

Courtney K. Baker

4400 University Drive, MSN 1E8
George Mason University
Fairfax, VA 22030

Email: cbaker@gmu.edu
Phone: (703) 993-5081

EDUCATION

- 2014 Ph.D. **George Mason University** – Fairfax, VA
Specialization: Mathematics Education Leadership
Secondary Concentration: Teaching and Teacher Education
Dissertation: *A Case Study of Novice Teachers' Mathematics Problem Solving Beliefs and Perspectives*
Dissertation Chair: Margret Hjalmarson
- 2008 M. A. **George Mason University** – Fairfax, VA
Endorsement: K-8 Mathematics Specialist Leader
Thesis: *Incorporating Problem Solving in Kindergarten Classrooms*
- 2004 **George Mason University** – Fairfax, VA
PK-6 Elementary Education License
- 2002 B.S. **Virginia Polytechnic Institute & State University** – Blacksburg, VA
Animal and Poultry Science
Emphasis: Equine Science

ACADEMIC POSITIONS

- Fall 2023-Present **George Mason University** – Fairfax, VA
College of Education & Human Development
Associate Professor, Mathematics Education Leadership
- Fall 2019-Summer 2023 **George Mason University** – Fairfax, VA
College of Education & Human Development
Assistant Professor (Tenure-Track), Mathematics Education Leadership
- Fall 2014-Summer 2019 **George Mason University** – Fairfax, VA
College of Education & Human Development
Assistant Professor (Term), Mathematics Education Leadership
- Fall 2016-Present **George Mason University** – Fairfax, VA
College of Education & Human Development
Academic Program Coordinator, Mathematics Education Leadership
- Fall 2009-Summer 2014 **George Mason University** – Fairfax, VA
College of Education & Human Development
Adjunct Faculty
- Fall 2009-Spring 2013 **George Mason University** – Fairfax, VA
College of Education & Human Development
Graduate Research Assistant

CONSULTING

- July 2020-August 2020 **Trinity Lutheran School** – Newport News, VA
Mathematics & Synchronous Online Learning Consultant
- June 2019-July 2019 **Virginia Commonwealth University** – Richmond, VA
Consultant for Mathematics Teacher Leader Professional Development Design
- August 2018-March 2019 **Middleburg Community Charter School** – Middleburg, VA
Professional Development Facilitator & Consultant for K-5 Educators
- July 2015-June 2020 **Manassas City Public Schools** – Manassas, VA
Professional Development Facilitator for Mathematics Coaches

PROFESSIONAL POSITIONS

- 2011-2014 **Virginia Run Elementary School** – Centreville, VA
Mathematics Resource Teacher
- 2012-2014 **Fairfax County Public Schools** – Fairfax, VA
Teacher Intervention Team Program Consultant
- 2009-2011 **Clearview Elementary School** – Herndon, VA
Mathematics Consultant
- 2006-2009 **Eagle View Elementary School** – Fairfax, VA
Second & Fourth Grade Teacher
- 2004-2006 **Parklawn Elementary School** – Fairfax, VA
Fourth Grade Teacher

RESEARCH INTERESTS

- Development of mathematics specialists (school- & district-level), coaches, and teacher leaders
- Self-study methodology; specializing in dialogue and critical friendship
- Synchronous online teaching; specializing in leadership
- Design-based implementation research with district partnerships

RESEARCH AND SCHOLARSHIP**Peer-Reviewed Research Articles**

Baker, C. K., Livers, S., Hjalmanson, M., Saclarides, E. S., Harbour, K., & Brown, K. (2024). Research publication and design trends in mathematics-specific teacher leadership: A systematic review. *School Science and Mathematics*. doi.org/10.1111/ssm.12661

Anderson, R. K., Donaldson, S., Troutt, M., **Baker, C. K.**, & Woods, D. M. (2024). A Collective Reflection for Change Framework: Structured Support for Mathematics Teacher Educator Practice Transformation. *Mathematics Teacher Educator*, 13(1), 297-311. doi.org/10.5951/MTE.2023-0010

- Bolyard, J. J. & **Baker, C. K.** (2024). An examination of how content-specific leadership is negotiated: District-based mathematics specialists' sense-making of their leadership role. *Investigations in Mathematics Learning*, 1-20. doi.org/10.1080/19477503.2024.2391257
- Holincheck, N. M., Kraft, T., Galanti, T. M., **Baker, C. K.**, & Nelson, J. K. (2024). Everybody was included in the conversation: Teachers' perceptions of student engagement in transdisciplinary STEM learning in diverse elementary schools. *Education Sciences*, 14(3), 242. doi.org/10.3390/educsci14030242
- Baker, C.**, Hjalmarson, M., & Fennell, F. (2023). Advancing Research about Mathematics Specialists and Mathematics Teacher Leaders. *Investigations in Mathematics Learning*, 15(1), 1-10. <https://doi.org/10.1080/19477503.2022.2154061>
- Galanti, T., & **Baker, C.** (2023). Transforming assessment in online STEM Learning: Preparing teachers to integrate computational thinking in elementary classrooms. *Contemporary Issues in Technology & Teacher Education*, 23(4), 602-624.
- Baker, C. K.** & Edwards, K.* (2023). Embedding photovoice to transform a mathematics specialist course assignment: A self-study on developing mathematics teacher educator anti-racist pedagogical praxis. *Philosophy of Mathematics Education Journal*, 40, 1-23.
- Donaldson, S., Anderson, R., **Baker, C. K.**, Troudt, M., & Woods, D. M. (2023). Stuck in our whiteness: The power of student feedback for perspective-taking within collaborative self-study. *Philosophy of Mathematics Education*, 40, 1-26.
- Baker, C. K.**, Hjalmarson, M. A., & Fennell, F. (2022). Mathematics specialists as school-based leaders: Adapting responsibilities to address shifts in teaching and learning. *Investigations in Mathematics Learning*, 1-21. doi.org/10.1080/19477503.2022.2043664
- Baker, C. K.**, Galanti, T. M.*, Kraft, T.*, Holincheck, N., Hjalmarson, M. A., & Nelson, J. (2022). Researchers as coaches: Developing mathematics teaching capacity using MEAs for STEM integration. *Investigations in Mathematics Learning*, 1-21. doi.org/10.1080/19477503.2021.2023966
- Baker, C. K.**, Saclarides, E. S., Harbour, K., Hjalmarson, M., Livers, S., & Edwards, K. C.* (2021). Trends in mathematics specialist literature: Analyzing research spanning four decades. *School Science and Mathematics*. doi.org/10.1111/ssm.12507
- Baker, C. K.** & Bitto, L. E. (2021b). Interrogating the tensions of becoming antiracist mathematics teacher educators via critical friendship and rehearsals. *Studying Teacher Education*, 1-18. doi.org/10.1080/17425964.2021.1997737
- Baker, C. K.** (2021). Learning to design effective professional development: The influence of integrating a coaching tool with an elementary mathematics specialist course assignment. *Journal of Mathematics Teacher Education*. <https://doi.org/10.1007/s10857-021-09507-2>
- Baker, C. K.**, Jamieson, S.#, Paul, A.*, Kibler, S.*, Eaglen, A.*, & Kraft, T*. (2021). Developing equity-centered leadership knowledge and skills via lesson study in an online mathematics specialist program. *Journal of Mathematics and Science: Collaborative Explorations*, 17(1), 45-52. <https://doi.org/10.25891/jhew-kt38>

