- 9. **Jackson, C.** (2012, March). *Games in the middle school: Things to consider*. Presentation at the annual conference at the Kentucky Center for Mathematics, Lexington, KY.
- 8. Wilhelm, J., **Jackson, C.,** & \*Sullivan, A. (2012, March). *Investigating students' spatial visualization and scientific development as they engage in an integrated mathematics/science Earth-Space unit.*Presentation at the annual conference at the Kentucky Center for Mathematics, Lexington, KY.
- 7. Fisher, M., Schroeder, M., Wilhelm, J., **Jackson, C.,** & Jong, C. (2012, March). *Pursuing a graduate degree in STEM Education: The facts and myths.* Presentation at the annual conference at the Kentucky Center for Mathematics, Lexington, KY.
- 6. **Jackson, C.** (2011, April). *Teachers' knowledge of equity*. Presentation at the annual meeting of the STEM Education Conference at the University of Kentucky, Lexington, KY.
- 5. **Jackson, C.,** \*Little, D., & Mohr-Schroeder, M. (2011, April). *UK mathematics clinic*. Presentation at the annual meeting of the STEM Education Conference at the University of Kentucky, Lexington, KY.
- 4. Hanley, C., Radcliffe, B., Taylor, K., **Jackson, C.,** and Schnittka, C. (2011, April). *Black males working STEM academy*. Presentation at the annual meeting of the STEM Education Conference at the University of Kentucky, Lexington, KY.
- 3. **Jackson, C.** (2010, October). *Here to there*. Presentation at the annual meeting of the Kentucky Council of Teachers of Mathematics, Somerset, KY.
- 2. **Jackson, C.,** Buchheister, K., & Taylor, C. (2009, December). *Selecting games: Things to consider*. Presentation at the Missouri Council of Teachers of Mathematics, Columbia, MO.
- 1. **Jackson, C.**, Taylor, C., & Buchheister, K. (2008, December). *Product bingo*. Presentation at the Missouri Council of Teachers of Mathematics, Columbia, MO.

#### INVITED SCHOLARLY PRESENTATIONS:

# Regional, National or International

\*indicates Keynote; #indicates work with practicing teacher(s)

- 17. Bush, S. B., & **Jackson, C.** (May, 2021). *Catalyzing change through joy, wonder, and beauty: Broadening the purposes of learning mathematics in middle school.* Featured speaker at the Wisconsin Mathematics Council Annual Conference.
- 16. **Jackson, C.** (November, 2020). *Equitable practices*. Featured speaker at the 2020 Kentucky Association of Mathematics Teacher Educators (KAMTE) Virtual Summit.
- 15. **Jackson, C.,** Taylor, C., & Buchheister, K. (2021, April). *Using children's literature to plan culturally rich mathematical tasks*. Session to be presented at the annual National Council of Teachers of Mathematics, St. Louis, MO. (Conference original scheduled for October 2020)
- 14. **Jackson, C.** (2020, March). *Collaborative conversations: Recognizing all classroom contributions*. Speaker for ED 137 Equity and K12 STEM Education. University of California Santa Barbara.
- 13. \*Jackson, C. (2019, September). *Equity and access: Examining teachers' conceptions to effectively position students*. Keynote speaker at the 2019 Annual Meeting of the Indiana Council of Teachers of Mathematics. Indianapolis, IN.

