University, Springfield, MO.

2001-2005 Adjunct Faculty, Department of Mathematics, Ozark Technical Community College, Springfield, MO

### PROFESSIONAL RESPONSIBILITIES (%)

Year	Teaching	Research	Professional	Institutional
	•	70	Service	Service
2021–2022	30%	50%	20%	
2020-2021	15%	40%	10%	35%
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; 2014–2021 was at Iowa State University; 2021–present was at Saint Louis 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, Science Education

### UNDERGRADUATE COURSES TAUGHT at Saint Louis University:

<sup>\*</sup>Redesigned Course

Course Title	Catalog#	Credit Hours	Average Number of Students per Class	Number of Semesters Taught	Years Taught
Big Ideas: Mathematics and Science (Birth-Grade 12)	EDUC 2200	3	13	1	2023
Teacher Learning Community Seminar with Field Experience	EDUC 1025	2	16	1	2023
*Methods in Teaching	EDI 3060	2	17	3	2021, 2022,

<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

- 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.

## \*Accomplishments at Prior Rank

- 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 (\$6,170,956)

- 27. National Institute of Sciences. A Virtual Project-Based Learning Sandbox for Mimetics and Medically Inspired Classroom Engineering (MiMICRE). Role: PI at Saint Louis University. Principal Investigator: Christopher Whitmer-CEO Parametric Studio. Total Award Amount: \$311,454 (Full project amount: \$883,323). August 2023-July 2025.
- 26. National Science Foundation. Preparing for the Future of the STEM Teacher Workforce in the 21st Century: Leveraging Multi-contextual Evidence. Role: Advisory Board. Principal Investigator: Tuan Nguyen, Co-PI: Cameron Anglum. Total Award Amount: \$491,943. June 2022 – May 2025.
- 25. Thomas R. Schilli Foundation. Ignatian Service Minor at Saint Louis University. Role: Researcher and Evaluator. Principal Investigator: Randy Rosenberg (Jay Hammond). Total Award Amount: \$881,309. July 2022-June 2023.
- 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

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 Awardtigator:

(DESCARTES) exploration in middle grades. **R** Investigator: Christopher Whitmer-CEO Param subcontract from Parametric Studio. Award A 2016–December 2016.

- 13. University of Northern Iowa Center for Education Text Messages to Improve Connections by Classroom Learning. **Role: Co-PI.** Princips \$31,000. May 2016–July 2017.
- 12. Kentucky Department of Education (MSP) Role: Co-PI. Principal Investigator: Award Amount: \$320,000. January
- 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. Decnthber 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

- 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

50. National Science Foundation. Racial Equity in STEM Education. Collaborative Research: Bridging the Divide through Diversity in Design (BD³). **Role: PI.** Collaborative with University of Kentucky, Bowling Green University, and California State University-Long Beach. Total Amount Requested: \$2,867,976.100.82 531.79 Tm0.2 g0.2 G{D)5(i)-4(vi)-4(de)9(t)-4(h)11(r)-3(ough D/F1 11.T/FSub0 mI)5(ni)6trs

- 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>In</u>struments for <u>Quantification of Understanding</u>, <u>Identity</u>, and <u>Reasoning in Engineering Focused S</u>

- 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.

- 37. Bush, S. B., Edelen, D., Roberts, T., Maiorca, C., Ivy, J., Cook, K., Tripp, L., Burton, M., Alameh, S., **Jackson, C.,** Mohr-Schroeder, M. J., Schroeder, D. C., McCurdy, R. P., & Cox, R. Jr. (2022). Humanistic STE(A)M instruction through empathy: Leveraging design thinking to improve society. *Pedagogies: An International Journal*, doi: 10.1080/1554480X.2022.2147937.
- 36. Taylor, C. E., **Jackson, C.,** Buchheister, K. (2022). Planning paramount tasks from culturally rich literature. *Mathematics Teacher: Learning and Teaching PK-12, 115*(7), 502-506.
- 35. Roberts, T., Mairorca, C., **Jackson, C.,** & Mohr-Schroeder, M. (2022). Integrated STEM as problem solving practices. *Investigations in Mathematics Learning*, https://doi.org/10.1080/19477503.2021.2024721
- 34. <sup>+</sup>Kebreab, L., Bush, S. B., & **Jackson, C.** (2021). Developing pedagogical fluency: Leveraging students' identities. *Mathematics Teacher: Learning and Teaching PK-12*, 114(12), 948-955, https://doi.org/10.5951/MTLT.2020.0355
- 33. **Jackson, C.,** Mohr-Schroeder, M., Bush, S. B., Maiorca, C., Roberts, T., 'Yost, C., & 'Fowler, A. (2021). Equity-oriented conceptual framework for K-12 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