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

- Baker, C. K.**, Ellington, A., & Haver., W. (2021). Mathematics teacher leadership preparation, mentorship, and service: Communities of practice through online modalities. *Journal of Mathematics and Science: Collaborative Explorations*, 17(1), 1–9. <https://doi.org/10.25891/xsz6-zg22>
- Galanti, T. M.* , **Baker, C. K.**, Morrow-Leong, K., & Kraft, T.* (2021). Enriching TPACK in mathematics education: Using digital interactive notebooks in synchronous online learning environments. *Interactive Technology and Smart Education*, 18 (3), 345-361. <https://doi.org/10.1108/ITSE-08-2020-0175>
- Galanti, T. M.* , Frank, T. J., & **Baker, C. K.** (2021). Hyper-acceleration of Algebra I: Diminishing opportunities to learn in secondary mathematics. *Journal of Mathematics Education at Teachers College*, 12(1), 43–50. <https://jmetc.columbia.edu/>
- Baker, C. K.** & Bitto, L. E. (2021a). Fostering a critical friendship between a program coordinator and an online adjunct to achieve reciprocal mentoring. *Studying Teacher Education*, 17(2), 188–207. <https://doi.org/10.1080/17425964.2021.1903413>
- Bolyard, J. J. & **Baker, C. K.** (2021). Examining the practice of elementary mathematics specialists through narratives: Implications for professional learning and development. *Professional Development in Education*. <https://doi.org/10.1080/19415257.2021.1876150>
- Suh, J. M., Birkhead, S.* , Frank, T., **Baker, C.**, Galanti, T.* , & Seshaiyer, P. (2021). Developing an asset-based view of students’ mathematical competencies through learning trajectory-based lesson study. *Mathematics Teacher Educator*, 9(3), 229–245. <https://doi.org/10.5951/MTE.2020.0033>
- Hjalmanson, M. A. & **Baker, C. K.** (2020). Mathematics specialists as the hidden players in professional development: Researchable questions and methodological considerations. *International Journal of Science and Mathematics Education*, 18(1), 51–66. <https://doi.org/10.1007/s10763-020-10077-7>
- Baker, C.** & Knapp, M. (2019). The decision-making protocol for mathematics coaching: Addressing the complexity of coaching with intentionality and reflection. *Mathematics Teacher Educator*, 7(2), 27–43. <https://doi.org/10.5951/mathteaceduc.7.2.0027>
- Baker, C.** & Hjalmanson, M. (2019). Designing purposeful interactions to advance synchronous learning experiences. *International Journal of Web-based Learning and Teaching Technologies*, 14(1), 1–16. <http://dx.doi.org/10.4018/IJWLTT.2019010101>
- Baker, C. K.**, Galanti, T. M.* , Graham, J.#, Hayden, K.* , & Bailey, P. (2018). From book club to professional learning community: Empowering a network of mathematics specialists. *School-University Partnerships*, 11(4), 48–63. <http://napds.org/journal/>
- Baker, C. K.** & Galanti, T. M.* (2017). Integrating STEM in K-8 classrooms using model-eliciting activities: Responsive professional development for mathematics teacher leaders. *International Journal of STEM Education*, 4(10). <https://doi.org/10.1186/s40594-017-0066-3>
- Groth, L.A., Parker, A., Parsons, S.A., Sprague, D., Brown, E. L., **Baker, C.**, & Suh, J. (2017). George Mason University’s elementary PDS program: Embracing innovation. *School-University Partnerships*, 10(1), 3–5. <http://napds.org/journal/>

Peer-Reviewed Books

Baker, C. & Knapp, M. (2023). *Proactive Mathematics Coaching: Bridging Content, Context, and Practice*. National Council of Teachers of Mathematics.

Refereed Book Chapters

Woods, D., **Baker, C.**, Anderson, R. K., Donaldson, S., & Troudt, M. (2024). Seeking to unsettle and break through whiteness: Enacting self-study to engage in antiracist pedagogy as mathematics teacher educators. In B. Butler & J. Ritter (Eds.) *Professional Learning Journeys of Teacher Educators* (pp. 205-217). Information Age Publishing.

Baker, C. K., Troudt, M., Anderson, R., Donaldson, S., & Woods, D. (2023). Becoming together: Interrogating antiracism in teacher education through critical self-study. In G. Martinez-Alba, A. Hersi, and L. Herrera (Eds.). *Antiracist teacher education: Theory and practice* (pp. 1-14). Association of Teacher Educators.

Baker, C. K. & Hjalmarson, M. (2021). Designing purposeful student interactions to advance synchronous learning experiences. In Management Association, Information Systems (Ed.). *Research anthology on developing effective online learning courses* (pp. 1228–1245). IGI Global. <http://dx.doi.org/10.4018/978-1-7998-8047-9>

Galanti, T. M.*, **Baker, C. K.**, Kraft, T.*, & Morrow-Leong, K. (2021). Using mathematics digital interactive notebooks as authentic integrated online assessments. In M. Neiss & H. Gillow-Willes (Eds.). *Handbook of research on transforming teachers' online pedagogical reasoning for engaging K-12 students in virtual learning* (pp. 470–493). IGI Global. <https://doi.org/10.4018/978-1-7998-7222-1>

Hjalmarson, M., Holincheck, N., **Baker, C.**, & Galanti, T.* (2020). Modeling in STEM learning. In C. Johnson, M. Mohr-Schroeder, T. Moore, & L. English (Eds.). *Handbook of research on STEM education* (pp. 223–233). Routledge.

Baker, C. K., Bitto, L., Wills, T., Galanti, T. M.*, & Eatmon, C.* (2018). Developing teacher leaders through self-study: A mathematics education field experience. In Hodges, T. E. & Baum, A. (Eds.). *Handbook of research on teacher education* (pp. 635–658). IGI Global.

Gallagher, M. A., Parsons, S. A., Parker, A. K., Groth, L., Brown, E. L., **Baker, C.**, & Suh, J. M. (2018). The importance of collaboration: Embedding courses in clinical practice. In K. Zenkov & K. Pytash (Eds.), *Clinical experiences in teacher preparation: Critical, project-based interventions in diverse classrooms* (pp. 49–70). Routledge.

Baker, C., Bailey, P., Larsen, S., & Galanti, T.* (2017). A critical analysis of emerging high-leverage practices for mathematics specialists. In M. McGatha & N. Rigelman (Eds.). *Elementary mathematics specialists* (pp.183–192). Association of Mathematics Teacher Educators.

Baker, C. K., Bailey, P., Hjalmarson, M. A., & King, L.* (2017). Mentoring mathematics teacher leaders: Guiding the transition from classroom teacher to agent of change. In Kent, A.M. & Green, A.M. (Eds.). *Across the domains: Examining best practices in mentoring public school educators* (pp.189–202). Information Age Publishing.

Suh, J. M., Birkhead, S.* **Baker, C.**, Frank, T., & Seshaiyer, P. (2017). Leveraging coach-facilitated professional development to create teacher networks for enhancing professional practice. In L. West & M. Boston (Eds.), *Annual perspectives in mathematics*

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

education: Reflective and collaborative processes to improve mathematics teaching (pp. 89–100). National Council of Teachers of Mathematics.

Suh, J. M., Sprague, D. R., & **Baker, C. K.** (2016). Transforming mathematics teacher knowledge in the digital age through iterative design of course-based projects. In Niess, M., Driskell, S., & Hollebrands, K. (Eds.), *Handbook of research on transforming mathematics teacher education in the digital age* (pp. 190–214). IGI Global.

Peer-Reviewed Practitioner Articles & Newsletters

Knapp, M., & Baker, C. (2024). Proactive Coaching: Bridging Content, Context, and Practice. *Mathematics Teacher: Learning and Teaching PK-12*, 117(6), 461-463.

Harbour, K., Livers, S., Hjalmarson, M., Saclarides, E. S., & **Baker, C. K.** (2022). Collaborative and sustained professional development with mathematics coaches. *Kappa Delta Pi Record*, 58(1), 32-37. doi.org/10.1080/00228958.2022.2005432

Baker, C. K., Galanti, T. M.*, Morrow-Leong, K., & Kraft, T*. (2021). Building powerful mathematical thinkers with digital interactive notebooks. *Mathematics Teacher: Learning and Teaching Pre-K-12*, 114(10), 750-758. doi.org/10.5951/MTLT.2020.0342

Baker, C. K., Rigelman, N., & Knapp, M. (2021). Examining the learning potential for rehearsals when working with mathematics teacher leaders. *Connections*, 30(4). Retrieved from <https://amte.net/connections/summer-2021>

Baker, C., Hjalmarson, M., & Fennell, F. (2021). Mathematics specialists/coaches and COVID-19: Professional learning needs and support. *Inspiration!* 51(3). Retrieved from <https://www.mathedleadership.org/pubtype/inspiration/>

Anderson, R. K., **Baker, C. K.**, Donaldson, S., & Troutt, M. L. (2020). Pursuing anti-racist practice through collaborative noticing and wondering. *Connections*, 30(2). Retrieved from <https://amte.net/connections/winter-2020>

Baker, C. & Wallace, A. (2019). Notes from the field: A mathematics teaching and learning resource bar none. *Virginia Mathematics Teacher*, 45(2). Retrieved from <http://www.vctm.org/VMT-Spring-2019>

Baker, C., Knapp, M., & Galanti, T. M.* (2018). Coaches engage with principles to action. *Teaching Children Mathematics*, 25(1), 36–45. <http://dx.doi.org/10.5951/teachilmath.25.1.0036>

Baker, C. & Wills, T. (2012). Technology from the Classroom: Have you used a glog yet? *Teaching Children Mathematics*, 19(5), 324–327. <https://doi.org/10.5951/teachilmath.19.5.0324>

Non-Refereed Publications

Mason MEC Collaborative Published Lesson

George Mason University's Mathematics Education Center & Manassas City Public Schools. (2024). Grade 1 Box Turtle Model-Eliciting Activity. <https://cehd.gmu.edu/assets/docs/mec/Grade1TurtleMEAMasonMEC.pdf>

Mason MEC Advocacy Brochures & Resources

George Mason University's Mathematics Education Center. (2024). Implementing Research-Informed Evidence-Based Mathematics Teaching.

