CURRICULUM VITAE Updated May 2022

Nicole M. Joseph

ASSOCIATE PROFESSOR

Director, The Joseph Mathematics Education Research Lab (JMEL)

AREAS OF SPECIALIZATION

At its core, my research focuses on the experiences of Black girls and women in mathematics from an intersectional perspective. This focal core informs, and is informed by, my research on the role of race, gender, class, other socially constructed identities, and structural systems of oppression shaping Black girls' and women's mathematics identity development. Throughout, my goal involves leveraging Black girls' and women's intuitive understanding of their experiences in mathematics contexts and supporting them in becoming girls and women who master mathematics and know themselves as critically and creatively conscious scholars, educators, and activists.

EDUCATION

April 2011	National Board for Professional Teaching Standards Candidate Certification Area: Early Adolescence Mathematics (ages 7 – 15)			
February 2011	Ph.D. in Curriculum & Instruction , University of Washington (Seattle, WA) Area of specialization: Multicultural Education & Mathematics Education <u>Dissertation</u> : Black Students and Mathematics Achievement: A Mixed-Method Analysis of In-School and Out-of-School Factors Shaping Student Success. Chair: James A. Banks			
June 2003	Masters of Human Development , Pacific Oaks College Northwest (Seattle, WA) Thesis Title: She Called on Me, But My Hand Wasn't Raised: A Correlational Study of African American Students' Perceptions of Teacher Expectations and MathAchievement			
June 2000	Washington State Certification , Pacific Oaks College Northwest (Seattle, WA) P-3 (Early Childhood Education), 4-12 (Mathematics & Economics), K-8 (Elementary Education			
March 1993	Bachelor of Arts in Business Administration , Seattle University (Seattle, WA) Major: Economics Minor: Mathematics Magna Cum Laude			

PROFESSIONAL EXPERIENCE

Associate Professor with Tenure, Vanderbilt University, 2021 - present

Mathematics Education/Teacher Education

Assistant Professor, Vanderbilt University, 2016-2021

Mathematics Education/Teacher Education/Special Education

Assistant Professor, University of Denver, 2011-2016

Curriculum & Instruction/Mathematics Education/Teacher Education Programs

Instructional Math Coach, Technology Access Foundation Academy (TAFA), 2008-2011

Federal Way Public School District (Federal Way, WA)

Coached, collaborated, and consulted with 20 middle/high school teachers in one-to-one, small and whole group settings. Facilitate these processes through authentic learning opportunities associated with personal or professional goals. Offer time and support for teachers to reflect, converse about, explore, and practice new ways of thinking about and doing the complex act of teaching. Put teachers' needs at the heart of professional learning by individualizing their learning and by positioning teachers as professionals.

Instructional Math Coach, Brighton Elementary & West Seattle Elementary, 2004-2008

Seattle Public School District (Seattle, WA)

Consulted, collaborated, and coached more than 30 elementary teachers individually at grade level collaborative meetings and building wide. Provided on-going support that weaved together an emphasis on coaching, teaching, and leadership aimed to produce a more comprehensive approach to increase academic achievement. Facilitated these processes on a variety of topics including formative assessments, analyzing student work, lesson design, standards, high-yielding strategies, and math content knowledge.

Math Teacher, Emerson Elementary School, 2001-2004

Seattle Public School District (Seattle, WA)

Instructed fifth grade students with ELL inclusion. Unstandardized the district adopted curriculum by creating a culturally relevant standards based supplementary curriculum as the classroom demographic dictated. Demonstrated a high level of commitment, flexibility, and enthusiasm in order to motivate all of the students to persist in their academic, intellectual, and social goals. Served in multiple building-level and district leadership roles, including Building Leadership Team and math research specialist.

Middle School Math Teacher, Zion Preparatory Academy, 1999-2001

Instructed fifth through eighth-grade mathematics using MathScape curriculum. Developed multidisciplinary lesson units using the Expeditionary Learning curriculum. Created culturally relevant standards-based curriculum and implemented inquiry-based science and mathematics.

