

Dan Battey Ph.D.

Professor

Rutgers, The State University of New Jersey

Graduate School of Education

Department of Learning & Teaching

10 Seminary Place, 232

New Brunswick, NJ 08901

dan.battey@gse.rutgers.edu

(848) 932-0800

Education:

Ph.D. Education – University of California, Los Angeles, 2004

B.S. Physics – University of California, Los Angeles, 1997

Professional Experience:

2020-present *Professor*, Rutgers University

2018-2020 *Ed.D. Director*, Graduate School of Education, Rutgers University

2013-2020 *Associate Professor*, Rutgers University

2009-2013 *Assistant Professor*, Rutgers University

2005-2009 *Assistant Professor*, Arizona State University

2001-2005 *Researcher and Professional Developer*: Preparing teachers to help students shift from arithmetic to algebra (NSF), Dr. Megan Franke

2003-2004 *Researcher*: Girls in science, technology, engineering, and mathematics (NSF), Dr. Yasmin Kafai

2003 *Professional Development Designer*: Chicago Public Schools, case-based math professional development for K-5 teachers (Lessonlab)

2001-2003 *Project Designer and Professional Developer*: LAUSD/UCLA Collaborative Institute in Mathematics, professional development for over 2000 K-5 teachers

2002-2003 *Adjunct Researcher*: Scoop and Mosaic projects assessing math and science teaching K-8 (RAND), Dr. Hilda Borko and Dr. Brian Stecher

2000-2001 *Fellow and Teacher*: University Elementary School K-6

- 2000-2001 *Assessor*: National Action Council for Minorities in Engineering, assessed minority high school students for entrance into college scholarship program
- 2000-2001 *Project Assistant*: Futures Project, prepared minority high school students for college math and science, Dr. Jeannie Oakes
- 1997-2001 *Researcher*: Understanding the Impact of Case-based Examples (NCISLA), Dr. Megan Franke
- 1998-2000 *Researcher*: Engaging Teachers and Students in Game Design (NSF), Dr. Yasmin Kafai

Grants and Awards:

- 2024-2026 Principal Investigator, NJ Department of Education, “Diversifying the Teaching Profession” (\$500,000/2 year, 50% responsibility)
- 2024 Mathematics Teacher Educator, Outstanding Reviewer Award
- 2022 Palmer O. Johnson Memorial Award, Outstanding paper in an AERA journal, AERA
- 2021-2022 Co-Principal Investigator, NJ Department of Education, “Diversifying the Teaching Profession” (\$200,000/1 year, 25% responsibility): Nora Hyland, PI
- 2017-2022 Principal Investigator, National Science Foundation, “Challenging, Operationalizing, and Understanding Racialized and Gendered Experiences in Undergraduate Mathematics” (\$300,000/3 year, 50% responsibility)
- 2019 Faculty Research Award, Rutgers Graduate School of Education
- 2019 Distinguished Faculty Lecture Award, Graduate School of Education Alumni Association
- 2015-2019 Chancellor’s Scholar Award, Rutgers University, innovation in research (\$5000 per year)
- 2018 National Council of Teachers of Mathematics Research Committee, Linking Research and Practice Outstanding Publication Award -- Teaching Children Mathematics
- 2015 Journal for Research in Mathematics Education, Outstanding Reviewer

- 2015 Principal Investigator, Rutgers Research Council, “Validating Relational Interactions in Mathematics Classrooms” (\$2500/1 year, 100% responsibility)
- 2013-2015 Co-Principal Investigator, Rutgers University Graduate School of Education Goal Advancement Program, “Redesigning Teacher Education at Rutgers GSE” (\$32,000/2 years, 25% responsibility): Sharon Ryan, PI
- 2014 Co-Principal Investigator, Spencer Foundation Discretionary Grant, “Planning and Developing the Evaluating Culturally Responsive Pedagogy in the Classroom Project: A Developmental Grant Proposal” (\$52,000/1 year, 20% responsibility): Stafford Hood, PI
- 2011-2012 Principal Investigator, Rutgers Research Council, “Measuring Racial Microaggressions in Mathematics Classrooms” (\$2000/1 year, 100% responsibility)
- 2007-2012 Co-Principal Investigator NSF funded project, “Moving Teachers and Students from Arithmetic to Algebraic Thinking in Murphy School District (K-5): Building Multilevel Insight” (\$1.25 million/5 years, 50% responsibility): Finbarr Sloan, PI
- 2010-2011 Principal Investigator, Teaching the World Fellowship, “Internationalizing Mathematics Teacher Education” (\$2900/1 year): 100% responsibility
- 2004-2005 *Post-Doctoral Fellow* (UCLA): NSF funded Center for Learning and Teaching (CLT) on Diversity in Mathematics Education (DiME) (\$45,000/ 1 year)

Publications

Editorial Activities

Batthey, D. & Wilson, J. (Eds.) (2022). Taking an interactional view to detail equitable mathematics teaching. *Teachers College Record*.

Journal Articles in Progress:

Amman, K., Batthey, D., Berninzon, A. & Mulvihill, B. (in preparation). Identifying critical features of student reasoning around discouraging and racialized events in pre-calculus and calculus. To be submitted to the *Journal of Diversity in Higher Education*.

Amman, K., Austin, T., Batthey, D., & Weber, K. (under revision). Two interpretive frames for making sense of racialization in instructional situations in undergraduate mathematics education classrooms. Resubmitted to *Educational Studies in Mathematics*.