<https://cehd.gmu.edu/assets/docs/mec/Research%20Informed%20Math%20Trifold.pdf>
<https://cehd.gmu.edu/assets/docs/mec/Research%20Informed%20Math%20Interactive.pdf>
<https://cehd.gmu.edu/assets/docs/mec/Research%20Informed%20Math%20Resources.pdf>

Mason MEC Advocacy Packet

George Mason University's Mathematics Education Center, Virginia Council of Mathematics Specialists, Virginia Council of Mathematics Supervisors, and Virginia Mathematics and Science Coalition (2023). Understanding the 2023 Virginia Mathematics Standards of Learning Revision Process: A Guide to Increase Transparency, Awareness, and Participation.

<https://cehd.gmu.edu/assets/docs/mec/Understanding%20the%202023%20Virginia%20Mathematics%20Standards%20of%20Learning%20Revision%20Process.pdf>

Invited Blog Post

Baker, C. (2017, April) When teacher candidates “do the math” with exemplars. *Exemplars*.

https://www.exemplars.com/blog/education/2607?utm_source=Master+Subscription+List&utm_campaign=ccb72d611b-20170427-anchorpaper-blog-A-B-PSCC&utm_medium=email&utm_term=0_bef865cbab-ccb72d611b-96728469

Invited Twitter Chats

Baker, C. & Knapp, M. (2018, September). Coaches engage with *Principles to Actions*. Teaching Children Mathematics Twitter Chat for Featured Articles.

PUBLICATIONS IN PROGRESS

Refereed Book Chapters In Progress

Bitto, L. E., & Baker, C. K. (in publication). An online adjunct's search for belonging to mathematics teacher education. In E. Suazo-Flores, S. E. Kastberg, M. Grant, and O. Chapman (Eds.), *Mathematics teacher educators' intimate scholarship: Being, knowing, and ethics*. Emerald Publishing.

Edwards*, K. C., & Baker, C. K. (in publication). A self-study on reconceptualizing notions of race and engaging in critical consciousness-building. In E. Suazo-Flores, S. E. Kastberg, M. Grant, and O. Chapman (Eds.), *Mathematics teacher educators' intimate scholarship: Being, knowing, and ethics*. Emerald Publishing.

Varier, D., Crawford, C., Baker, C. K., & Bolyard, J. J. (in revision). Cultivating a mutualistic partnership for ambitious mathematics teaching: A balancing act. In J. Senechal and H. Parkhouse (Eds.), *Navigating Issues of Equity in PK12 Schools through Research-Practice Partnerships: Stories from the Field*. Routledge.

SPONSORED RESEARCH ACTIVITIES

Funded Grants

C. Baker (PI) & D. Varier. *Advancing equitable and ambitious mathematics instruction: An exploration of the impact of math specialists*. (8/1/22-10/31/24). George Mason University, College of Education SEED Grant, \$6,905.

C. Baker (PI), M. Hjalmanson, N. Holincheck, & J. Nelson. *Model-eliciting activity design considerations to achieve K-8 STEM integration*. (02/01/2019 – 06/30/2020). George Mason

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

University, College of Education SEED Grant. Award Amount \$7,428.00.

C. Baker (PI), M. Hjalmanson, N. Holincheck, & J. Nelson. *Model-eliciting activity design considerations to achieve STEM integration*. (01/26/2018 – 06/30/2019). George Mason University, College of Education SEED Grant. Award Amount \$8,392.00.

Research Associate and Faculty. (With P. Seshaiyer, J. Suh, & T. Frank) *Transitions: Transforming mathematics instruction through mathematical modeling, algebraic thinking, and proportional reasoning, teaching and assessing*. (03/01/2015 – 09/30/2018). Virginia Department of Education. Award Amount \$711,114.

Research Associate and Faculty. (With P. Seshaiyer, J. Suh, & T. Frank) *Developing rational numbers and proportional reasoning through math modeling and performance-based assessments: Teaching and assessing Virginia's 2009 6-8 mathematics standards of learning*. (03/01/2014 – 09/30/2015) Virginia Department of Education. Award Amount \$211,456.

Advisory Boards

Advisory Board Member. Ellington, A. (PI), Trinter, C. (Co-PI), & Whitenack, J (Co-PI). *The Virginia mathematics specialist initiative: An online program to prepare K-8 mathematics teacher leaders for high-needs school districts*. (05/01/2017 – 04/30/2022). National Science Foundation: Robert Noyce Scholarship Program. Award Amount \$1,499,991.

HONORS, AWARDS & RECOGNITIONS

2024	William C. Lowry Mathematics Educator of the Year Award: University Level Virginia Council of Teachers of Mathematics
2022	Best Paper Nomination for Technology as an Agent of Change in Teaching and Learning Special Interest Group: American Educational Research Association
2020	Association of Mathematics Teacher Educators Service Teaching and Research (STaR) Fellow
2020	Spotlight Speaker for the 2020 National Council of the Supervisors of Mathematics National Conference
2019	George Mason University Online Teacher of Distinction
2019	Spotlight Speaker for the 2019 National Council of the Supervisors of Mathematics National Conference
2019	Leadership Exchange Facilitator for the 2019 National Council of the Supervisors of Mathematics National Conference
2015	Research on Teacher Induction Outstanding Dissertation Award: Second Place American Educational Research Association
2015	Online Teaching Initiative Essentials Completion Badge
2008	Academic Award for Mathematics Education Leadership George Mason University – Fairfax, VA

PRESENTATIONS

Invited Presentations

- Baker, C.** & Knapp, M. (2024, April 17). *Proactive mathematics coaching: Bridging content, context, and practice*. [New York State Association of Mathematics Supervisors Webinar].
- Baker, C.**, Livers, S., Hjalmarson, M., Saclarides, E. S., & Harbour, K. (2024, May 29). *Research publication and design trends for school-based mathematics specialists and teacher leaders*. [Invited Keynote Presentation]. SyncOn II Conference, Boulder, CO.
- Baker, C. (2023, September 23). *Engaging in Proactive Coaching*. [Invited Keynote Presentation]. Virginia Council of Mathematics Specialists Annual Conference, Fredericksburg, VA.
- Baker, C.** & Knapp, M. (2023, September 13). Proactive mathematics coaching: Bridging content, context, and practice, [Audio podcast episode]. In *Teaching math teaching podcast*. <https://www.teachingmathteachingpodcast.com/80>
- Baker, C.** (2023, June 12). *Synergize and energize: Virtual discussion and networking event for K-12 math specialists and math supervisors across Virginia*. [Virginia Council of Mathematics Specialists & Virginia Council for Mathematics Supervision Webinar]. https://drive.google.com/file/d/1AAk6CvYQN2jxvY2Xm2P7ntr_LHIK83Fn/view
- Baker, C.**, Gómez Marchant, C. N., Munson, J., & Wilhelm, A. (2022, June 15). *Establishing your research agenda and turning your dissertation into a publication*. [Association of Mathematics Teacher Educators Webinar]. <https://amte.net/webinars>
- Baker, C.** & Knapp, M. (2019, August). The decision-making protocol for mathematics coaching: Addressing the complexity of coaching with intentionality and reflection [Audio podcast episode]. In *Mathematics teacher educator podcast*. <https://mtepodcast.amte.net/>