- 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.

G. Bartell, K. N. Bieda, R. T. Put

North American Chapter of the International Group for the Psychology of Mathematics Education, (pp. 865–868). Chicago, IL: University of Illinois at Chicago.

6. <sup>+</sup>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* 

Resubmit). Validating a critical consciousness scale for civil engineers.

#### Regional, National or International

- <sup>+</sup> indicates work with graduate student(s); ^ indicates work with undergraduate student(s); #indicates work with practicing teacher(s)
- 127. Buchheister, K., **Jackson, C.,** & Taylor, C. E. (2024, February). The Power of Paramount Tasks in Mathematics Teaching and Learning. Session presented at the 2024 Association of Mathematics Teachers Educators Conference, Orlando, FL.
- 126. Kebreab, L., Bush, S. B., Hahs-Vaughn, D., Safi, F., Andreasen, J., & **Jackson, C.** (2023, October). Belonging and Boundary Crossing Establishing a Mathematical Belongingness Construct: Exploratory factor analysis of NCES's high school longitudinal study 2009. Session at the North American Chapter of the International Group for the Psychology of Mathematics Education, Reno, NV.
- 125. Pierce, K. M., **Jackson, C.,** Ott, E., & Floyd, A. (2023, July). Who gets to be included? Critical analysis of the mathical prize books 2015-2023. 2023 LLA Summer Institute Teaching Readers (Not Reading). Virtual Conference.
- 124. Edelqq010000091,210. 61,27792preW On B7/Fslott 1.04 Bfilsl0, 8.1B7/0344rd 93139 eThen34MT/036ft 2dddetd0.128Qq0.00000912 0
  Roberts, T., Maiorca, C., Ivy, J., Burton, M., Cox Jr., R., & Perrin, A. (2023, October). Participant centered research in STEM education using photo elicitation and photovoice. Presentation to be Treathers BedSchool Science and Mathematics Association Annual Convention. Colorado Springs, Co.
- 123. **Jackson, C.,** Taylor, C., & Buchheister, K. (2023, February). *What-How-Who: A Lesson Planning Framework*. Session presented at the 2023 Association of Mathematics Teachers Educators Conference, New Orleans, LA.
- 122. Roberts, T., **Jackson, C.,** Maiorca, C., Mohr-Schroeder, M., Bush, S. B., & Cook, K. (2022, October). *Integrated STEM as Problem-Solving Practices*. Session presented at the 2022 School Science and Mathematics Association Convention, Missoula, MT.
- 121. Edelen, D., Schroeder, D. C., Roberts, T., Maiorca, C., Ivy, J. T., Cook, K. L., Tripp, L. O., Burton, M., Alameh, S., **Jackson, C.,** Bush, S. B., & Mohr-Schroeder, M. J. (2022, October). *Belonging, Becoming, and STEM Identity Development: A Photo Elicitation Investigation*. Session presented at the 2022 School Science and Mathematics Association Convention, Missoula, MT.
- 120. **Jackson, C.** (2022, September). *President Series: STEM-ifying the Beauty of Mathematics*. Session presented at the annual National Council of Teachers of Mathematics Conference, Los Angeles, CA.
- 119. Bush, S. B., **Jackson, C.**, Roy, G. (2022, September). Catalyzing Change: Broaden the Purposes of Learning Mathematics in Middle School

- 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*.

- the purposes of learning mathematics and dismantling inequitable structures. Session 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 R0 1 44f\*12.72 rechetional R31/Lang (en-US) DC q0.00000912 0 6

- 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.