HONORS/AWARDS

- 2022 Vanderbilt Mary Jane Werthan Award
- 2021 Honoree Feature in Mathematically Gifted and Black, Nicole Michelle Joseph Mathematically Gifted & Black (<u>https://mathematicallygiftedandblack.com/</u>)
- 2019 Vanderbilt Chancellor's Award for Research on Equity, Diversity, and Inclusion
- 2019 R.A.C.E Mentoring Advocacy Award for Black Girls and STEM
- 2019 The Mindset Scholars Network Grant Proposal Reviewer
- 2018 Charles A. Dana Center Mathematics Pathways (DCMP) Leadership Fellow

- 2018 Charles A. Dana Center Convening at U of Texas Austin: Equity in MathematicsPathways Initiative—Equity, Mobility, and Mathematics at the Transition from K-12 to College
- 2018 Peabody College Moderator at The Vanderbilt Symposium to Commemorate Martin Luther King's Assassination
- 2018 Workshop on Diversifying and Deepening Engagement and Learning in STEM: Bringing Together Dutch and U.S. Scholars (one of 10 U.S./Dutch Experts in Diversity, Equity, and STEM)
- 2018 American Education Research Association Scholars of Color Contribution Early Career Award
- 2018 American Education Research Association Scholars of Color Early Career Award (Division G)
- 2018 Research on Equity/Sustained Participation in Computing, Engineering & Technology (RESPECT) Best Research Paper Award for "Speaking Truth to Power: Exploring the Intersectional Experiences of Black Women in Computing.
- 2018 Distinguished Graduate/Professional Student Advocate Award by Vanderbilt's Organization of Black Graduate/Profession Students (OBGAPS)
- Furthering Girls' Math Identity Research-Practitioner Forum Invited Participant, 2016-2017 (An NSF funded partnership between New York Academy of Sciences and FHI 360 to advance research and practice on girls' math identity).
- Spencer/National Academy of Education Postdoctoral Fellow, 2013-2014.
- Mathematics Education Service Teaching and Research (STaR) Fellow for 2013-2014.
- University of Denver Provost Research, Scholarship, and Creative Work Faculty Recognition Candidate (This event recognizes the most outstanding researchers, scholars, and creative artists on the University's faculty, and faculty are recommended by the dean), Spring 2012, Spring 2015, Spring 2016.

PUBLICATIONS

Articles

- 1. **Joseph, N. M**. (2021). Black Feminist Mathematics Pedagogies (BlackFMP): A curricular confrontation to gendered antiblackness in the US mathematics education system. *Curriculum Inquiry*, *51*(1), 75-97.
- 2. Joseph, N. M., Frank, T. J., & Elliott, T. Y. (2021). A call for a critical-historical framework in addressing the mathematical experiences of Black teachers and students. *Journal for Research in Mathematics Education*, *52*(4), 476-490.
- 3. Howard, N. R., & **Joseph, N. M.** (2021). Black Girls in Mathematics:(Re) envisioning an Inclusive Parent Involvement Measure. *Educational Policy*, 08959048211015622.
- 4. **Joseph, N. M.**, Haynes-Davison, C., & Patton-Davis, L. (2021). The Politics of Publishing: A National Conversation with Scholars who use their Research about Black Women to Address Intersectionality. *Educational Researcher. doi:10.3102/0013189X20985460*
- 5. Rankin, Y. A., Thomas, J. O., & **Joseph, N. M**. (2020). Intersectionality in HCI: lost in translation. *Interactions* 27, 5 (September October 2020), 68–71. DOI:<u>https://doi.org/10.1145/3416498</u>
- Haynes, C., Joseph, N. M., Patton, L. D., Stewart, S., & Allen, E. L. (2020). Toward an Understanding of Intersectionality Methodology: A 30-Year Literature Synthesis of Black Women's Experiences in Higher Education. *Review of Educational Research*, <u>0034654320946822</u>
- 7. Joseph, N. M., Tyler, A., Howard, Nicol, Akridge, S., & Rugo, K (2020). The Role of

Socialization in Shaping Black Girls' Mathematics Identity: An Analysis of the High School Longitudinal Study 2009. *Teachers College Record*, 122(11), 1-34.