Marshall, B. L. & Battey, D. (under revision). Disrupting Exclusionary Logics in Mathematics for Black Students. Submitted to *Mathematics Teacher: Learning and Teaching PK-12*.

Battey, D. & Austin, T. (under revision). Mathematics as Property: Examining mathematics reform as a racial project through raciolinguistic genealogy. Submitted to the *Journal for Research in Mathematics Education*.

Refereed Journal Articles:

Marshall, B. L. & Battey, D. (2025). "I want them to see their magic!": Two teachers working within structural constraints to help cultivate their Black girl students' positive mathematics identities. *Journal of Mathematical Behavior*, 80, 1-19.

Hyland, N. E., Guzman, A., Antunes, D., & Battey, D. (2025). Reimagining teacher leadership: A framework for transforming structures to diversify the teaching workforce. *Equity & Excellence in Education*, 58(3), 232-247. <https://doi.org/10.1080/10665684.2025.2490903>

Wilkes II, C. E. & Battey, D. (2024). Disrupting racial storylines about Black girls in mathematics through teaching content and building relationships. *Journal of Mathematical Behavior*, 75, 1-15.

Marshall, B. L., Rosado, A., & Battey, D. (2022). Successful Black mathematics teachers building collectivity, autonomy, and mathematics expertise of their Black girls. *Teachers College Record*, 124(11), 153-178. <https://doi.org/10.1177/016146812211395>

Vaidya, A. & Battey, D. (2022). Homeplace: Black teachers creating space for black students in mathematics classrooms. *Teachers College Record*, 124(11), 218-256. <https://doi.org/10.1177/01614681221139535>

Dominguez, A., Feldman, M., Battey, D., Palpacuer-Lee, C., & Hunsdon, J. (2022) Centering families' mathematical practices in a multilingual space. *Mathematics Teacher: Learning and Teaching PK-12*, 15(9), 633-641.

Battey, D., Amman, K., Leyva, L., Hyland, N., & Wolf, E. A. (2022). Racialized and Gendered Labor in Students' Responses to Precalculus and Calculus Instruction. *Journal for Research in Mathematics Education*, 53(2), 94-113.

Battey, D. & Coleman, M. A. (2021). Antiracist work through mathematics education: The case of policing. *Journal of Urban Mathematics Education*, 14(1B), 6-20.

Wu, S. & Battey, D. (2021). The cultural production of being smart and good at math: parental involvement, K-12 mathematics curricular tracking and Asian American students' reauthoring racialized figured worlds. *Journal for Research in Mathematics Education*, 52(5), 581-614.

- Gitomer, D., Martinez, J. F., & Battey, D. (2021). Who's assessing the assessment? The cautionary tale of the edTPA. *Phi Delta Kappan*, 102(6), 38-43.
- Battey, D., Bartell, T. G., Webel, C., & Lowry, A. (2021). Understanding the impact of racial attitudes on pre-service teachers' perceptions of children's mathematical thinking. *Journal of Research for Mathematics Education*, 52(1), 62-93.
- Gitomer, D., Martínez, J. F., Battey, D., & Hyland, N. (2021). Assessing the Assessment: Evidence of Reliability and Validity in the edTPA. *American Educational Research Journal*, 58(1), 3-31. <https://doi.org/10.3102/0002831219890608>
- Leyva, L., Quea, R., Weber, K., Battey, D., & López, D. (2021). Detailing racialized and gendered mechanisms of pre-calculus and calculus classroom instruction. *Cognition & Instruction*, 39(1), 1-34. DOI: [10.1080/07370008.2020.1849218](https://doi.org/10.1080/07370008.2020.1849218)
- Burroughs, G., Lewis, A., Battey, D., Curran, M., Hyland, N. & Ryan, S. (2020). From mediated fieldwork to co-constructed partnerships: A framework for guiding and reflecting on P-12 school–university partnerships. *Journal of Teacher Education*, 71(1), 122-134.
- Battey, D., Leyva, L. A., Williams, I., Belizario, V., Greco, R., & Shah, R. (2018). Racial (mis)match in middle school mathematics classrooms: Relational interactions as a racialized mechanism. *Harvard Educational Review*, 88(4), 455-482.
- Battey, D., Neal, R., & Hunsdon, J. (2018). Strategies for caring mathematical interactions. *Teaching Children Mathematics*, 24(7), 432-440.
- Battey, D. & Neal, R. A. (2018). Detailing relational interactions in urban elementary mathematics classrooms. *Mathematics Teacher Education and Development*, 20(1), 23-42.
- Kang, H. & Battey, D. (2017). Contextualizing the identity development of preservice elementary mathematics teachers in methods courses and mentor teacher support. *Journal of Education and Development*, 1(1), 24-36.
- Bartell, T. G., Wager, A. A., Edwards, A. R., Battey, D., Foote, M. Q., & Spencer, J. (2017). Toward a framework for research linking equitable teaching with the Standards for Mathematical Practice. *Journal for Research in Mathematics Education*, 48(1), 7-21.
- Battey, D. & Leyva, L. (2016). A framework for understanding whiteness in mathematics education. *Journal of Urban Mathematics Education*, 9(2), 49-80.
- Battey, D., Neal, R., Leyva, L., & Adams-Wiggins, K. (2016). The interconnectedness of relational and content dimensions of quality instruction: Supportive teacher–student

relationships in urban elementary mathematics classrooms. *Journal of Mathematical Behavior*, 42, 1-19.