Refereed Presentations

- Varier, D., **Baker, C. K.**, Bolyard, J., Crawford, C., & Brown, N. (2024, April 11-14). Persuasive and innovative: Mixed methods in service of research-practice partnerships [Roundtable discussion]. Annual Meeting of the American Educational Research Association, Philadelphia, PA.
- Baker, C. K.**, & Edwards, K. C.* (2022, September 28-29). Using photovoice to catalyze mathematics teacher leaders' professional learning design. [Poster presentation]. NCTM Research Conference.
- Harbour, K. E., Hjalmarson, M. A., Livers, S. D., **Baker, C. K.**, Saclarides, E. S., & Edwards, K. C.* (2022, November 17-20). A critical literature synthesis on methodological and dissemination considerations around mathematics specialists. [Paper presentation]. In A. Lischka, J. Strayer, J. Lovett, R. S. Jones, & E. Dyer (Eds.), *Proceedings of the 44th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 976-981). Nashville, Tennessee

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

- Galanti, T.* & **Baker, C.** (2022, April 21-26). Transforming assessment in online learning: Preparing teachers to integrate computational thinking in elementary classrooms [Paper presentation]. Annual Meeting of the American Educational Research Association, San Diego, CA.
- Baker, C. K.**, Edwards, K. C.*, Harbour, K. E., Saclarides, E. S., Hjalmarson, M. A., & Livers, S. D., (2022, January 7). Synthesizing research to elevate mathematics specialist positioning [Paper presentation]. NCTM Research Conference.
- Ward, J. & **Baker, C.** (2021, April 8-12). Making sense of, assuming responsibility for, and conceptualizing the possibilities for teacher education in a changing world [Paper presentation]. Annual Meeting of the American Educational Research Association, Virtual Online Conference.
- Galanti, T.*, **Baker, C.**, Morrow-Leong, K., & Kraft, T.* (2021, April 8-12). Graduate communities of inquiry foster a vision of effective pre-K–12 mathematics distance teaching [Paper presentation]. Annual Meeting of the American Educational Research Association, Virtual Online Conference.
- Saclarides, E. S., **Baker, C.**, Mudd, A., Livers, S., Harbour, K., Hjalmarson, M. (2020, October 14-18). An exploration of mathematics teacher leaders in PME-NA proceedings from 1984-2019 [Paper presentation]. In A.I. Sacristán, J.C. Cortés-Zavala, & P.M. Ruiz-Arias (Eds.), Proceedings of the 42nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 1828–1836). Mexico, Cinvestav. <http://dx.doi.org/10.51272/pmena.42.2020>
- Hjalmarson, M., Saclarides, E. S., Harbour, K., Livers, S., & **Baker, C.** (2020, October 14-18). Mathematics specialists and teacher leaders: An ongoing qualitative synthesis [Paper presentation]. In A.I. Sacristán, J.C. Cortés-Zavala, & P.M. Ruiz-Arias (Eds.), Proceedings of the 42nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 1868–1872). Mexico, Cinvestav <http://dx.doi.org/10.51272/pmena.42.2020>
- Baker, C.** & Bitto, L. (2020, July 14–15). Learning to productively struggle with self-study through feedback and failed attempts [Paper presentation]. 13th International Conference on Self-Study of Teacher Education Practices, Textiles and Tapestries Self Study for Envisioning New Ways of Knowing, Herstmonceux, UK.
- Baker, C.**, Galanti, T.*, Bitto, L., Wills, T. & Eatmon, C. C.* (2019, November 14-17). Acquiring a stance on equity and social justice within an online mathematics specialist program [Paper presentation]. In S. Otten, Z. de Arujo, A. Candela, & C. Munter (Eds.), Proceedings of the 41st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 632–640). St. Louis, MO: University of Missouri. <http://www.pmena.org/proceedings/>
- Baker, C.**, Kraft, T.*, & Galanti, T*. (2019, November 14-17). More than doing a “good job”: Coaching for meaningful engagement with model-eliciting activities [Paper presentation]. In S. Otten, Z. de Arujo, A. Candela, & C. Munter (Eds.), Proceedings of the 41st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 655–659). St. Louis, MO: University of Missouri. <http://www.pmena.org/proceedings/>
- Eatmon, C. C.*, **Baker, C.**, Morrow-Leong, K., Wills, T. (2019, November 14-17). Number talks as a high-leverage method to foster equity in diverse classrooms [Paper presentation]. In S. Otten, Z. de Arujo, A. Candela, & C. Munter (Eds.), Proceedings of the 41st annual meeting of the

- North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 665–670). St. Louis, MO: University of Missouri.
<http://www.pmena.org/proceedings/>
- Brady, C., McLean, J., Jung, H., Dominguez, A., **Baker, C. K.**, & Glancy, A. (2019, November 14-17). Models and modeling working group [Paper presentation]. In S. Otten, Z. de Arujo, A. Candela, & C. Munter (Eds.), Proceedings of the 41st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 2026–2036). St. Louis, MO: University of Missouri. <http://www.pmena.org/proceedings/>
- Baker, C. K.**, & Bitto, L. (2019, April 5-9). A self-study of mathematics teacher educators in a blended mathematics specialist program [Paper presentation]. Annual Meeting of the American Educational Research Association, Toronto, Canada.
- Bolyard, J., & **Baker, C. K.** (2019, April 5-9). Examining the work of mathematics specialist or teacher leaders through agency, agenda and positioning [Paper presentation]. Annual Meeting of the American Educational Research Association, Toronto, Canada.
- Baker, C.**, Knapp, M., Hjalmarson, M., Rigelman, N., Bailey, P., & McGatha, M. (2017, October 5-8). Developing a research agenda of mathematics teacher leaders and their preparation and professional development experiences [Paper presentation]. In E. B. Galindo, J. Newton, S. Stump, & S. Kastberg (Eds.), Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 1489–1496). Indianapolis, IN: Purdue University.
<http://www.pmena.org/proceedings/>
- Baker, C.**, Galanti, T.* , & Birkhead, S.* (2017, October 5-8). STEM and model-eliciting activities: Responsive professional development for K-8 mathematics coaches [Paper presentation]. In E. B. Galindo, J. Newton, S. Stump, & S. Kastberg (Eds.), Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 439–446). Indianapolis, IN: Purdue University.
<http://www.pmena.org/proceedings/>
- Baker, C.**, Knapp, M., & Galanti, T.* (2017, October 5-8). Decision-making protocol for mathematics coaching: Connecting research to practice. In E. B. Galindo, J. Newton, S. Stump, & S. Kastberg (Eds.), Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (p. 535). Indianapolis, IN: Purdue University.
- Baker, C. K.**, Hjalmarson, M. A., Bailey, P. & King, L.* (2017, April 27-May 1). Mentoring mathematics teacher leaders: Guiding the transition from classroom teacher to agent of change [Paper presentation]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- Baker, C.**, Galanti, T. *, Suh, J. M., Seshaiyer, P. & Frank, T. (2016, November 3-6). Identifying barriers to teacher growth in implementing problem solving by reflecting on lesson study [Paper presentation]. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli (Eds.), Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 355–358). Tucson, AZ: The University of Arizona. <http://www.pmena.org/proceedings/>
- Suh, J. M., Birkhead, S. *, Seshaiyer, P., Frank, T., & **Baker, C.** (2016, November 3-6).

- The use of coach facilitated professional development to deepen algebraic thinking across the transition grades [Paper presentation]. In M. B. Wood, E. E. Turner, M. Civil, & J. A. Eli (Eds.), Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (p. 442). Tucson, AZ: The University of Arizona. <http://www.pmena.org/proceedings/>
- Parker, A. K., Parsons, S. Groth, L., Sell, C., Brown, E. L., **Baker, C.**, & Gallagher, M. (2016, February 13-16). School-based teacher preparation: Collaborating with PK-6 partners to re-conceptualize methods courses and field experiences [Paper presentation]. Annual meeting of the Association of Teacher Educators, Chicago, IL.
- Baker, C. K.**, Hjalmarson, M. A., Reybold, L. E., & Suh, J.M. (2015, April 16-20). The impact of beliefs and background on mathematical problem solving [Paper presentation]. Annual Meeting of the American Educational Research Association, Chicago, IL.
- Baker, C. K.**, Hjalmarson, M. A., & Reybold, L. E. (2013, April 27-May 1). The impact of beliefs and background on a first year teacher's problem solving [Paper presentation]. Annual Meeting of the American Educational Research Association, San Francisco, CA.