- 12. **Jackson, C.** (2019, June). What, how, who: Planning structure for mathematical discourse. Speaker at the Math Teacher Academy, Baylor University. Waco, TX.
- 11. **Jackson, C.** (2019, April). *Access and equity: Exploring our conceptions*. Speaker at West Point, United States Military Academy. West Point, NY.
- 10. **Jackson, C.** (2019, April). *An equitable approach of noticing*. Webinar speaker for the Maryland Association of Mathematics Teacher Educators.
- 9. \*Philipp, R., Steele, M., Myers, M., Wager, A., MacArthur, K., & **Jackson, C.** (2019, February). *Challenges and opportunities on our journeys of embodying our commitment to equity*. Opening session of the 2019 Association of Mathematics Teacher Educators 23<sup>rd</sup> Annual Conference. Orlando, FL.
- 8. Stuessy, C., Barrow, L., Foster, A., **Jackson, C.,** Johnson, C., Lyons, L., Nazier, G., Ivey, T., Scogin, S., Utley, J., Zollman, A. (2018, October). *Top 10 reasons to stay involved in SSMA: Hear from the membership.* Panel discussion at the 2018 School Science Mathematics Association (SSMA) Convention. Little Rock, AR.
- 7. \*Jackson, C. (2018, September). Access and equity in the mathematics classroom: Exploring teachers' conceptions. Keynote speaker at the Nebraska Joint Conference for Math (Nebraska Association of Teachers of Mathematics–NATM) and Science (Nebraska Association of Teachers of Science–NATS). Kearney, NE.
- 6. **Jackson, C.** (2018, September). *Student voice in the mathematics classroom*. Speaker at the Nebraska Joint Conference for Math (Nebraska Association of Teachers of Mathematics–NATM) and Science (Nebraska Association of Teachers of Science–NATS). Kearney, NE.
- 5. Taylor, C., Buchheister, K., & **Jackson, C.** (2018, April). *Through the looking glass—Using literature as windows into equity in early mathematics*. Reflection Cove speaker at the annual meeting of the National Council of Teachers of Mathematics, Washington D.C.
- 4. **Jackson, C.** (2017, May). *Equity*. Speaker for ED 137 Equity and STEM. University of California Santa Barbara.
- 3. Mohr-Schroeder, M. J., **Jackson, C.,** \*Schroeder, D. C., & Thomas, J. N. (2017, April). *Connecting the* "M" in STEM. Gallery workshop presenter at the annual meeting of the National Council of Teachers of Mathematics, San Antonio, TX.

- 2. **Jackson, C.** (2016, May). What is equity? Ways of seeing. Speaker for ED 137 Equity and STEM. University of California Santa Barbara.
- 1. **Jackson, C.,** & Salinas, A. (2013, October). Secondary preservice teachers' conceptions of equity. Rethinking mathematics teacher preparation to meet the needs of Latin@ and Native American youth: Integrating mathematics, power, culture, and language. Symposium conducted at the meeting of the Society for Advancement of Hispanics/Chicanos and Native Americans in Science (SACNAS), San Antonio, TX.

#### State and Local

- 21. Carlson, S., Foegen, A., Beecher, C., & **Jackson, C.** (2020, April). *Intro to IES: US department of education institute of education sciences*. College of Human Sciences, Iowa State University. Ames, IA.
- 20. Appelgate, M. & **Jackson, C.** (2017, January). *Using mathematically-focused text messages to connect linguistically-diverse parents with their child's classroom.* ISU 4U Promise 2<sup>nd</sup> Annual Mini-Conference. Ames, IA.
- 19. **Jackson, C.** (2016, October). *ISU 4U Promise preservice practica support video series*. https://www.youtube.com/playlist?list=PLka2x1HoGsW\_9WsqBDQiNf\_1CGa2fJMOz