Batthey, D. & Franke, M. (2015). Integrating professional development on mathematics and equity: Countering deficit views of students of color. *Education and Urban Society*, 47(4), 433-462, first published online August 29, 2013 doi:10.1177/0013124513497788

Neal, R. A. & Batthey, D. (2014). Opening classroom spaces for the mathematical success of African American and Latino/a students. *TODOS Research Monograph*, 3, 50-64.

Batthey, D. (2013). Access to mathematics: A possessive investment in whiteness. *Curriculum Inquiry*, 43(3), 332-359.

Batthey, D., Llamas-Flores, S., Burke, M., Guerra, P., Kang, H. J., & Kim, S. H., (2013). ELL policy and mathematics professional development colliding: Placing teacher experimentation within a sociopolitical context. *Teachers College Record*, 115(6), 1-44.

Batthey, D. (2013). "Good" mathematics teaching for students of color and those in poverty: The importance of relational interactions within instruction. *Educational Studies in Mathematics*, 82(1), 125-144.

Ullucci, K. & Batthey, D. (2011). Exposing color blindness/grounding color consciousness: Challenges for teacher education. *Urban Education*, 46(6), 1195-1225.

Franke, M. L., Webb, N. M., Chan, A., Ing, M., Freund, D., & Batthey, D. (2009). Teacher questioning to elicit students' mathematical thinking in elementary school classrooms. *Journal of Teacher Education*, 60(4), 380-392.

Batthey, D. & Franke, M. L. (2008). Transforming identities: Understanding teachers across professional development and classroom practice. *Teacher Education Quarterly*, 35(3), 127-149.

Webb, N. M., Franke, M. L., Ing, M., Chan, A., De, T., Freund, D., & Batthey, D. (2008). The role of teacher instructional practices in student collaboration. *Contemporary Educational Psychology*, 33(3), 360-381.

Jacobs, V., Franke, M., Carpenter, T., Levi, L., & Batthey, D. (2007). Professional development focused on children's algebraic reasoning in elementary school. *Journal for Research in Mathematics Education*, 38(3), 258-288.

Batthey, D., Kafai, Y., Nixon, A. S., & Kao, L. (2007). Professional development for teachers on gender equity in the sciences: Initiating the conversation. *Teachers College Record*, 109(1), 221-243.

Kafai, Y., Franke, M., & Batthey, D. (2002). Educational software reviews under investigation. *Education, Communication & Information*, 2(2), 163-180.

Refereed Handbook Chapters:

*Diversity in Mathematics Education Center for Learning & Teaching (2007). Culture, race, power, and mathematics education. In F. Lester (Ed.), *The Second Handbook of Research on Mathematics Teaching and Learning* (p. 405-433). Charlotte, NC: Information Age Publishing.

*one of five editors/writers on the chapter

Franke, M. L., Kazemi, E., & Batthey, D. (2007). Mathematics teaching and classroom practices. In F. Lester (Ed.), *The Second Handbook of Research on Mathematics Teaching and Learning* (p. 225-256). Charlotte, NC: Information Age Publishing.

Book Chapters:

Batthey, D. & Marshall, B. L. (2024). Math logics: Perpetrators of whiteness in STEM educational spaces. In J. Ravulo, K. Olcoń, T. Dune, A. Workman, and P. Liamputtong (Eds.), *Handbook of Critical Whiteness: Deconstructing Dominant Discourses Across Disciplines* (p. 717-727). Springer.

Batthey, D. & Wolf McMichael, E. (2021). Inquiry-based practices: Opening possibilities for (in)equitable interactions in classrooms. In R. G. Duncan & C. A. Chinn (Eds.), *International Handbook of Inquiry and Learning* (p. 189-203). Routledge.

Batthey, D. & Leyva, L. A. (2018). Making the implicit explicit: Building a case for implicit racial attitudes to inform mathematics education research. In T. Bartell (Ed.), *Toward Equity and Social Justice in Mathematics Education* (p. 21-41). NY: Springer.

Melgar, K. & Batthey, D. (2016). Opportunities for America's youth. In D. White, S. Crespo, & M. Civil (Eds.), *Cases for Teacher Educators: Facilitating Conversations about Inequities in Mathematics Classrooms* (p. 135-142). Charlotte, NC: Information Age Publishing.

Batthey, D. & Chan, A. (2010). Building community and relationships that support critical conversations on race: The case of Cognitively Guided Instruction. In M. Q. Foote (Ed.), *Mathematics Teaching & Learning in K-12: Equity and Professional Development* (p. 137-149). New York: Palgrave.

Batthey, D. & Stark, M. (2009). Inequitable classroom practices: Diagnosing misconceptions as inability in mathematics. In C. Malloy (Ed.), *Mathematics for Every Student, Responding to*

Diversity, Grades PreK-5 (p. 167-177). Reston, VA: National Council of Teachers of Mathematics.

Franke, M. L., Carpenter, T. P., & Battey, D. (2007). Content matters: Algebraic reasoning in teacher professional development. In J. Kaput, D. Carraher, & M. Blanton, (Eds.) *Algebra in the Early Grades* (p. 333-359). Hillside, NJ: Lawrence Erlbaum.