- 8. Joseph, N. M., Hailu, M. F., & Matthews, J. S. (2019). Normalizing Black girls' humanity in mathematics classrooms. *Harvard Educational Review*, 89(1), 132-155.
- 9. Joseph, N. M. Black Feminist Mathematics Pedagogies (Black FMP) (in press): A Curricular Confrontation to Gendered Antiblackness in the US Mathematics Education System. *Curriculum Inquiry*.
- 10. Collins, K. H., **Joseph, N. M.**, & Ford, D. Y. (2020). Missing in Action: Gifted Black Girls in Science, Technology, Engineering, and Mathematics. *Gifted Child Today*, 43(1), 55-63.
- Thomas, J. O., Joseph, N., Williams, A., & Burge, J. (2018, February). Speaking truth to power: Exploring the intersectional experiences of Black women in computing. In 2018 Research on Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT) (pp. 1-8). IEEE.
- 12. Allen, E. & **Joseph, N. M**. (2018). The Sistah Network: Enhancing the Educational and Social Experiences of Black Graduate Women. *NASPA Journal about Women in Higher Education*, 1-20.
- Joseph, N.M., Hailu, M.* & Boston, D. L.* (2017). Black Girls' and Women's Persistence in the P-20 Mathematics Pipeline: Two Decades of Children and Youth Education Research. *Review of Research in Education*, 41(1), 203-227.
- 14. Joseph, N. M. (2017). The Invisibility of Black Girls in Mathematics. *Journal of Virginia Mathematics Teachers*, 44(1), 21-27.
- 15. Joseph, N. M. & Jordan-Taylor, J. (2017). The Value of a Triangle: Mathematics Education in Industrial and Classical Schools in the Segregated South. *Journal of Negro Education*, 85(4), 444-461.
- Annamma, S. A., Anyon, Y., Joseph, N. M., Farrar, J., Greer, E., Downing, B., & Simmons, J. (2016). Black Girls and School Discipline: The Complexities of Being Overrepresented and Understudied. *Urban Education*, 0042085916646610.
- 17. Joseph, N. M., Viesca, K. M., Bianco, M. (2016). Black Female Adolescents and Racism in Schools: Experiences in a Colorblind Society. *The High School*, 100 (1), 4 25.
- Crowe, K. & Joseph, N. M. (2016). Reconstructing history: African American alumnae at the University of Denver. Special Edition Archives on Fire. *Reconstruction*, 16(1). Retrieved from <u>http://reconstruction.eserver.org/Issues/161/Crowe_Joseph.shtml</u>.
- Djonko-Moore, C. M. & Joseph, N. M. (2016). Out of the Classroom and Into the City: The Use ofField Trips as an Experiential Learning Tool in Teacher Education. *Sage Open*, 1-13. DOI: 10.1177/2158244016649648
- 20. Joseph, N., Leonard, J., Viesca, K. M., & Hamilton, B. (2015). Mathematics Teachers' Perspectives on Online Professional Development Modules. *NABE Journal of Research and Practice*, 6.
- 21. *Cobb, F. & Russell, N. M. (2015). Meritocracy or complexity: Problematizing racial disparities in

mathematics assessment within the context of curricular structures, practices, and discourse. *Journal of Education Policy*, <u>http://dx.doi.org/10.1080/02680939.2014.983551</u>

- 22. Leonard, J. & **Russell, N. M**. (2013). Using GIS to Teach Place-based Mathematics in Rural Classrooms. *The Rural Educator*, *34*(3), 10 17.
- 23. **Russell, N. M**. (2012). Classroom discourse: An interesting case for ways to positively influence mathematics achievement for African American students. *Curriculum and Teaching Dialogue*, *14*(2), 35-48.

Articles Under Second Round of Review

- 24. Erving, C. L., **Joseph, N. M.**, Robinson, R. A.S, Smith, R., Boone, J., and VCL-ISBWG Team. "Small Group Learning Communities: A Possibility Model for Affirming and Understanding the Intersectional Experiences of Black Women and Girls in Society."
- 25. **Joseph, N. M**., Douglas, A., & Harmon, M. "I Like to do More Hands-On Stuff than Just Worksheets:" High School Black Girls' Stories of their Experiences in Urban Mathematics Classrooms.
- 26. Dunleavy, T. & **Joseph, N. M**. Using Inclusive Pedagogies to Foster Black Girls' Transformative Experiences in Mathematics. Cognition & Instruction. January 2022.