- 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., ^

- 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

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

- 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

scientific development as they engage in an integrated mathematics/science Earth-Space unit. Presentation at the annual conference at the

10. **Jackson, C.** (2012, October). *Diversity in STEM* –

#### https://www.slu.edu/news/2021/november/meet-a-slu-researcher-christa-jackson.php

1. Bush, S. B. & **Jackson, C**. (2021). A look at mathematics: PreK-12 and Postsecondary. Represented NCTM as part of a larger panel for the Charles A. Dana Center Launch Years Math Organizations Leadership Network.

### Ad/Hoc Reviewer

2023-present	Journal of Catholic Education
2022-present	Journal of African American Women and Girls in Education
2020	Online Learning in Mathematics Education book
2020-present	Teacher Educator
2020-present	Investigations in Mathematics Learning
2020-present	

# Saint Louis University

2022 Audrey Floyd
2021 Debra Goldstein
2021 Christine Pickett

# **Doctoral Students Supervised**

State University, \*University of Kentucky, +Saint Louis University

Year	Name	Role	Dissertation Title
Completed			
2022	<sup>+</sup> Brittney Ellis		

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

·	
2019	Co-author, <b>Top downloaded article</b> 2017-2018 and <b>recognized as top 20 most read paper</b> in <i>School Science and Mathematics:</i> Mohr-Schroeder, M. J., <b>Jackson, C.</b> , 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. <i>School Science and Mathematics</i> , <i>117</i> (5), 214-222.
2019	<i>Teaching Children Mathematics</i> Featured Article, National Council of Mathematics Twitter Chat (2019, January): Buchheister, K., <b>Jackson, C.,</b> & Taylor, C. E. (2019). "Sliding" into an equitable lesson. <i>Teaching Children Mathematics</i> , 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., <b>Jackson, C.,</b> & Taylor, C. E. (2019). What-how-who: Developing mathematical discourse. <i>Mathematics Teaching in the Middle School</i> , 24(4), 202-209. doi: 10.5951/mathteacmiddscho.24.4.0202.
2015	PI/Co-PI, National Science Foundation (EPSCoR Track 3), <b>Utilizing STEM Camps and STEM Clubs</b>