Battey, D., Kafai, Y., & Franke, M. (2005). Evaluation of mathematical inquiry in commercial rational number software: Pre-service teachers' criteria and choices. In C. Vrasidas & G. V. Glass (Eds.) *Preparing Teachers to Teach with Technology* (p. 241-256). Greenwich, CT: Information Age Publishing.

Franke, M., Kazemi, E., Shih, J., Biagetti, S., & Battey, D. (2005). Changing teachers' professional work in mathematics: One school's journey. In T. Romberg, T. Carpenter, & Dremock (Eds.) *Understanding Mathematics and Science Matters* (p. 209-229). Hillside, NJ: Lawrence Erlbaum.

Refereed Conference Proceedings:

Battey, D. & Leyva, L. (2016). Making the implicit explicit: A call for exploring implicit racial attitudes in mathematics education. Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (p. 664-667). Tucson, AZ: University of Arizona.

Leyva, L. A., Massa, J., & Battey, D. (2016). Queering engineering: A critical analysis of the gendered technical/social dualism in engineering and engineering education research. In Proceedings of the American Society for Engineering Education's 123rd Annual Conference and Exposition, New Orleans, LA. doi:10.18260/p.26026. Retrieved from <https://peer.asee.org/26026>.

Battey, D. & Leyva, L. (2015). Developing a framework for assessing the impact of whiteness in mathematics education. Proceedings of the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (p. 494-501). East Lansing, MI: Michigan State University.

Battey, D. & Leyva, L. (2015). Building a case for understanding relational dimensions in mathematics classrooms. In S. Mukhopadhyay and B. Greer (Eds.), Proceedings of the 8th International Conference on Mathematics Education & Society (p. 327-339). Portland, OR: MES8.

Battey, D. & Leyva, L. (2013). Rethinking mathematics instruction: An analysis of relational interactions and mathematics achievement in elementary classrooms. In M. Martinez & A. Castro Superfine (Eds.), Proceedings of the 35th Annual Meeting of the North American

Chapter of the International Group for the Psychology of Mathematics Education (p. 980-987). Chicago, IL: University of Illinois, Chicago.

Battey, D. & Guerra, P. (2011). Teacher change in mathematics professional development: Understanding experimentation in classrooms. In L. R. Wiest & T. Lamberg (Eds.), Proceedings of the 33rd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (p. 1510-1518). Reno, NV: University of Nevada Reno.

Battey, D. (2009). Access to mathematics: A possessive investment in whiteness. In S. L. Swars, D. W. Stinson, & S. Lemons-Smith (Eds.), Proceedings of the 31st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (p. 488-497). Atlanta, GA: Georgia State University.

Hand, V. M., Bannister, V. P., Bartell, T. G., Battey, D., & Spencer, J. (2006). Inequity in mathematics education: Moving beyond individual-level explanations of differential mathematics achievement to account for race and power. In S. Alatorre, J. L. Cortina, M. Sáiz, & A. Méndez (Eds.), Proceedings of the 28th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (p. 481-487). Mérida, México: Universidad Pedagógica Nacional.

Kafai, Y., Franke, M., & Battey, D. (2002). How design features in commercial educational software are evaluated by teachers and reviewers: A report from the sidelines. In the 2002 Proceedings of the International Conference of the Learning Sciences: Seattle, WA.

Presentations

Invited Talks:

Battey, D. & Marshall, B. L. (2020). But isn't math a competition? Challenging racialized myths and assumptions in math. Invited talk given at the annual conference of the National Council of Teachers of Mathematics (Virtual).

Battey, D. (September, 2020). Building students' mathematical competence. Invited talk given at NCTM's 100 Days of Professional Learning series.

Battey, D. (March, 2020). "A lot of people don't understand how much courage it takes": Understanding students' responses to discouraging events in undergraduate mathematics. Invited Lecture given for the University of Missouri College of Education. Columbia, MO.

Battey, D. (September, 2019). Understanding the impact of racial attitudes on pre-service teachers' perceptions of children's mathematical thinking. Invited talk given to the University of Delaware Mathematics Department. Wilmington, DE.

- Batthey, D. (June, 2019). Understanding race in mathematics education through relational interactions. Invited talk given to Hamline University College of Education. Minneapolis, MN.
- Batthey, D. & Neal, R. A., (June, 2019). Developing caring relationships in CGI classrooms. Invited talk given at the Cognitively Guided Instruction National Biennial Conference. Minneapolis, MN.
- Batthey, D. (April, 2019). Racial bias in mathematics: Understanding the impact of racial attitudes on pre-service teachers' perceptions of children's mathematical thinking. Invited talk given to the Texas State University Mathematics Department. San Marcos, TX.
- Batthey, D. (April, 2019). Understanding historically marginalized students' responses to discouraging events in undergraduate mathematics. Invited colloquia given to the Texas State University Mathematics Department. San Marcos, TX.
- Batthey, D. (April, 2019). Developing caring mathematics classrooms through attending to interactions. Invited talk given at the annual conference of the National Council of Teachers of Mathematics. San Diego, CA.
- Batthey, D. (April, 2019). Strategies for building caring relationships in math classrooms. Invited talk given at the annual conference of the National Council of Teachers of Mathematics. San Diego, CA.
- Batthey, D. (February, 2019). Building towards equity: Identifying and detailing mechanisms in undergraduate mathematics. Keynote talk given at the annual conference for Research in Undergraduate Mathematics Education. Oklahoma City, OK.
- Batthey, D. (October, 2018). Leveraging mechanisms in undergraduate mathematics to build towards equity. Keynote talk given at the regional Northeast Research in Undergraduate Mathematics Education conference. New Brunswick, NJ.
- Batthey, D. (June, 2018). Teacher knowledge of students' mathematical thinking in the United States. Invited talk given at Shanxi Normal University. Linfen, China
- Batthey, D. (December, 2017). Racial bias in math: Understanding the impact of racial attitudes on pre-service elementary math teachers. Invited talk given at the Rutgers Graduate School of Education Brown Bag Series. New Brunswick, NJ.
- Batthey, D. (April, 2017). Beyond caring for the mathematics: Building caring mathematical relationships with students. Invited talk given at the annual conference of the National Council of Teachers of Mathematics. San Antonio, TX.