- 18. **Jackson, C.** (2016, April). *Preparing prospective mathematics teachers: Seeing mathematics through different eyes.* Iowa State University School of Education Lunch and Learn. Ames, IA.
- 17. **Jackson, C.,** & Hamilton, K. (2016, January). *Engaging middle school students in STEM*. ISU 4U Promise Mini-Conference. Ames, IA.
- 16. Jackson, C. (2015, November). What is equity? State Mathematics Leadership Team. Marshalltown, IA.
- 15. **Jackson, C.,** Estapa, A., Tank, K. M., & Appelgate, M. (2015, October). *Supporting girls in math and science*. Women in Science and Engineering: Taking the Road Less Traveled Conference: Ames, IA.
- 14. **Jackson, C.** (2015, March). *Teaching students who struggle in mathematics*. Iowa State Math Club for Future Teachers. Iowa State University, Ames, IA.
- 13. **Jackson, C.** (2014, December). *Using virtual worlds to prepare pre-service teachers to teach math and science in culturally responsive ways*. Iowa State Literacy and STEM Symposium. Iowa State University, Ames, IA.
- 12. **Jackson, C.** (2014, August). Statistics and Probability, Content and Pedagogy, for Secondary Teachers. Cedar Falls, IA.
- 11. **Jackson, C.** (2012, November). *Taking a piece: Strategies to help students understand fractions*. Minority Educators Association (MEA)/Kentucky Education Association (KEA) Professional Development, Lexington, KY.
- 10. **Jackson, C.** (2012, October). *Diversity in STEM STEM opportunities for girls of underrepresented groups*. Kentucky Girls STEM Collaborative Project, Bowling Green, KY.
- 9. **Jackson, C.** (2011, November). *Teachers' knowledge of equity in teaching mathematics*. Guest Lecturer in EDC 706: Research in STEM Education, Lexington, KY.
- 8. **Jackson, C.** (2011, June). *Applying spatial visualization skills to STEM education*. Invited speaker at the annual Jessie Clark Middle School STEM Education Camp, Lexington, KY.
- 7. van Garderen, D., Davis, J., & **Jackson, C.** (2010, January). *Dissecting number and operations:*\*Identifying 9 constructs to assess the mathematical understanding of struggling learners. Workshop presented at Student Council for Exceptional Children Conference, Columbia, MO.

- 6. **Jackson, C.** (2009, February). *Diagrams: A tool to solve mathematical word problems*. Poster presented at the Research Meeting of the Center for the Study of Mathematics Curriculum, Phoenix, AZ.
- 5. **Jackson, C.,** & Buchheister, K. (2008, February). *MARS: Mathematically at-risk students*. Poster presented at the Research Meeting of the Center for the Study of Mathematics Curriculum, Phoenix, AZ.
- 4. Pomerenke, S., Webb, M., **Jackson, C.,** Regis, T. P., & Chval, K. (2008, February). *Orientations of mathematics pre-service teachers in alternative certification and traditional programs.* Poster presented at the Research Meeting of the Center for the Study of Mathematics Curriculum, Phoenix, AZ.
- 3. **Jackson, C.,** Buchheister, K., Castagno-Dysart, D., Lannin, J., & van Garderen, D. (2008, February). *A trip to MARS (Mathematically at-risk students)*. Workshop presented at the University of Missouri-Columbia Mathematics and Science Colloquium, Columbia, MO.
- 2. Arbaugh, F., Volkmann, M., Abell, S., Pareja, E., Lankford, D., Regis, T., **Jackson, C.,** & Webb, M. (2007, September). *Mathematics and science teachers' prior knowledge of organizing classroom instruction*. Workshop presented at the University of Missouri-Columbia Mathematics and Science Colloquium, Columbia, MO.
- 1. **Jackson, C.** (2007, February). *InSite: Integrating science industrial technology and engineering*. Poster presented at the Research Meeting of the Center for the Study of Mathematics Curriculum, Phoenix, AZ.

## OTHER SCHOLARLY ACTIVITIES

#### Ad/Hoc Reviewer

2020	Online Learning in Mathematics Education book
2020-present	Teacher Educator
2020-present	Investigations in Mathematics Learning
2020-present	International Journal of STEM Education
2015, 2019–present	National Council of Teachers of Mathematics (NCTM) conference proposals
2015, 2019–present	Teaching for Excellence and Equity in Mathematics
2018-present	Mathematics Teacher: Learning and Teaching Pre-K-12
2016-present	Journal of Teacher Education
2013-present	Mathematics Teacher Educator
2012-present	Current Issues in Education
2012–2018	Mathematics Teaching in the Middle School