CONFERENCES

Peer-Refereed International Conferences

- Hjalmarson, M.A. & **Baker, C. K.** (2016, July 24-31). *Synchronous online courses for mathematics teacher Leaders* [Conference session]. 13th International Congress on Mathematical Education, Hamburg, Germany.

Invited National Conferences and Institutes

- Knapp, M. & **Baker, C.** (2024, Spring). *Catalyzing Change through Proactive Mathematics Coaching: Book Study*. [Invited virtual sessions]. National Council of Teachers of Mathematics Professional Development.
- Baker, C.**, & Knapp, M. (2023, October 25-28). *Leading with Intention: Navigating the Journey towards Equitable Coaching*. [Invited session]. National Council of Teachers of Mathematics Annual Conference, Washington, D.C.
- Baker, C.** & Knapp, M. (2023, Fall). *Unveiling the Proactive Coaching Framework: Book Study*. [Invited virtual sessions]. National Council of Teachers of Mathematics Professional Development.
- Baker, C. K.** (2023, August 3). *Supporting productive struggle: In upper elementary classrooms*. [Invited institute]. National Council of Teachers of Mathematics Professional Development, Plano, TX.
- Baker, C.** & Knapp, M. (2023, July 25). The proactive coaching framework: A National Council of Teachers of Mathematics Online Workshop, Online Author Spotlight.
- Baker, C.** & Edwards, K.* (2022, June 9). *Shifting agency in professional learning design via use of photovoice in an online mathematics specialist course*. [Invited Conference Presentation]. SyncOn Conference, Boulder, CO.

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

- Knapp, M. & **Baker, C.** (2021, August 25). *Enacting an intentional coaching practice: Practical uses for the Decision-Making Protocol for Mathematics Coaching* [Conference session]. Bend-LaPine Public Schools Professional Development Day, Bend, OR.
- Baker, C. K.**, & Knapp, M. (2018, April 1-3). *Math coaches enact principles to actions: Intentionally balancing content and context to make instructional shifts* [Invited pre-session workshop]. 50th Annual Meeting of the National Council of Supervisors of Mathematics, Washington, D.C.
- Baker, C.** & Knapp, M. (2017, June 6). *The decision-making protocol for mathematics coaches: Advancing your practice and school mathematics program* [Conference session]. National Mathematics Coaching Conference, Farmington, ME.
- Baker, C. K.** & Ward, J. (2016, July 21-23). *Base ten and place value: K-2* [Conference session]. National Council of Teachers of Mathematics Connecting Numbers and Operations in the Classroom Institute, Denver, CO.
- Baker, C. K.** & Ward, J. (2016, July 21-23). *Addition and subtraction: K-2* [Conference session]. National Council of Teachers of Mathematics Connecting Numbers and Operations in the Classroom Institute, Denver, CO.
- Baker, C. K.** & Ward, J. (2015, July 23-25). *Base ten and place value: K-2* [Conference session]. National Council of Teachers of Mathematics Connecting Numbers and Operations in the Classroom Institute, Chicago, IL.
- Bailey, P., Hjalmanson, M., **Baker, C.**, Bolyard, J., King, L*. (2015, May 18-19). *Ideal and reality, needs and support: Math specialist identity* [Conference session]. AMTE Elementary Mathematics Specialists Research Conference, Waukesha, WI
- Baker, C. K.** & Ward, J. (2015, July 23-25). *Addition and subtraction: K-2* [Conference session]. National Council of Teachers of Mathematics Connecting Numbers and Operations in the Classroom Institute, Chicago, IL.

Peer-Refereed National Conferences & Institutes

- Baker, C.**, Crawford, D.#, Bolyard, J., Edwards, K.C.*, & Varier, D. (2024, February 8-10). *Researching equity in K-12 mathematics: Navigating political, cultural tensions through a mutualistic partnership for inquiry*. [Conference session]. Association of Mathematics Teacher Educators National Conference, Orlando, FL.
- Livers, S. D., Harbour, K. E., Hjalmanson, M., **Baker, C.**, & Edwards, K.C.*. (2024, February 8-10). *Past, present, and future of mathematics specialist research agenda*. [Discussion session]. Association of Mathematics Teacher Educators National Conference, Orlando, FL.
- Knapp, M. & **Baker, C. K.** (2024, September 23-25). *The proactive coaching framework: Breaking through barriers to build a culture of action, reflection, and refinement*. [Invited pre-session workshop]. 55th Annual Meeting of the National Council of Supervisors of Mathematics, Washington, D.C.
- Hjalmanson, M. A., Fennell, F., & **Baker, C. K.** (2023, March 2-4). *Mathematics specialists and teacher leaders: Reflection and refraction*. [Conference session]. Research Council on Mathematics Learning National Conference, Las Vegas, NV.

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

- Baker, C. K.**, Edwards, K. C.,* Saclarides, E. S., Livers, S., Hjalmarson, M., & Harbour, K. (2023, February 2-4). *Synthesizing research to advance mathematics specialist research and practice*. [Conference session]. Association of Mathematics Teacher Educators National Conference, New Orleans, LA.
- Edwards, K. C.* & **Baker, C.** (2023, February 2-4.). *Shifting authority through antiracist pedagogy: The use of photovoice to support professional learning design*. [Conference session]. Association of Mathematics Teacher Educators National Conference, New Orleans, LA.
- Woods, D., Donaldson, S., Anderson, R., Troutt, M., & **Baker, C.** (2023, February 2-4.). “*Unsettling folks*” to move towards antiracist praxis through collaborative mathematics teacher educator self-study. [Conference session]. Association of Mathematics Teacher Educators National Conference, New Orleans, LA.
- Donaldson, S., Anderson, R., Woods, D., Troutt, M., & **Baker, C.** (2023, February 2-4.). *The collective reflection for change framework: Supporting journeys from recognizing positionality to antiracist praxis development*. [Conference session]. Association of Mathematics Teacher Educators National Conference, New Orleans, LA.
- Rigelman, N., **Baker, C. K.**, & Knapp, M. (2022, September 26-28). *Using rehearsals to support mathematics teacher leaders learning that supports effective and equitable practice*. [Conference session]. 54th Annual Meeting of the National Council of Supervisors of Mathematics, Anaheim, CA.
- Baker, C.**, & Galanti, T.* (2022, February 10-12). *Positioning coaches as mathematics teacher educators: Building school-based capacity to foreground mathematics in integrated STEM*. [Conference session]. Association of Mathematics Teacher Educators National Conference, Las Vegas, NV.
- Rigelman, N., **Baker, C.**, & Knapp, M. (2022, February 10-12). *Using rehearsals to support mathematics teacher leader learning about just practice*. [Conference session]. Association of Mathematics Teacher Educators National Conference, Las Vegas, NV.
- Rigelman, N., **Baker, C.**, & Knapp, M. (2021, February 11-13). *What do mathematics teacher leaders have the opportunity to learn through rehearsals?* [Conference session]. Association of Mathematics Teacher Educators National Conference, Online Virtual Conference.
- Galanti, T. * & **Baker, C.** (2021, February 11-13). *Using mathematics digital interactive notebooks as authentic online assessments* [Conference session]. Association of Mathematics Teacher Educators National Conference, Online Virtual Conference.
- Baker, C. K.**, & Knapp, M., & (2020, March 30-31). *Why be a lucky coach, when you can be a great coach?* [Conference session]. National Council of Supervisors of Mathematics Virtual Conference, San Diego, CA.
<https://www.mathedleadership.org/events/conferences/virtual/Tuesday.html>
- Rigelman, R., Knapp, M., & **Baker, C. K.** (2020, March 30-31). *Don't regret, rehearse! Making challenging conversations a site for mathematics teacher leader learning* [Conference session]. Annual Meeting of the National Council of Supervisors of Mathematics, San Diego, CA. (Conference canceled)