Batthey, D. (April, 2017). Racial mis-match? Racialized effects on relational interactions in mathematics classrooms. Invited talk given at the Rutgers Graduate School of Education Brown Bag series. New Brunswick, NJ.

Batthey, D. (2015). Reconstructing teaching mathematics: Moving away from deficit views toward equitable instruction in mathematics. Invited talk given to the Rutgers Institute for Improving Student Achievement (RIISA). New Brunswick, NJ.

Batthey, D. (2012). Managing racial and ethnic microaggressions. Invited talk given to the Center for Race and Ethnicity. New Brunswick, NJ: Rutgers University.

Batthey, D. (2011). Relational interactions in urban mathematics classrooms: Exploring associations with the quality of instruction. Invited talk given at York University: Queens, NY.

Batthey, D. (2011). "Good" mathematics teaching for African American & Latino students: Critical relational interactions in the mathematics classroom. Invited talk given at the Learning Sciences Series: New Brunswick, NJ.

Batthey, D. (2007). Professional development for teachers on gender equity in the sciences: Initiating the conversation. Invited talk given to the Center for Research in education on Science, Mathematics, Engineering, and Technology. Tempe, AZ.

Batthey, D. (2007). Supporting the mathematical development of children. Invited talk given to the Gila River Indian Community. Sacaton, AZ.

Batthey, D. (2005). Algebra in the upper elementary grades. Invited talk given to the California Mathematics Council. Palm Springs, CA.

Batthey, D. (2004). Algebraic thinking in elementary school. Invited talk given to the San Diego Math Council. San Diego, CA.

Batthey, D. (2002). Developing students' mathematical reasoning: The case of fractions. Invited talk given to the California Mathematics Council. Palm Springs, CA.

Refereed Conference Presentations:

Amman, K., Batthey, D., & Berninzon, A. (April, 2020). Identifying critical features of discouraging events for historically marginalized students in precalculus and calculus. Roundtable Session at the annual meeting of the American Educational Research Association. San Francisco, CA. (Conference Canceled)

- Amman, K., Battey, D., Leyva, L. A., & Wolf, E. (April, 2019). 'A lot of people don't understand how much courage it takes': Understanding students' responses to discouraging events in undergraduate mathematics. Paper presented at the annual meeting of the American Educational Research Association: Toronto, Canada.
- Leyva, L. A., Quea, R., Battey, D., Weber, K., & Lopez, D. (February, 2019). Detailing the potentially marginalizing nature of undergraduate mathematics classroom events for minoritized students at intersections of race and gender identities. Paper presented at the annual conference of Research in Undergraduate Mathematics Education: Oklahoma City, OK.
- Leyva, L.A., Wolf, E. A., Amman, K., Igbinosun, J., Khan, N., Battey, D. (January, 2019). Can instructional practices disrupt marginalization?: Student-identified positive instructional strategies in response to experiences with marginalizing events, cultural ideas and problematic instructor interactions in precalculus and calculus classrooms. Presentation at the Joint Mathematics Meeting, Baltimore, MD.
- Battey, D., Weibel, C., Bartell, T. G., & Lowry, A. (April, 2018). Understanding the impact of racial attitudes on pre-service teachers' ratings of children's mathematical thinking. Paper presented at the annual meeting of the American Educational Research Association: New York, NY.
- Battey, D. & Leyva, L. (February, 2018). Whiteness in mathematics teacher education: Supporting preservice teachers in noticing and challenging whiteness in classrooms. Paper presented at the annual conference of the Association of Mathematics Teacher Educators: Houston, TX.
- Battey, D. & Leyva, L. (April, 2017). Whiteness and mathematics: Parallels in perceived neutrality. Paper presented at the annual meeting of the American Educational Research Association: San Antonio, TX.
- Battey, D., Leyva, L., & Belizario, V. (April, 2017). Race and relational interactions in middle school mathematics classrooms. Paper presented at the annual research pre-session of the National Council of Teachers of Mathematics: San Antonio, TX.
- Foote, M., Spencer, J., Battey, D., (April, 2017). Review of equitable instructional practices in mathematics: A lens on CCSSM. Paper presented at the annual research pre-session of the National Council of Teachers of Mathematics: San Antonio, TX.
- Bartell, T., Wager, A., Foote, M., & Battey, D. (February, 2017). Clarifying the role of equity research around the Standards for Mathematical Practice. Paper presented at the annual conference of the Association of Mathematics Teacher Educators: Orlando, FL.