2012-2018 Teaching Children Mathematics School Science and Mathematics 2011–present 2011–present Urban Education 2006, 2012–present American Educational Research Association (AERA) conference proposals 2015, 2017, 2019, Research Council of Mathematics Learning Proceedings 2020 2015 International Congress on Mathematics Education (ICME) conference proposals 2015 Journal of STEM Education 2015 Mathematics Thinking and Learning North American Chapter of the International Group for the Psychology of 2011, 2015, 2017, Mathematics Education (PME-NA) conference proposals 2018 2015 School Science and Mathematics Proceedings 2013, 2014 National Council on Undergraduate Research Proposals Mathematics Teacher 2013 2010 National Association for Research in Science Teaching (NARST) conference proposals 2006 Association of Mathematics Teachers Educators (AMTE) conference proposals Journal Editorial Board 2021-2024 Investigations in Mathematics Learning (IML) 2021-2024 *Mathematics Teacher: Learning and Teaching PK-12 (MTLT)* External Promotion and Tenure Reviewer 2020 University of South Carolina 2019 George Mason University Curriculum Writer 2019–present Emerald Education Mathematics Curriculum Writer K-5, Grade Level Curriculum

# **Grant Reviewer**

2015–2019 National Science Foundation Review Panel

Lead: Grades 2–3

2017 Institute of Education Sciences Review Panel

2012 National Science Foundation Review Panel

**Book Reviewer** 

2016 Handbook of Teacher Education and Professional Development

2008 Corwin Press

Consulting

2016 Minnesota Math Corps (an organization that provides school mathematics tutors

support for students in grades 4–8)

1998–2003 & Missouri Mathematics Consultant, Missouri Department of Elementary and

2007–2009 Secondary Education

President

2020–2022 School Science and Mathematics Association President

President-Elect

2019-2020 School Science and Mathematics Association President-Elect

**Professional Development** 

2019 International Leadership Association Annual Global Conference (October 23 –

28, 2019), Ottawa Canada

2019 American Association of Colleges for Teacher Education 2019 Leadership

Academy (June 23 – 27, 2019)

**Board of Directors** 

2018–2021 Association of Mathematics Teacher Educators Board Member at Large

2016–2019 School Science and Mathematics Association Board Member at Large

**Advisory Boards** 

2011–2012 Kentucky Department of Education (KDE) Mathematics Content Advisory

Committee

2019–2024 Teacher Education for Equitable Mathematics Instruction: An Exploratory Study of

Noyce Program Impacts (TEEM) NSF Grant Advisory Board

**Outreach Activities** 

2020–present Virtual STEM Camp

2017–2019 STEM InCYte Camp

2015–2016 DAVinCI Flight Camp

2011–2019 See Blue STEM Camp

2011–2018 Family Math Night, Family STEM Night, STEM Day

# **Doctoral Students Supervised**

Sowa State University, \*University of Kentucky

Year	Name	Role	Dissertation Title
Completed			
In progress	<coskun erden<="" td=""><td>Major Professor</td><td>TBD</td></coskun>	Major Professor	TBD
In progress	<hilda makori<="" td=""><td>Committee</td><td>TBD</td></hilda>	Committee	TBD
		Member	
In progress	<kari jurgenson<="" td=""><td>Committee</td><td>TBD</td></kari>	Committee	TBD
		Member	
In progress	<sup>&lt;</sup> Isaiah McGee	Committee	TBD
		Member	
2020	<ricardo martinez<="" td=""><td>Committee</td><td>Mathematics Reborn: Empowerment with</td></ricardo>	Committee	Mathematics Reborn: Empowerment with
		Member	Youth Participatory Action Research
			EntreMundos in Reconstructing Our
			Relationship with Mathematics
2019	<ashley delaney<="" td=""><td>Major Professor</td><td>The influence of a female-centered</td></ashley>	Major Professor	The influence of a female-centered
			figured world on STEM identities of
			young girls
2018	Ashley Nashleanas	Major Professor	Graph accessibility and comprehension
			for the blind: A challenge of its own kind
2017	*Thomas Roberts	Committee	Classroom influences on third grade
		Member	African American learners' mathematics
			identities
2012	*Kelly Dixon	Committee	Social support, socialization, and social
		Member	cognitive theory: An examination of the
			graduate teaching assistant