- Kirschner, S.*, & **Baker, C. K.** (2020, February 6-8). *Using number talks to explore preservice teachers' mathematical knowledge for teaching* [Conference session]. Presented at the Association of Mathematics Teacher Educators National Conference, Phoenix, AZ.
- Hjalmarson, M., **Baker, C.**, Holincheck, N., Galanti, T.*, & Nelson, J. (2019, October 10). *Designing a transdisciplinary model-eliciting activity: Questions and challenges* [Conference session]. National STEM Education Research Summit, Raleigh, NC.
- Baker, C.**, & Knapp, M. (2019, April). *The Decision-making protocol for mathematics coaching: Apply high-leverage practices and advocate change* [Conference session]. National Council of Teachers of Mathematics Conference, San Diego, CA.
- Baker, C. K.**, Knapp, M., & Rigelman, R. (2019, April 3-6). *Practice makes perfect: Developing an effective mathematics practice through intentionally planned rehearsals* [Conference session]. 51st Annual Meeting of the National Council of Supervisors of Mathematics, San Diego, CA.
- Baker, C.**, Bitto, L., Wills, T., Galanti, T.*, & Eatmon, C.* (2019, February 7-9). *Developing leaders through self-study research: An analysis of field experiences in a mathematics specialist program* [Conference session]. Association of Mathematics Teacher Educators National Conference, Orlando, FL.
- Knapp, M., **Baker, C.**, Rigelman, N., Larsen, S., Flessner, C., & Gibbons, G. (2019, February 7-9). *Rehearsals as tools for mathematics teacher leader professional learning* [Conference session]. Association of Mathematics Teacher Educators National Conference, Orlando, FL.
- Knapp, M., **Baker, C. K.**, & Hayden, K.*# (2018, April 1-3). *The decision-making protocol for mathematics coaching: A tool to empower mathematics teacher leaders in supporting equitable teaching practices* [Conference session]. 50th Annual Meeting of the National Council of Supervisors of Mathematics, Washington, D.C.
- Baker, C. K.**, Bailey, P., & Galanti, T.* (2017, April). *From book club to professional learning community: Transforming and sustaining coaching capacity* [Conference session]. 49th Annual Meeting of the National Council of Supervisors of Mathematics, San Antonio, TX.
- Larsen, S., Bailey, P., & **Baker, C.** (2017, April 3-5). *Professional development for elementary mathematics specialists: Supporting research-based principles and practices* [Conference session]. National Council of Supervisor of Mathematics Annual Conference, San Antonio, TX.
- Galanti, T.* & **Baker, C.** (2017, April 3-5). *Integrating the "M" in STEM through coaching and model-eliciting activities* [Conference session]. National Council of Teachers of Mathematics Research (NCTM-R) Annual Meeting, San Antonio, TX.
- Baker, C.**, Larsen, S., Bailey, P., Galanti, T.* (2017, February 9-11). *A critical analysis of emerging high-leverage practices for mathematics specialists* [Conference session]. Association of Mathematics Teacher Educators National Conference, Orlando, FL.
- Suh, J. M., **Baker, C.K.**, King, L.*, Galanti, T.*, Birkhead, S.*, Frank, T. & Seshaiyer, P. (2016, June). *Differentiating PD for mathematics specialists through Lesson Study collaborative networks and video coaching* [Conference session]. Virginia Mathematics Specialists Institute, Richmond, VA.

- Bailey, P., **Baker, C.**, & Larsen, S. (2016, April 13-16). *Supporting mathematics specialists: Identification and development of high-leverage practices* [Conference session]. National Council of Teachers of Mathematics Research Conference, San Francisco, CA.
- Sprague, D., **Baker, C.**, & Suh, J. (2016, March). *From self-study to collaboration: Working together to redesign the technology course* [Conference session]. National Association of Professional Development Schools Conference, Washington, D.C.
- Bailey, P., **Baker, C.**, Hjalmarson, M., Bolyard, J. & King, L.* (2016, January 28-30). *I am a math specialist: Now what?* [Conference session]. Association of Mathematics Teacher Educators National Conference, Irvine, CA.
- Sell, C. R., Groth, L., **Baker, C.**, Parker, A. K., & Parsons, S. (2015, April). *Purposeful exploration of video-coding (Edthena) in an elementary teacher preparation program* [Conference session]. Annual Meeting of the Association of Teacher Educators of Virginia (ATE-VA), Roanoke, VA.
- Baker, C. K. (2011, October). *Student invented mathematics: Promoting critical thinking of computation through problem-based assessments* [Conference session]. National Council of Teachers of Mathematics National Conference, Atlantic City, NJ.
- Hott, B. L. & **Baker, C. K.** (2011, April). *Using the concrete-representational-abstract method to teach Measurement* [Conference session]. Council for Exceptional Children Annual Convention, National Harbor, MD.
- Baker, C. K.** & Suh, J.M. (2011, January 27-29). *Content-focused coaching with pre-service teachers* [Conference session]. Presented at the Association of Mathematics Teacher Educators National Conference, Irvine, CA.

Peer-Refereed Local, State & Regional Conferences

- Baker, C. K.**, & Knapp, M. (2024, June 17-18). *Cultivating leadership via proactive mathematics coaching*. [Conference session]. Virginia Council of Teachers of Mathematics State Conference, Williamsburg, VA.
- Baker, C. K.** & Knapp, M. (2023, March 17-18). *Lead with intention to catalyze change: Navigating the journey toward equitable coaching*. [Conference session]. Virginia Council of Teachers of Mathematics State Conference, Fairfax, VA.
- Baker, C. K.** & Knapp, M. (2022, November 30-December 2). *Catalyzing the change within: Navigating the journey toward equitable coaching*. [Conference session]. National Council of Teachers of Mathematics Regional Conference, Baltimore, MD.
- Baker, C.** (2021, January 14). *Rethink your coaching practice to equitably lead mathematics (virtually) anywhere* [Webinar]. George Mason College of Education and Human Development Webinar Series.
- Baker, C.** (2019, October 4). *Tired of reactive coaching? Try proactive coaching!* [Conference session]. Presented at the Virginia Council of Mathematics Specialists 8th Annual Conference, Fredericksburg, VA.

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

- Baker, C., & Knapp, M.** (2019, September 25-29). *The decision-making protocol for mathematics coaching: Advocating change through research-based practices* [Conference session]. National Council of Teachers of Mathematics Regional Conference, Boston, MA.
- Baker, C. (2019, May). *Mathematics teacher leader rehearsals for equity: Reframing our thinking* [Conference session]. Loudoun County Public Schools Mathematics Chair and Subject Area Leadership Team Meeting, Ashburn, VA.
- Baker, C. (2019, April). *Developing a collaborative vision for mathematics instruction* [Conference session]. Mathematics Specialist Mentoring Workshop for Virginia Commonwealth University Noyce Fellows, Richmond, VA.
- Baker, C., Escaboar, M.#, & Barnhill, K.#** (2019, March 8-9). *Model-eliciting activities and STEM integration in the primary grades* [Conference session]. Virginia Council of Teachers of Mathematics Conference, Farmington, VA.
- Baker, C., & Knapp, M.** (2019, March 8-9). *Advocate for math: Intentional collaboration with other instructional leaders* [Conference session]. Virginia Council of Teachers of Mathematics Conference, Farmington, VA.
- Baker, C., Speaks, J.#, Metcalf, J.#, March, A.#, Collins, K.#, Charnley, K.#, & Singletary, R.#** (2019, March 8-9). *Keep math at the center of STEM integration via model-eliciting activities* [Conference session]. Virginia Council of Teachers of Mathematics Conference, Farmington, VA.
- Baker, C., Wallace, C.#, & Teets, A.#** (2019, March 8-9). *Using clinical interviews to guide instruction* [Conference session]. Virginia Council of Teachers of Mathematics Conference, Farmington, VA.
- Stamberg, B.* & **Baker, C.** (2019, March 8-9). *I don't understand! What do they want me to do? Connecting Representations* [Conference session]. Virginia Council of Teachers of Mathematics Conference, Farmington, VA.
- Knapp, M. & **Baker, C.** (2018, November 28-30). *The decision-making protocol for mathematics coaching: A tool to empower mathematics teacher leaders* [Conference session]. National Council of Teachers of Mathematics Regional Conference, Seattle, VA.
- Baker, C. & Knapp, M.** (2018, October 5). *Working with administrators: Intentionally planning Advocacy* [Conference session]. Virginia Council of Mathematics Specialists 7th Annual Conference, Fredericksburg, VA.
- Baker, C. & Knapp, M.** (2018, March 9-10). *Intentionally move instruction forward: Balancing content, context & Principles to Actions* [Conference session]. Virginia Council of Teachers of Mathematics Annual Conference, Radford, VA.
- Graham, J.#, Baker, M.#, Huntley, K.#, Marsh, A.#, Flake, S#. & **Baker, C.** (2018, March 9-10). *Model-eliciting activities: Maintaining a math focus in STEM integration* [Conference session]. Virginia Council of Teachers of Mathematics Annual Conference, Radford, VA.
- Baker, C. & Knapp, M.** (2018, February). *Enhancing your coaching practice: The decision-making Protocol for mathematics coaching* [Conference session]. Presented at the Fairfax County Public Schools Elementary Mathematics Resource Teacher Meeting, Fairfax, VA.