Batthey, D. & Leyva, L. (November, 2016). Making the implicit explicit: A call for exploring implicit racial attitudes in mathematics education. Paper presented at the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education: Tucson, AZ: University of Arizona.

Leyva, L., Massa, J., & Batthey, D. (June, 2016). Queering engineering: A critical analysis of the gendered technical/social dualism in engineering and engineering education. Paper presented at the 123rd Annual meeting of the American Society for Engineering Education: New Orleans, LA.

Batthey, D. & Leyva, L. (April, 2016). Intersections of instructional and relational dimensions of urban mathematics classrooms. Paper presented at the annual research pre-session of the National Council of Teachers of Mathematics: San Francisco, CA.

Batthey, D. & Leyva, L. (November, 2015). Developing a framework for assessing the impact of whiteness in mathematics education. Paper presented at the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education: East Lansing, MI.

Leyva, L., Massa, J., & Batthey, D. (November, 2015). Queering engineering: A critical analysis of the technical/social dualism in engineering. Paper presented at the 5th Annual Out in STEM Conference: Pittsburg, PA.

Batthey, D. & Leyva, L. (June, 2015). Building a case for understanding relational dimensions in mathematics classrooms. Paper presented at the 8th international conference on Mathematics Education & Society: Portland, OR.

Spencer, J., Foote, M. Q., & Batthey, D. (April, 2015). Equitable instructional practices in mathematics education: A review of the field. Paper presented at the annual meeting of the American Educational Research Association: Chicago, IL.

Batthey, D., Neal, R., Leyva, L., Adams-Wiggins, K. & Milby, A. (April, 2014). Analyzing intersections of sex and ethnicity within mathematics: The impact of relational interactions on achievement. Paper presented at the annual meeting of the American Educational Research Association: Philadelphia, PA.

Batthey, D. & Leyva, L. (April, 2013). Rethinking mathematics instruction: An analysis of relational interactions and mathematics achievement in elementary classrooms. Paper presented at the annual conference of the Psychology in Mathematics Education, North American Chapter: Chicago, IL.

Batthey, D., Neal, R., Leyva, L., Adams-Wiggins, K. & Milby, A. (April, 2013). Detailing culturally relevant relational interactions in the mathematics classroom. Paper presented

at the annual meeting of the American Educational Research Association: San Francisco, CA.

Batthey, D. & Neal, R. (April, 2012). Relational interactions in mathematics classrooms and their relationship with instructional quality. Paper presented at the 2012 annual meeting of the American Educational Research Association: Vancouver, Canada.

Batthey, D. (April, 2012). Mediating instructional quality: Relational interactions in mathematics classrooms. Paper presented at the 2012 annual research pre-session of the National Council of Teachers of Mathematics: Philadelphia, PA.

Batthey, D. & Guerra, P. (2011). Teacher change in mathematics professional development: Understanding experimentation in classrooms. Paper presented at the annual conference of the Psychology in Mathematics Education, North American Chapter: Reno, NV.

Batthey, D. (April, 2011). "Good" mathematics teaching for African American & Latino students: Critical relational interactions in the mathematics classroom. Paper presented at the 2011 annual meeting of the American Educational Research Association: New Orleans, LA.

Ullucci, K. & Batthey, D. (April, 2011). Exposing colorblindness/exploring color consciousness: Methods for urban teacher educators. Paper presented at the 2011 annual meeting of the American Educational Research Association: New Orleans, LA.

Batthey, D., Llamas-Flores, S., Burke, M., Guerra, P., Kang, H. J., & Kim, S. H., (April, 2010). ELL policy and mathematics professional development colliding: Placing teacher experimentation within a social, historical, and political context. Paper presented at the 2010 annual meeting of the American Educational Research Association: Denver, CO.

Batthey, D. (2009). Access to mathematics: A possessive investment in whiteness. Paper presented at the 2009 annual meeting of the Psychology in Mathematics Education, North American Chapter: Atlanta, GA.

Batthey, D. (April, 2009). Multilevel insights into teacher learning: Case studies to district-wide reform. Paper presented at the annual meeting of the American Educational Research Association: San Diego, CA.

Batthey, D. & Stark, M. (April, 2009). Inequitable mathematics teaching practices: Attributing ability from mistakes. Paper presented at the annual meeting of the American Educational Research Association: San Diego, CA.

Doan, L. A., Hilpert, J. C., & Batthey, D. (April, 2009). A qualitative investigation of stereotype threat activation and mediation. Paper presented at the annual meeting of the American Educational Research Association: San Diego, CA.