# Masters Students Supervised (All at Iowa State University)

Year Completed	Name	Role	Field/Degree
2018	Teresa Aguilar- Fabian	Major Professor	Secondary Mathematics Education, M.Ed
2017	Minsook Han	Major Professor	Secondary Mathematics Education, M.Ed
2016	Katharine Thomas	Major Professor	Secondary Mathematics Education, M.Ed
2016	Garrett Patterson	Major Professor	Secondary Mathematics Education, M.Ed
2016	Elizabeth Doebel	Major Professor	Secondary Mathematics Education, M.Ed
2016	Jasmine Stanford	Major Professor	Secondary Mathematics Education, M.Ed
2015	Alexander Thompkins	Major Professor	Secondary Mathematics Education, M.Ed

2015	Rebecca Ehlers	Major Professor	Secondary Mathematics Education, M.Ed
2015	Breanne Maranto	Major Professor	Secondary Mathematics Education, M.Ed
2015	Emily Julin	Major Professor	Secondary Mathematics Education, M.Ed
2015	Debora Masker	Committee Member	Curriculum & Instructional Technology, M.Ed

#### **HONORS AND AWARDS**

## National/International

Co-author, **Top downloaded article** 2017-2018 and **recognized as top 20 most read paper** in *School Science and Mathematics:* Mohr-Schroeder, M. J., **Jackson, C.**, Cavalcanti, M., Jong, C., Schroeder, D.C., & Speler, L. (2017). Parents' attitudes toward mathematics and their influence on their students' attitudes towards mathematics: A quantitative study. *School Science and Mathematics*, *117*(5), 214-222.

Teaching Children Mathematics Featured Article, National Council of Mathematics Twitter Chat (2019, January): Buchheister, K., **Jackson, C.,** & Taylor, C. E. (2019). "Sliding" into an equitable lesson. *Teaching Children Mathematics*, 25(4), 224-231. doi: 10.5951/teacchilmath.25.4.0224.

2019 *Mathematics Teaching in the Middle School* Featured Article, National Council of Teachers of Mathematics Twitter Chat (2019, January): Buchheister, K., **Jackson, C.,** & Taylor, C. E. (2019). What-how-who: Developing mathematical discourse. *Mathematics Teaching in the Middle School*, 24(4), 202-209. doi: 10.5951/mathteacmiddscho.24.4.0202.

PI/Co-PI, National Science Foundation (EPSCoR Track 3), Utilizing STEM Camps and STEM Clubs to increase interest in STEM fields among females and students of color (http://education.uky.edu/STEM/content/seebluestemcamp) Grant identified by the National Science Foundation as one of the top 5 national models for broadening participation in STEM. Recognized at the 2015 National EPSCoR Conference, Portsmouth, NH.

Co-author, Article–Developing representational ability in mathematics for students with learning disabilities: A content analysis of Grades 6 and 7 textbooks **identified as a must read in**: Reed, D. K., Weiser, B. L., Cummings, K. D., & Shapiro, E. (2013). Synthesis of research symposium at CLD's 34th international conference on learning disabilities: **Must reads for 2012**. *Learning Disability Quarterly*, *36*(4), 195-202. doi: 10.1177/0731948713480788.