Articles Under First Review

- 27. Ellison, T., **Joseph, N.M**., Thomas, J. A. "My Father Was a Natural Builder": Exploring the Relationships Between Black Fathers and their Daughters' Interest, Motivation, and Self-efficacy in STEM.
- 28. Dunleavy, T. & **Joseph**, N. M. Using Inclusive Pedagogies to Foster Black Girls' Transformative Experiences in Mathematics.

Books

- **1.** Joseph, N. M. (in press). Mathematizing Feminism: Making Space at the Intersection of Black Girlhood and Mathematics Education. Cambridge, MA: Harvard Education Press.
- **2.** Joseph, N. M. (2020). Understanding the Intersections of Race, Class, and Gifted Education: An Anthology By and About Talented Black Girls and Women in STEM. Charlotte, NC: Information Age.
- **3.** Joseph, N. M., Haynes, C.M., & Cobb, F. (Eds.) (2016). *Interrogating Whiteness and Relinquishing Power: White Faculty's Commitment to Racial Consciousness in STEM Classrooms*. New York, NY: Peter Lang Publishers.

Invited Publications

- 1. Joseph, N. M., Frank, T., & Elliott, T. (in press). Black Women Teaching Mathematics for Social Justice in the U.S. In M. Winn & L. Winn (Eds.), Encyclopedia of Social Justice in Education. Oxford, UK: Bloomsbury Publishing.
- 2. Joseph, N. M. (2022). Issues, trends, and best practices: Black women's and girls' pathways in

mathematics education. In L. Patton, V. Evans-Winters & C. Jacobs (Eds.), Investing in the Educational Success of Black Women and Girls (pp. 40-58). Sterling, VA: Stylus Publishing.

- **3.** Joseph, N. M. & Leyva, L. A. (2019). The Affordances of Intersectionality in Equity-Oriented Research: Lessons from Mathematics Education. *American Physics Society Gazette*.
- **4. Joseph, N.M.** & Cobb, F. (2019). *Antiblackness is in the Air: Problematizing Black Students' Mathematics Education Pathways from Curriculum to Standardized Assessments*. In J. Davis & C.Jett (Eds), *Critical Race Theory in Mathematics Education Research* (pp. 140-163). New York, NY: Routledge.
- Joseph, N. M., Jett, C., & Leonard, J. (2018). A Review of Cases for Mathematics Teacher Educators: Facilitating Conversations about Inequities in Mathematics Classrooms. *Journal of Research in Mathematics Education*, 49(2), 232-236.
- 6. Viesca, K.M., Hamilton, B., Davidson, A., & **The eCALLMS Team** (2016). Supporting linguistically responsive teaching: e-Learning communities for academic language learning in mathematics and science (eCALLMS). In C. P. Proctor, A. Boardman, & E. H. Hiebert (Eds.), Teaching emergent bilingual students: Flexible approaches in an era of new standards (215-236). New York, NY: Guilford.
- 7. Viesca, K. M., Mahon, E., Carson, C. D. & **The eCALLMS Team** (2017). Online professional learning for science teachers of multilingual learners. In A. W. Oliveira and M. H. Weinburgh (Eds), *Science teacher preparation in content-based second language acquisition* (pp. 117-135). Springer.
- 8. Joseph, N. M. (2016). Regard, Resilience, and Resistance (RCubed): Experiences in the R.A.C.E. Mentoring Facebook Social Media Group. In D. Y. Ford, M. T. Scott, R. B. Goings, T. T. Wingfield, and M. S. Henfield (Eds.), *R.A.C.E. Mentoring Through Social Media: Black and Hispanic Scholars Share Their Journey in the Academy*. Charlotte, NC: Information Age Publishing.
- 9. Joseph, N. M. (2016). James A. Banks. In J. Palmer (Ed.), *The Routledge Encyclopedia of Educational Thinkers*, (pp. 574-578). New York, NY: Routledge.