- Franke, M. L., Webb, N. M., Chan, A. G., De, T., Freund, D. P., Ing, M., & Battey, D. (April, 2009). Effects of PD on teacher practices and student participation: Variability across classrooms. Paper presented at the annual meeting of the American Educational Research Association: San Diego, CA.
- Battey, D. (April, 2008). Counternarratives: Teacher participation in professional development as the interaction between identity and discourse. Paper presented at the 2008 annual meeting of the American Educational Research Association: New York, NY.
- Battey, D. (April, 2008). Foregrounding issues of equity and diversity in mathematics education research: Implications for research methods and teacher development. Panel member at the annual meeting of the American Educational Research Association: New York, NY.
- Battey, D. (April, 2007). Theorizing race & power in mathematics education research. Panel Member at the annual meeting of the American Educational Research Association: Chicago, IL.
- Battey, D., Wager, A. A., Taylor, E. V., Foote, M. Q., Spencer, J. (April, 2007). Professional development at the intersection of mathematics and equity. Session Chair and paper presented at the annual research pre-session of the National Council of Teachers of Mathematics: Atlanta, GA.
- Franke, M., Webb, N., Battey, D., Ing, M., & Chan, A. (April, 2007). Eliciting student thinking in elementary school mathematics classrooms. Session chair and paper presented at the annual meeting of the American Educational Research Association: Chicago, IL.
- Battey, D. (April, 2007). Mathematics education research and the study of change: Conceptualizing individual growth. Panel member at the annual research pre-session of the National Council of Teachers of Mathematics: Atlanta, GA.
- Battey, D. (2006). Inequity in Mathematics Education: Moving beyond individual-level explanations of differential mathematics achievement to account for race and power. Paper presented at the 2006 annual meeting of the Psychology in Mathematics Education, North American Chapter: Merida, Mexico.
- Battey, D. & Chan, A. (April, 2006). Using planned and emergent mathematical tasks to describe opportunities for student learning and classroom practice. Paper presented at the 2006 annual meeting of the American Educational Research Association: San Francisco, CA.
- *Bannister, V. P., Bartell, T. G., Battey, D., Hand, V. M., & Spencer, J. (April, 2006). The untapped potential of mathematics education research to address equity. Paper presented

at the 2006 annual research precession of the National Council of Teachers of Mathematics: St. Louis, MO.

*One of five authors with equal authorship

- Batthey, D. (April, 2005). Contextualizing teacher content knowledge of mathematics. Paper presented at the 2005 annual meeting of the American Educational Research Association: Montreal, Canada.
- Batthey, D., Kafai, Y., Nixon, A. S., & Kao, L. (April, 2005). Professional development for teachers on gender equity in the sciences. Paper presented at the 2005 annual meeting of the American Educational Research Association: Montreal, Canada.
- Batthey, D., Franke, M., & Priselac, J. (April, 2004). Scaling up professional development: Using cases to initiate change in the core of teaching mathematics. Paper presented at the annual meeting of the American Educational Research Association: San Diego, CA.
- Franke, M., & Batthey, D. (April, 2004). Content matters: The case of algebraic reasoning in teacher professional development. Paper presented at the annual meeting of the American Educational Research Association: San Diego, CA.
- Batthey, D. S., Kafai, Y. B., & Franke, M. L. (April, 2003). Evaluation of mathematical inquiry in commercial rational number software: Pre-service teachers' criteria and choices. Paper presented at the annual meeting of the American Educational Research Association: Chicago, IL.
- Franke, M., Carpenter, T., Kazemi, E., Batthey, D., & Deneroff, V. (April, 2002). Articulating and capturing generative growth: Implications for professional development. Paper presented at the annual meeting of the American Educational Research Association: New Orleans, LA.
- Batthey, D. S., Kafai, Y. B., & Franke, M. L. (April, 2002). Preservice teachers' evaluation of commercial rational number software. Paper presented at the annual meeting of the American Educational Research Association: New Orleans, LA.
- Kafai, Y., Franke, M., & Batthey, D. (October, 2002). How design features in commercial educational software are evaluated by teachers and reviewers: A report from the sidelines. Paper presented at the 2002 International Conference of the Learning Sciences: Seattle, WA.
- Batthey, D., Kafai, Y., & Franke, M. (April, 2001) Review of rational number software. Paper presented at the annual meeting of the American Educational Research Association: Seattle, WA.

Franke, M., Kazemi, E., Shih, J., Biagetti, S., & Battey, D. (April, 2001). Changing teachers' professional work in mathematics: One school's journey. Paper presented at the annual meeting of the American Educational Research Association: Seattle, WA.

Recognition of Work in the Press

<https://www.theatlantic.com/education/archive/2017/04/racist-math-education/524199/>

https://blogs.edweek.org/teachers/teaching_now/2019/01/white_teachers_majority_black_classroom_punishment.html

<https://news.rutgers.edu/why-we-need-more-black-math-teachers/20190124>

<https://www.jbhe.com/2019/02/study-finds-white-teachers-of-black-students-more-likely-to-punish-students-for-misbehavior/>

<https://www.sciencedaily.com/releases/2019/01/190124115356.htm>

<https://us5.campaign-archive.com/?u=cf662e426cbf9803f0d8b4329&id=57c4efafa7>

Professional Activities:

2019-present Editorial Board, Journal of Urban Mathematics Education

2019-present Editorial Board, Journal of Mathematical Behavior

2021-2025 Advisory Board, *Developing and Researching K-12 Teacher Leaders Enacting Anti-bias Mathematics Education*, NSF Funded grant

2020-2022 Co-chair, AERA SIG-Research in Mathematics Education

2018-2021 Editorial Board, Journal for Research in Mathematics Education

2011-2019 Editorial Advisory Board, Teachers College Record

2016 Review Strand Leader: Student Learning and Related Factors, The North American Chapter of the Psychology in Mathematics Education association (PME-NA), 2016 international conference.