STaR Fellow, Service, Teaching, and Research (STaR) in Mathematics Education: Supporting Early Career Professionals

#### University

2015

2013

2011

2020–2021 College of Human Sciences Dean's Fellow

2019 Member, 2019-2020 Cohort of Iowa State University's Emerging Leaders Academy

2006–2010	University of Missouri-Columbia; Gus T. Ridgel Fellowship
2006–2010	University of Missouri-Columbia; Center for the Study of Mathematics Curriculum (CSMC) Fellow
2002–2006	Who's Who Among America's Teachers
1995	Presidential Leadership Forum, Washington D.C.
1995	Outstanding Elementary Student Graduate, Evangel University

#### MEMBERSHIP IN PROFESSIONAL AND HONOR SOCIETIES:

American Educational Research Association

Appalachian Association of Mathematics Teachers Educators

Association of Mathematics Teachers Educators

Benjamin Banneker Association

Iowa Association of Mathematics Teacher Educators

Iowa Mathematics Leadership Team Iowa Success for All Task Team

Kentucky Council of Teachers of Mathematics

Kentucky Middle Grades Pre-Service Teacher Preparation (PTP) Collaborative

Missouri Council of Teachers of Mathematics

National Association for Multicultural Education

National Center for Faculty Development & Diversity

National Council of Teachers of Mathematics

National Science Teachers Association

North American Chapter of the International Group for the Psychology of Mathematics Education

Research Council on Mathematics Learning School Science and Mathematics Association

TODOS: Mathematics for ALL

# OFFICES HELD AND COMMITTEE MEMBERSHIPS

2020–2022	Chair Finance Committee, School Science and Mathematics Association
2020	Team Member, Association of Mathematics Teacher Educators Synthesizing Data Team
2020	Team Member, National Council of Teachers of Mathematics Subcommittee for NCTM 100 Days
2019–2021	Team Member, Des Moines Public Schools Equity Structure for Increasing Black Males Success in Algebra
2018–2020	Program Committee, National Council of Teachers of Mathematics, 2020 Centennial meeting, Chicago, IL
2017–2019	Secondary Education Representative, Regents Alternative Pathway Leadership Team
2016–2019	Chair Awards and Endowment Committee, School Science and Mathematics Association
2017	Team Member, National Council of Teachers' of Mathematics Journal Implementation

Task	Force
1 ask	1 0100

2013–2016	STaR Program Committee, Association of Mathematics Teacher Educators (AMTE)
2014–2016	Vice President of Colleges, Kentucky Council for Teachers of Mathematics (KCTM)
2015–2017	Program Committee, National Council of Teachers of Mathematics, 2017 annual meeting, San Antonio, TX
2014–2016	Finance Committee, School Science and Mathematics Association
2014–2015	Program Chair, Research Council on Mathematics Learning, 2015 annual meeting, Las Vegas, NV

# UNIVERSITY, COLLEGE, DEPARTMENTAL, AND PUBLIC SERVICE:

# University Service at Iowa State University

2019	College of Human Sciences Marshal, Spring Convocation
2017	Panelist, ISU Christian Faculty and Staff Forum
2017	ISU Basketball STEM Day
2017	Student Evaluation of Teaching Task Force
2016	Member, Faculty Champions for Graduate Students Gaining Broader Opportunities
2016	Moderator, Veritas Forum
2015	Panelist, Connect Four Student Success Program

# University-level Standing and Ad Hoc Committees at Iowa State University

2017-2021	Faculty Champion, Iowa State University Graduate College
2014-2021	Member, Black Faculty and Staff Association
2015-2016	Co-Advisor, Iowa State University Education Association (ISUEA)
2015, 2016	Member, 4-H Search Committee for Program Manager I–Educational Opportunities
	Manager
2015	Presenter, Panel on Key Topics for Family Members Orientation

# College of Human Sciences Service at Iowa State University

2019–2021	Equity Advisor, College of Human Sciences
2019-2021	Co-chair, Diversity, Equity, and Community Committee
2015-2019	Member, Education Preparation Coordinating Council
2015	Grant Reviewer, College of Human Sciences Innovative Teaching Grant
2015	Presenter, Iowa State University Math Club for Future Teachers

# School of Education Service at Iowa State University

2019-2021	School of Education Promotion and Tenure Committee
2018-2021	Third Year Review Committee
2019-2020	Computer Advisory Committee
2018-2019	Secondary Mathematics Education M.Ed Program Redesign Committee
2018	Secondary Education Major Task Force
2017-2018	Member, School of Education Director Search Committee
2017	Recruitment and Retention Task Force
2016-2019	School of Education K-12/Secondary Education Program Lead