Peer-Reviewed Book Chapters

- Johnson, H. J., Dunleavy, T. K., & Joseph, N. M. (2019). Noyce at Vanderbilt: Exploring the Factors That Shape the Recruitment and Retention of Black Teachers. In J.L., A. C. Burrows, & R. Kitchen (Eds.), *Recruiting, Preparing, and Retaining STEM Teachers for a Global Generation* (pp. 58-77). Boston, MA: Brille Sense.
- Viesca, K. M., Joseph, N.M. & Commins, N. (2019). A Framework for Improving the Teaching of Mathematics to Bi/Multilingual Learners In L. C. de Oliveria, K. Obenchain, R. Kenney, & A. Oliveria (Eds.), *Approaches to Teaching the Content Areas to English Language Learners in Secondary Schools.*
- 3. Joseph, N.M. & Alston, N. V. (2018). I fear no number: Black girls' experiences in eMode learning math academy. In I. Goffney, R. Gutierrez, & M. Boston (Eds.), *Rehumanizing mathematics for Black, indigenous, and Latinx students* (pp. 51-62). Reston, VA: NCTM.
- 4. **Joseph, N.M.**, Mackey, J., Crowe, K.M. (2017). Interrogating whiteness in college and university archival spaces. In G. Schlesselman-Tarango, (Ed.) Topographies of whiteness: Mapping whiteness in

library and information science (pp. 55-78). Sacramento, CA: Library Juice Press.

- Joseph, N. M. (2016). What Plato took for granted: Examining the biographies of the first five African American female mathematicians and what that says about resistance to the western epistemological cannon. In B. Polnick, B. Irby, & J. Ballenger (Eds.), *Women of Color in STEM: Navigating the Workforce* (pp. 3-38). Charlotte, NC: Information Age Publishing Inc.
- Leonard, J. L., Walker, E., Joseph, N. M. & Cloud, V. (2016). Mathematics Literacy, Identity Resilience, and Opportunity Sixty Years Since *Brown v. Board:* Counter narratives of a Five-Generation Family Mathematics education of African American children sixty years post-Brown. In B. Polnick, B. Irby, & J. Ballenger. (Eds.). Women of color in STEM: Navigating the Workforce (pp. 79-110). Charlotte, NC: Information Age Publishing Inc.
- 7. **Russell, N. M**. (2013). Unpacking brilliance: A new discourse for Black students and successful mathematics achievement. In J. Leonard & D. B. Martin (Eds.), *Beyond the numbers and toward new discourse: The brilliance of Black children in mathematics*. Charlotte, NC: Information Age.

Non-Peer-Reviewed Book Chapters

- 1. Joseph, N. M. (2020). Introduction. In N. M. Joseph (Ed.) Understanding the Intersections of Race Gender and Gifted Education An Anthology By and About Talented Black Girls and Women in STEM.
- Haynes, C. M. & Joseph, N. M. (2016). Transforming the STEM System: Teaching that DisruptsWhite Institutional Space. In N.M. Joseph, C. Haynes, & F.Cobb (Eds.), Interrogating Whiteness and Relinquishing Power: White Faculty's Commitment to Racial Consciousness in STEM Classrooms (pp. 1-12). New York, NY: Peter Lang.

Technical Reports

- 1. **Joseph, N. M**., & Leyva, L. A. (in press). Black students' mathematics experiences in K-16 education. Invited review of research for the Launch Years initiative (Charles A. Dana Center at UT-Austin).
- 2. Joseph, N.M., Pereira, P., & Hailu, M.F. (2018. STEM Participation Among Girls and Underrepresented Students of Color: An Equity-Based and Critical Perspective (Consulting Report). San Antonio, Texas: IDRA EAC-South.