- Baker, C.**, Hayden, K.* & Willerth, S.* (2017, September 28-29). *The decision-making protocol for mathematics coaching: Enhancing mathematics coaching and intentionally enacting Principles to Actions* [Conference session]. Virginia Council of Mathematics Specialists 6th Annual Conference, Culpepper, VA.
- Suh, J., Birkhead, S.*, Galanti, T.*, Freeman, P., Gillen, L., **Baker, C.**, Frank, T., & Seshaiyer, P. (2017, September 28-29). *Coaching for powerful math classrooms using problems to unpack the learning trajectories* [Conference session]. Virginia Council of Mathematics Specialists 6th Annual Conference, Culpepper, VA.
- Wills, T. & **Baker, C.** (2017, September 22). *Strategies to make online teaching better than face to face* [Conference session]. Annual George Mason University Innovations of Teaching and Learning Conference, Fairfax, VA.
- Baker, C.** & Galanti, T.* (2017, March 9-10). *Process as product: STEM integration through model-eliciting Activities* [Conference session]. Virginia Council of Teachers of Mathematics Annual Conference, Harrisonburg, VA.
- Baker, C.**, Galanti, T.*, Eaglen, A.*, Clovis, J.*, Krajieski, B.*, Miknis, A.*, Suh, J., Seshaiyer, P., & Frank, T. (2017, March 9-10). *Making instructional shifts: Targeted professional development on coaching* [Conference session]. Virginia Council of Teachers of Mathematics Annual Conference, Harrisonburg, VA
- Frank, T., Farmer, R.* , Tripathi, A.*, Suh, J., **Baker, C.**, & Seshaiyer, P. (2017, March 9-10). *Broadening participation for English learners in mathematics* [Conference session]. Virginia Council of Teachers of Mathematics Annual Conference, Harrisonburg, VA.
- Seshaiyer, P., Suh, J., **Baker, C.**, Frank, T., Birkhead, S.*, Galanti, T.*, Burrell, E.*, Taylor, E.*, & Wiseman, B.* (2017, March 9-10). *Ducks and sheep to minotaurs and pegasi: Algebraic thinking grades 2-11* [Conference session]. Virginia Council of Teachers of Mathematics Annual Conference, Harrisonburg, VA.
- Baker, C. K.** & Galanti, T. M.* (2016, October 4-5). *Implementing MEAs to achieve STEM integration* [Conference session]. 5th Annual Virginia Military Institute STEM Education Conference, Lexington, VA.
- Smucny, D., **Baker, C. K.**, & Tripathy, M. (2016, September 16). *Teaching strategies to promote imagination and creativity through student choice* [Conference session]. George Mason University Innovations of Teaching and Learning Conference, Fairfax, VA.
- Bailey, P. R. & **Baker, C. K.** (2016, March 4-5). *Math specialists/coaches: Support through networking* [Conference session]. Virginia Council of Teachers of Mathematics Conference, Stafford, VA.
- Baker, C. K.**, Smucny, D., & Tripathy, M. (2015, September 18). *Beyond the discussion board: Increasing participation and engagement in synchronous and asynchronous learning environments* [Conference session]. George Mason University Innovations of Teaching and Learning Conference, Fairfax, VA.

- Baker, C. K. (2013, March 8-9). *Differentiate and engage to make the math workshop work for you* [Conference session]. Annual Virginia Council of Teachers of Mathematics Regional Conference, Virginia Beach, VA.
- Baker, C. K. & Lee, C.** (2012, April). *Exploring our available resources: Probability and Statistics* [Conference session]. Presented at the Westfield Pyramid Mathematics Institute, Chantilly, VA.
- Baker, C. K. & Lee, C.** (2012, February). *Exploring our available resources: Measurement and geometry* [Conference session]. Westfield Pyramid Mathematics Institute, Chantilly, VA.
- Baker, C. K. & Wyland, R.** (2012, January). *Addition for the primary grades: Putting it all together* [Conference session]. Fairfax County Public School Elementary Mathematics Lead Conference, Lorton, VA.
- Baker, C. K. & Wills, T.** (2011, April). *Using Glogster to enhance student understanding* [Conference session]. Annual Battlefields of Northern Virginia Council of Teachers of Mathematics Regional Conference, Manassas, VA.
- Baker, C. K. (2011, March). *Student invented mathematics: Promoting critical thinking of computation through problem-based assessments* [Conference session]. Annual Virginia Council of Teachers of Mathematics Conference, Harrisonburg, VA.
- Baker, C. K. (2010, March). *Using a teacher book club to gain mathematical understanding* [Conference session]. Annual Virginia Council of Teachers of Mathematics Regional Conference, Richmond, VA.
- Baker, C. K. (2008, January). *Implementing problem solving in the primary classroom* [Conference session]. Fairfax County Public School Elementary Mathematics Lead Conference, Fairfax, VA.
- Baker, C. K. (2007, January). *Invented mathematics: A unique approach to mathematics* [Conference session]. Fairfax County Public School Elementary Mathematics Lead Conference, Fairfax, VA.

ACADEMIC TEACHING AND ADVISING

Ph.D. in Education Program

George Mason University

- EDCI 855: Mathematics Education Leadership Research on Teaching and Learning
 - EDCI 858: Mathematics Education Research Design and Evaluation
 - EDRS 825: Advanced Research Methods in Self-Study of Professional Practice
 - EDCI 994: Advanced Internship in Education
 - EDUC 897: Independent Study in Mathematics Education
 - EDUC 890: Internship in Mathematics Education
- Photovoice & Mathematics Education Professional Development Design*

Master's Program for K-8 Mathematics Specialists (Online Synchronous/Hybrid)

George Mason University

- MATH 611: Geometry for K-8 Teachers
- EDCI 645: Curriculum in Mathematics Education Leadership

EDCI 644: Assessment in Mathematics Education Leadership
 EDCI 646: School Change in Mathematics
 EDCI 666: Research in Mathematics Education Leadership
 EDCI 702: Internship in Mathematics Education Leadership

Elementary Mathematics Licensure and Master's Program

George Mason University

EDCI 552: Math Methods for the Elementary Classroom
 EDCI 790: Internship in Elementary Education; University Facilitator

Teaching Culturally, Linguistically Diverse & Exceptional Learners Program

George Mason University

EDUC 513: Teaching Math in International Settings

COMPLETE Center Courses: Continuing Education in Mathematics Education

George Mason University

MATH 600: Assessing Math Learning and Modeling Math in Primary Grades
 MATH 600: Modeling Math Ideas Across Learning Progressions
 MATH 600: TRANSITIONS Algebraic Thinking
 MATH 600: TRANSITIONS Proportional Reasoning
 MATH 600: TRANSITIONS Geometric and Spatial Reasoning

Guest Lectures

George Mason University

INTS 434: Research for Social Change (Spring 2024)
 EDCI 856: Mathematics Education Curriculum Design and Evaluation (Spring 2023)
 EDRS 825: Advanced Research Methods in Self-study (Spring 2019)
 EDRS 810: Problems and Methods in Education Research (Fall 2019)

Student Supervision

George Mason University Doctoral Dissertation Committees

Sophie Donora (methodologist); Fall 2024-present
 Kate Roscioli (chair); Fall 2023-present
 Tammy Kraft (co-chair); Fall 2022-present
 Wai Ling Fong (methodologist); Fall 2021-present
 Terrie Galanti (member); Summer 2018-Summer 2019

International Doctoral Dissertation Committees

Burhan Karakaya (member); Spring 2023-present
Necmettin Erbakan University; Turkey

National Doctoral Dissertation Committees

Letitice Johnson (external member); Summer 2023-Spring 2024
Georgia Southern University; GA

George Mason University Doctoral Advising Committees

Sophie Donora (methodologist); Fall 2023-Summer 2024
 Desmond McGlone (chair); Fall 2021-present
 Wai Ling Fong (methodologist); Summer 2021
 Katherine Edwards (chair); Fall 2020-present
 Kate Roscioli (chair); Spring 2020-Summer 2023
 Tammy Kraft (chair); Spring 2020-Summer 2022

Rachelle Farmer (member); Spring 2020-Summer 2023
Sara Kirschner (member); Spring 2018-Fall 2022
Cassie Cook Eatmon (member); Spring 2018-Summer 2023
Terrie Galanti (member); 2016-2018
Sara Birkhead (member); 2016-2018

COMMUNITY TEACHING AND PROFESSIONAL DEVELOPMENT WORKSHOPS

Baker, C. K., & Knapp, M. (2024, Spring). *Proactive Mathematics Coaching: A District-Leader Professional Learning Opportunity*. Presented virtually.