	2017 2016 2016 2016 2015 2015–2016 2014–2021 2014–2015	May Teacher Education Cording Ceremony December Teacher Education Cording Ceremony Panelist, School of Education Freshman Learning Community Presenter, ISU 4U Promise Practica Video Presenter, School of Education Professor Panel for Tomorrow's Teacher's Learning Community Member, Undergraduate Studies Committee Member, Education for Social Justice Collective Member, Center for Excellence in Science, Mathematics and Engineering Education
	School of I	Education Standing and Ad Hoc Committees at Iowa State University
	2018–2019 2017–2021 2016–2021 2014–2021 2016 2015 2014, 2015	Chair, School of Education, Educational Psychology/Learning Sciences Assistant Professor Search Committee Panelist, School of Education Faculty for Elementary Education Majors Panelist, School of Education Faculty for Transfer/Change of Major Students Member, ISU 4U Promise (formerly King and Moulton Pathways Project) Presenter, School of Education Lunch & Learn Participant, School of Education Ribbon Cutting Member, Search Committee, Associate Director for Educator (Teacher and Administrator) Preparation
	University Service at University of Kentucky	
	2013	Marshall, Undergraduate Commencement Ceremony
	<u>University</u> -	-level Standing and Ad Hoc Committees at University of Kentucky
	2012–2014	Member, Underrepresented Girls in STEM
	College of	Education Service at University of Kentucky
	2010–2014 2011	Co-Director, P20 STEM Innovation Lab Judge, STEM Symposium Posters, Second Annual Meeting of STEM Education
College of Education Standing and Ad Hoc Committees at University of Kentucky		
	2010–2014 2010–2014 2010–2014 2012–2014 2012–2014 2011–2014 2011	Member, Mathematics Education Program Faculty Member, Middle School Teacher Education Program Faculty Supervisor, Elementary and Middle Level Education Practicum Students in Field Placements Member, Task Force on Inclusiveness Co-Advisor, STEM Club Member, Scholarship Committee Chair, Undergraduate Redesign for Middle School Education Member, Master Redesign for Middle School Education
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# Departmental of STEM Education Service at University of Kentucky

2011–2014	Interviewer, Masters with Initial Certification (MIC)
2013	Scorer, Masters with Initial Certification (MIC)
2010-2014	Mentor to African American Females in the College of Educ

# Public Service

2018	Iowa Space Grant 2018-2019 Preservice Scholarship Reviewer
2017-present	Mentor, Cathrine Maiorca California State University Long Beach College of
2017 mmagant	Education Director & Foundar STEM InCVto Comp
2017–present	Director & Founder, STEM InCYte Camp
2016–2019	Member, Des Moines Public School District Mathematics Leadership Team
2015–2018	Member, Iowa Governor's STEM Advisory Council on STEM Equity and
	Access
2014-2021	Member, Iowa Mathematics Leadership Team
2000-2014	Tutor, Mathematics
2015, 2016	Co-Director, DAVinCI Camp
2015	Expert Member, Hoover High School Goal–setting Day
2014	Meal Server, Children and Family Urban Movement (CFUM)
2012-2014	Member, AdvancED/Diagnostic Review Team
2012	Member, Kentucky Department of Education Reading/Math Standard Setting & on
	Demand Writing Standard Setting: Math Grades 7, 8
2006-2009	Member, Learning, Teaching, and Curriculum Graduate Student Association
2006-2008	Synthesis Project Evaluator, Elementary, Middle, and Secondary Mathematics Education
	Synthesis Projects
2003-2006	Missouri Mathematics Assessment Program Item Writer, Missouri Department of
	Elementary and Secondary Education
2003-2006	Missouri Assessment Program Scorer, Missouri Department of Elementary and
	Secondary Education
2003-2005	Director, Summer Youth Program
2006	Mathematics Coordinator, Michael Center After School Program