2011-2013 Elected Board Member, AERA Special Interest Group-Research in Mathematics Education (SIG-RME)

2010-2012 Elected Steering Committee Member, The North American chapter of the Psychology in Mathematics Education association (PME-NA)

2008-2010 Session Discussant, AERA

2008 Session Panelist, AERA

2007 Session Panelist and Chair, AERA

2007 Professional Developer, Yavapai County, Cottonwood, AZ

2007 Professional Developer, Kyrene School District, Tempe, AZ

2007 Session Chair, AERA

2006 Professional Developer, Wentzville School District, St. Louis, MO

2005 Professional Developer, North Central Arizona Mathematics and Science Consortium, Prescott, AZ

2005 Professional Developer, Santa Monica/Malibu Unified School District, CA

2005 Professional Developer, Department of Education: Orange County, CA.

2003 Session Chair and Discussant, AERA

1999-2001 Graduate Representative, Committee on Degrees and Academic Standards

1999-2000 Graduate Representative, Psychological Studies in Education Division

1999 Educational Consultant, Francis Parker School: San Diego, CA.

Member: National Council for Teachers of Mathematics
American Educational Research Association
Special Interest Group: Research in Mathematics Education
Psychology in Mathematics Education, North American Chapter
TODOS: Mathematics for All

Reviewer: American Educational Research Journal
Journal of the Learning Sciences
Journal of Research in Mathematics Education
Cognition & Instruction
Journal of Teacher Education
Urban Education
Journal of Urban Mathematics Education
Journal of Mathematics Teacher Education
Journal of Educational Psychology
Equity and Excellence in Education (guest reviewer)
International Multilingual Research Journal (guest reviewer)
American Educational Research Association
Psychology in Mathematics Education, North American Chapter

National Council for Teachers of Mathematics
International Conference for the Learning Sciences

Teaching Experience and Courses

Courses at Rutgers:

2016-present ED 618: Teacher Leadership Inquiry

2009-present ED 441/543/561/562: Teaching Mathematics in Elementary School

2010-2015 ED 401: Individual & Cultural Diversity

2013 ED 599: Equity Issues in Mathematics Education

2011 ED 604: Models of Professional Development

Courses at ASU:

2009 (Spring) DCI 791: Racism & Whiteness

2006-2009 DCI 791: Teacher Learning in Mathematics Education

2008 (Fall) DCI 791: Academic Writing

2008 (Fall) EED/SED 496/576: Professional Field Experience

2006-2008 BLE 480: Elementary Mathematics Methods

2008 (Spring) DCI 791: Qualitative Research: Case Study Methods

2005-2007 EED/SED 598: Equity Issues in Mathematics Education

2007 (Fall) DCI 791: Equity Issues in Mathematics Education

2007 (Fall) DCI 791: Current Research in Mathematics Education

2007 (Spring) EED/SED 598: Professional Development in Mathematics

2006 (Fall) DCI 791: Mathematics Education Seminar: Theoretical Perspectives

2006 (Spring) EED/SED 598: Instructional Models in Mathematics Education

Previous Teaching Experience:

- 2004-2005 *Instructor:* Diversity in Mathematics Education Seminar – Race, Professional Development, and Math Education, Across UC Los Angeles, UC Berkeley, and the University of Wisconsin, Madison
- 1998-2005 *Instructor:* Math methods in the elementary teacher education program at UCLA
- 2004 *Instructor:* Educational psychology in the elementary teacher education program at UCLA
- 2000-2001 *Fellow and Teacher:* University Elementary School, K-6
- 2000-2001 *Project Assistant:* Futures Project, prepared minority high school students for college mathematics and science
- 1999-2000 *Instructor:* Science methods in the elementary teacher education program at UCLA
- 1997-1998 *Instructor:* Educational psychology in the elementary teacher education program at UCLA
- 1997-1998 *Instructor:* Electricity and Magnetism, Mechanics - Physics Department
- Outstanding Teaching Award, Physics Department, Spring 1998

Doctoral Mentoring:

Doctoral Committees (Chair) –

- Lesli Doan, Ph.D., 2008 (co-chair)
- Paula Guerra Lombardi, Ph.D. 2011 (Kennesaw State University)
- Hyun Kang, Ph.D., 2012 (University of Northern Colorado)
- Silvia Llamas-Flores, Ph.D., 2013 (Arizona State University)
- Tali Axelrod, Ed.D., 2014
- Jessica Monaghan, Ed.D., 2015
- Karen Lederle Foglia, Ed.D., 2015
- Natalia Kouraeva, Ed.D., 2015
- Paul Duncan, Ed.D., 2015
- Luis Leyva, Ph.D., 2016 (Vanderbilt University)
- Jennifer Johnson, Ed.D., 2018
- Andrew Panico, Ed.D., 2019
- Amanda Lowry, Ph.D., 2019
- Gary Wenger, Ph.D., 2019
- Jeanne Weinmann, Ed.D., 2019
- Jordan Dellostretto, Ed.D., 2019
- Anita Kumar, Ed.D. 2019 (William Patterson University)
- Brittany Marshall, Ph.D., 2024 (San Diego State University)

Tim Hart-Ruiz, Ed.D., 2024

Doctoral Committees (Chair, in progress) –

Roberta Washington, Ph.D. (Advanced to Candidacy)

Kendell Ali, Ph.D. (Advanced to Candidacy)

Daniel Lopez, Ph.D. (Advanced to Candidacy)

Joseph Garcia-Dziuba, Ed.D. (Advanced to Candidacy)