Conference Proceedings

- Thomas, J., Joseph, N. M., Williams, A., Crum, C., & Burge, J. (2018). Speaking truth to power: Exploring the intersectional experiences of Black women in computing. In J. Payton, G. K. Thiruvathukal, J. Burge, F. Stukes, Y. Rankin & E. Dillon (Eds.), *Proceedings of the Research on Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT)* (pp. 36-42). Red Hook, NY: Curran Associates, Inc. Retrieved from_ <u>https://drive.google.com/file/d/18MYJpBdTpPpkg_EgcYCXViHGJzqel6R6/view</u>
- Joseph, N. M. (2017). Equity Panel Reactant. In W. M. Smith, B. R. Lawler, J. Bowers, & L. Augustyn (Eds.), *Proceedings of the Sixth Annual Mathematics Teacher Education Partnership Conference* (pp. 40-43). Washington, DC: Association of Public and Land-grant Universities. Retrieved from_ <u>http://www.aplu.org/projects-and-initiatives/stem-education/mathematics-teacher-education-</u>

partnership/mtep-conferences-meetings/mtep6-materials/9-Equity-Panel_Nicole-M-Joseph.pdf

- 3. Joseph, N.M. (2017). The Promises of Deconstructing and Disrupting for Critical Transformations. In W. M. Smith, B. R. Lawler, J. Bowers, & L. Augustyn (Eds.). Proceedings of the Sixth Annual Mathematics Teacher Education Partnership Conference (pp. 155-158). Washington, DC: Association of Public and Land-grant Universities. Retrieved from http://www.aplu.org/projects-andinitiatives/stem-education/mathematics-teacher-education-partnership/mtep-conferencesmeetings/mtep6-materials/32-The-Promises-of-Deconstructing.pdf
- 4. Dunleavy, T., Joseph, N. M., Zavala, M. (2016, November). Black girls in high school mathematics: Crossing the border of deficit discourses. 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. 1487-1494). Tucson, AZ: The University of Arizona. *Online*. 2016-11-3 from

http://www.pmena.org/pmenaproceedings/PMENA%2038%202016%20Proceedings.pdf

In Process/Forthcoming

- 1. Joseph, N.M. & Cosby, M. An Intersectional Understanding of Black Girls' School Mathematics: Review and Recommendations for Practice and Policy.
- 2. Joseph, N.M., Thomas, J. & Harmon, M. Supporting Computational Algorithmic Thinking (SCAT) and Middle School Black Girls: A Possibility Model for Changing Hegemonic Narratives and Disrupting STEM Neoliberal Projects.
- 3. Leyva, L. & Joseph, N M. "What Counts" in Counter-storytelling?: Tracing the Critical Race Methodology for the Advancement of Innovative, Transformative Inquiry about Educational Inequalities.
- 4. Horn, I. & Joseph, N. M. Teaching Competence that Supports Laughter and Joy While Learning Mathematics.
- 5. Joseph, N. M., Marshall, S., & Harmon, M. NSF Funding and Broadening Participation: Examining and Problematizing A Case of Black Women in Mathematics.

INVITED TALKS

- Quantitative Methods Colloquium Speaker, Department of Psychology & Human Development •
- Panelist: "Black Lives in Academia and Research". Vanderbilt Scientific Immersion and Mentorship. February • 24, 2022.
- Panelist: Educator's Cooperative Teacher Series: Antiracist Teaching, Leading, & Learning from the • Classroom: Rehumanizing Education—An Antidote to White Supremacy Culture, October 25, 2021
- Keynote for California Association for Gifted Education, Virtual, October 2, 2021 •
- Keynote for Southern Methodist University, Virtual, September 30, 2021 •
- Panelist: Mentoring for Equity & Science Identity. Purdue University Arts/Sciences Department. Virtual, • August 30, 2021
- Keynote for Black Girls Do STEM Summer Speaker Series. Virtual, July 19, 2021 •
- Keynote for Rhodes College of Education National Science Foundation Noyce Program. Virtual, March 30, •

2021.