Baker, C. K. (2024, July 29). *The Proactive Coaching Framework: A Prince William County Schools Book Study Launch*. Presented at Prince William County Schools Middle School Mathematics Specialists' Professional Development, Manassas, VA.

Baker, C. K. (2024, February 16). *Understanding Perspective, Developing Goals, & Taking Action*. Presented at Prince William County Schools Elementary Mathematics Specialists' Professional Development, Manassas, VA.

Baker, C. K., Hjalmarson, M., & Fennell, F. (2024, March 14). *Understanding District Mathematics Leaders' Responsibilities and Professional Learning Needs: Preliminary Data Analysis*. Presented at Virginia Council of Mathematics Supervisors Spring Meeting, Richmond, VA.

Baker, C. K., Bitto, L., Samaras, A., & Karras, I. (2023, October 19-20). *Intercultural self-study research method*. Presented by the George Mason University and Ionian University Cultural Workshop [online synchronous workshop].

Baker, C. K. (2023, August 17). *Embracing the Challenge: Empowering Students through Productive Struggle*. Presented at Loudoun County Public Schools K-12 Professional Development Day, Loudoun, VA.

Baker, C. K. (2023, August 17). *Embracing the Challenge: Empowering Students through Productive Struggle*. Presented at Loudoun County Public Schools K-12 Professional Development Day, Loudoun, VA.

Baker, C. K. (2019, May). *Considering actions for equity in mathematics*. Presented at Loudoun County Public Schools Secondary Mathematics Department Chair Professional Development, Loudoun, VA.

Baker, C. K. (2016, August). *Integration of STEM in mathematics*. Presented at Manassas City Public Schools Professional Development Day, Osborne High School, Manassas City, VA.

Baker, C. K. & Galanti, T.* (2016, June 27-30). *STEM in math*. Presented at Manassas City Public Schools Curriculum Development Week, MCPS Instructional Headquarters, Manassas City, VA.

Baker, C. K. (2015, August). *Structuring your RTI to engage in mathematics: K-4*. Presented at Manassas City Public Schools Professional Development Day, Metz Middle School, Manassas City, VA.

Baker, C. K. (2015, August). *Structuring your RTI to engage in mathematics: 5-8*. Presented at

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

- Manassas City Public Schools Professional Development Day, Metz Middle School, Manassas City, VA.
- Baker, C. K. (2015, March). *The VRES math program: Understanding where we came from and knowing where we are going*. Presented at Virginia Run Elementary School, Centreville, VA.
- Baker, C. K. (2015, January). *A brand new start: Looking back and moving forward*. Presented at Cesar Chavez Public Charter School for Public Policy, Washington, D.C.
- Baker, C. K. (2014, November). *Facilitating mathematical discourse: A continued conversation*. Presented at Cesar Chavez Public Charter School for Public Policy, Washington, D.C.
- Baker, C. K. (2014, October). *Facilitating mathematical discourse: Lesson study reflection*. Presented at Cesar Chavez Public Charter School for Public Policy, Washington, D.C.
- Baker, C. K. (2014, September). *Facilitating mathematical discourse*. Presented at Cesar Chavez Public Charter School for Public Policy, Washington, D.C.
- Baker, C. K. (2013, November). *Facilitating professional learning communities*. Presented at the initial George Mason University Mathematics Specialist Institute, Fairfax, VA.

ACADEMIC AND COMMUNITY SERVICE

Service to the Field

Editorial and Grants Duties

- Associate Editor, *Journal of Teacher Education* (2021-present)
- Guest Editor, *Investigations in Mathematics Learning* Special Issue on Mathematics Specialists and Mathematics Teacher Leaders (2021-2023)
- Assistant Editor, *School-University Partnerships* (2014-2018)
- National Science Foundation Reverse Site Panel; PIRE (Fall 2018)
- National Science Foundation Review Panel; DRK-12
- Editorial Board, *The Journal of Mathematics and Science: Collaborative Explorations* (2019-present)
- Editorial Review Board, *International Journal of Web-based Learning and Teaching Technologies* (2017-2019)

Journal Reviewer

- Reviewer, *Journal of Mathematics Teacher Education* (2021-present)
- Reviewer, *Teaching and Teacher Education* (2021-present)
- Reviewer, *Investigations in Mathematics Learning* (2021-present)
- Reviewer, *Association of Mathematics Teacher Educators* (2022, June)
- Reviewer, *International Journal of STEM Education* (2020-present)
- Reviewer, *Journal of Research in Mathematics Education* (2020)
- Reviewer, *Mathematics Teacher: Learning and Teaching PreK-12* (2018-present)
- Reviewer, *Mathematics Teacher Educator* (2018-present)
- Reviewer, *Virginia Mathematics Teacher Journal* (2017-present)
- Reviewer, *National Council of Supervisors of Mathematics* (2017, July)
- Reviewer, *Psychology of Mathematics Education – North America* (2019, 2017, & 2016, May)
- Reviewer, *American Educational Research Association* (2016 & 2015, August)
- Reviewer, *Teaching Children Mathematics* (2011-2019)

*co-author/presenter is a current or former student

co-author/presenter is a K-12 school district partner

Leadership in Professional Organizations and Associations

2024-present	Invited	National Council of Teachers of Mathematics & Association of Mathematics Teacher Educators Mentor Teacher Project Committee
2021-present	Invited	<i>Journal of Teacher Education</i> Diversity, Equity, and Inclusion Committee
2022-present	Invited	Association of Mathematics Teacher Educators STaR Fundraising Committee
2021, 2022	Invited	Association of Mathematics Teacher Educators Conference Social Media Team
2019-present	Nominated	Board Member, Virginia Mathematics and Science Coalition
2017-2019	Nominated	4-Year College Representative Virginia Council of Teachers of Mathematics

Professional Organizations and Associations

American Educational Research Association (AERA)
 Association of Mathematics Teacher Educators (AMTE)
 Association of Teacher Education (ATE)
 National Council of Teachers of Mathematics (NCTM)
 National Council of Supervisors of Mathematics (NCSM)
 Research Council on Mathematics Learning (RCML)
 School Science and Mathematics (SSM)
 Virginia Council of Mathematics Specialists (VACMS)
 Virginia Council of Teachers of Mathematics (VCTM)
 Virginia Association of Mathematics Teacher Educators (VA-AMTE)

Service to the University/College***George Mason University***

2024-current	Elected	CEHD Promotion & Tenure Committee
2023-2024	Elected	CEHD Professional Development Committee Co-Chair
2022-2024	Elected	CEHD Professional Development Committee
2019-2021	Invited	CAEP Interim Advanced Report Committee
2019-2021	Member	Ph.D. in Education Program Committee
Fall 2019	Invited	Moderator, CEHD Research Seminar
Spring 2017	Chair	Mathematics Education Leadership Search Committee
Fall 2017	Member	Advanced Professional Teacher Development and International Education Outlook Coordinator Search Committee
2016-2019	Co-Chair	Standards 1 & 2 Advanced Programs CAEP Working Group
January 2016	Invited	Ph.D. Student Curriculum Vitae Workshop
2015-2017	Invited	New Faculty Orientation Planning Committee

Service to the Program/ Department***George Mason University – Mathematics Education Program***

2020-present	Director	Mathematics Education Center
2017-2023	Co-Chair	Annual Mason Coaching Institute for Mathematics and Literacy
Summer 2019	Organizer	Mason Mathematics Education Leadership Summer Tweet Club
2014-2016	Chair	Annual GMU Mathematics Specialist Institute
2015-2016	Organizer	Mathematics Coaching Professional Learning Communities