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	

2023 2023 2023 2023 2023 2022–present 2022 2021 2021 2021 2021 2021 2021	School of Education, 5YP Research Growth Team School of Education, Search Committee for School of Education Assistant Dean for the Teacher Education Programs School of Education, Search Committee for Undergraduate Paraprofessional Program School of Education, Search Committee for Non Tenure Track Assistant Professor School of Education, Research Growth Team School of Education, Pre-Commencement Ceremony Marshall School of Education, Visiting Professor in Teacher Ed/Special Ed Search Committee School of Education, Portfolio II Reviewer School of Education, Third Year Review Committee, J. Cameron Anglum Faculty Mentor, Debra Goldstein and Katrice Noble School of Education Rank and Tenure Committee School of Education Educational Studies Graduate Faculty
2021	School of Education Undergraduate Educational Studies Faculty  y Service at Iowa State University
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2019 2017	College of Human Sciences Marshal, Spring Convocation 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	y-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
	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager
2015, 2016 2015	Member, 4-H Search Committee for Program Manager I–Educational Opportunities
2015	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager
2015 <u>College o</u> 2019–2021	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences
2015 <u>College o</u> 2019–2021 2019–2021	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee
2015 <u>College o</u> 2019–2021 2019–2021 2015–2019	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee Member, Education Preparation Coordinating Council
2015 <u>College o</u> 2019–2021 2019–2021	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee Member, Education Preparation Coordinating Council Grant Reviewer, College of Human Sciences Innovative Teaching Grant
2015 <u>College o</u> 2019–2021 2019–2021 2015–2019 2015 2015	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee Member, Education Preparation Coordinating Council
2015 <u>College o</u> 2019–2021 2019–2021 2015–2019 2015 2015 <u>School of</u>	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee Member, Education Preparation Coordinating Council Grant Reviewer, College of Human Sciences Innovative Teaching Grant Presenter, Iowa State University Math Club for Future Teachers
2015  College of 2019–2021 2019–2021 2015–2019 2015 2015 School of 2019–2021	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  If Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee Member, Education Preparation Coordinating Council Grant Reviewer, College of Human Sciences Innovative Teaching Grant Presenter, Iowa State University Math Club for Future Teachers  Education Service at Iowa State University  School of Education Promotion and Tenure Committee
2015  College of 2019–2021 2019–2021 2015–2019 2015 School of 2019–2021 2018–2021	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee Member, Education Preparation Coordinating Council Grant Reviewer, College of Human Sciences Innovative Teaching Grant Presenter, Iowa State University Math Club for Future Teachers  Education Service at Iowa State University  School of Education Promotion and Tenure Committee Third Year Review Committee
2015  College of 2019–2021 2019–2021 2015–2019 2015 2015 School of 2019–2021	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee Member, Education Preparation Coordinating Council Grant Reviewer, College of Human Sciences Innovative Teaching Grant Presenter, Iowa State University Math Club for Future Teachers  Education Service at Iowa State University  School of Education Promotion and Tenure Committee Third Year Review Committee Computer Advisory Committee
2015  College of 2019–2021 2019–2021 2015–2019 2015 School of 2019–2021 2018–2021 2019–2020	Member, 4-H Search Committee for Program Manager I–Educational Opportunities Manager Presenter, Panel on Key Topics for Family Members Orientation  of Human Sciences Service at Iowa State University  Equity Advisor, College of Human Sciences Co-chair, Diversity, Equity, and Community Committee Member, Education Preparation Coordinating Council Grant Reviewer, College of Human Sciences Innovative Teaching Grant Presenter, Iowa State University Math Club for Future Teachers  Education Service at Iowa State University  School of Education Promotion and Tenure Committee Third Year Review Committee

2016	December Teacher Education Cording Ceremony
2016	Panelist, School of Education Freshman Learning Community
2016	Presenter, ISU 4U Promise Practica Video
2015	Presenter, School of Education Professor Panel for Tomorrow's Teacher's
	Learning Community
2015-2016	Member, Undergraduate Studies Committee
2014-2021	Member, Education for Social Justice Collective
2014-2015	Member, Center for Excellence in Science, Mathematics and Engineering
	Education

#### School of Education Standing and Ad Hoc Committees at Iowa State University

2018-2019	Chair, School of Education, Educational Psychology/Learning Sciences
	Assistant Professor Search Committee
2017-2021	Panelist, School of Education Faculty for Elementary Education Majors
2016-2021	Panelist, School of Education Faculty for Transfer/Change of Major Students
2014-2021	Member, ISU 4U Promise (formerly King and Moulton Pathways Project)
2016	Presenter, School of Education Lunch & Learn
2015	Participant, School of Education Ribbon Cutting
2014, 2015	Member, Search Committee, Associate Director for Educator (Teacher and
	Administrator) Preparation

# University Service at University of Kentucky

2013 Marshall, Undergraduate Commencement Ceremony

#### University-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	Co-Director, P20 STEM Innovation Lab
2011	Judge, STEM Symposium Posters, Second Annual Meeting of STEM Education

### College of Education Standing and Ad Hoc Committees at University of Kentucky

2010-2014	Member, Mathematics Education Program Faculty
2010-2014	Member, Middle School Teacher Education Program Faculty
2010-2014	Supervisor, Elementary and Middle Level Education Practicum Students in Field
	Placements
2012-2014	Member, Task Force on Inclusiveness
2012-2014	Co-Advisor, STEM Club
2011-2014	Member, Scholarship Committee
2011	Chair, Undergraduate Redesign for Middle School Education
2011	Member, Master Redesign for Middle School Education

### 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 Education

#### Public Service

2023	NASA OSTEM K-12 Outcome Assessment – Expert Review Panel
2018	Iowa Space Grant 2018-2019 Preservice Scholarship Reviewer
2017-present	Mentor, Cathrine Maiorca California State University Long Beach College of
-	Education
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