- Panelist: Reflection/Discussion of the award-winning documentary about gender inequality, *Picture a Scientist*. Vanderbilt Provost' WAVE Council & Margaret Cuninggim Women's Center. March 9, 2021.
- Panelist: Rutgers Graduate School of Education Brown Bag Series. Researching Black Girlhood & Womanhood in Mathematics as Intersectional Praxis: A Conversation for Emerging Scholars, February 24, 2021
- Virtual Co-Keynote: Striving for Racial Justice in Academic Biology, Arizona State University, November 19, 2020
- Virtual Keynote: Elmhurst University STEM Conference, Chicago, IL, October 17, 2020.
- Virtual Co-Keynote: National Educators for Antiracism Nonprofit, August 8, 2020.
- Panelist: IMA/Math Alliance Career Paths Conference, July 13-15, 2020
- Co-Keynote: Mathematics and Anti-Racism. National Educator Anti-Racism Conference, August 8, 2020
- Keynote: Tulane University, Mathematics for All New Orleans, March 6, 2020
- Panelist: Vanderbilt University, Margaret Cuninggim Women's Center: *Women in the Academy*, Nashville, TN, September 25, 2019
- Research Talk: John Hopkins University, Department of Mathematics, Baltimore, MD, September 20 22, 2019.
- Training for the Dana Center Leadership Team Equity Convening (to include the president, vice-chair, and several senior managers), June 12-14, 2019.
- Keynote Speaker: University of Georgia Navigating STEM Colloquium. June 5, 2019.
- Colloquium Speaker: Kaput Center for Research and Innovation in STEM Education, University of Massachusetts Dartmouth, North Dartmouth, MA, May 5-7, 2019
- Research Talk: Virginia Polytechnic Institute and State University, Women and Minority Artists and Scholars Lecture Series, Blacksburg, VA, April 24-26, 2019.
- Panelist: Second Annual Data for Black Lives Conference, Cambridge, MA, January 10 13, 2019.
- Research Talk: University of Illinois Urbana Champaign, Teaching and Diversity Seminar, May 2-3, 2018.
- Research Talk: James Banks final Symposium: Commemorating the Past and Envisioning the Future of the Center for Multicultural Education, April 25-27, 2018.
- Research Talk: Middle Tennessee State University, Math & Science Seminar Series, March 29, 2018.
- Research Talk: Clemson University, Women in Mathematics Lecture Series, March 8-9, 2018.
- Research Talk & Collaborations: Purdue University Mathematics/Statistics Department, September 25 27, 2017.
- Conference Reactant: Mathematics Teacher Education Partnership (MTE-P), New Orleans, LA, June 25 27, 2017.
- Plenary Speaker: Mathematical Sciences Research Institute, Berkeley University, March 15-17, 2017.
- Research Talk: Twitter Global Mathematics Department Webinar. December 12, 2017. Exploring Black Feminist Math Pedagogy as Intersectional Intervention
- Co-Presenter with Viveka Brown (Spelman College): Research Colloquium for Associate Provost for Strategic Initiatives and Partnerships sponsored by the Vanderbilt University Wondry, May 18,2017.
- Panelist: HIDDEN FIGURES at the Belcourt Theater, March 22, 2017.

PRESENTATIONS (Peer-Reviewed)

- 1. Douglas, A., Harmon, M., Joseph, N. & Rittle-Johnson, B. (2021, April). "*I'm scared to ask for help": Black Girls' Voicing of their K-12 Math.* Poster to presented at the Society for Research in Child Development, virtual.
- 2. International Conference of the Learning Sciences (ICLS), Nashville, TN. June 2020.Short

Paper. Designing STEM Learning Environments to Support Computational Algorithmic Thinking and Middle School Black Girls: A Possibility Model for Changing Hegemonic Narratives and Disrupting STEM Neoliberal Projects. Cancelled: COVID19.

- 3. American Education Research Association, San Francisco, CA. April 2020. Paper: *Black Girls' Perspectives of Instructional Strategies in Urban Middle-School Mathematics Classrooms.* Cancelled: COVID19.
- 4. American Education Research Association, San Francisco, CA. April 2020. Paper: Antiblackness in the air: Problematizing Black Students' Mathematics Education Pathways from Curriculum to Standardized Assessments. Cancelled: COVID19.
- American Education Research Association, San Francisco, CA: April 2020. Symposium: Building Solidarity, Supporting Black Women: Black Men Scholars Researching Black Women in STEM. Cancelled: COVID19.
- 6. American Education Research Association, Toronto, Canada. April 2019. Paper: *Measuring and Problematizing Black Girls' STEM Experiences in Informal Learning Environments*
- 7. American Education Research Association, Toronto, Canada. April 2019. Roundtable: *Black Girls as Possibility Models for Changing Hegemonic Narratives and Disrupting STEM Neoliberal Projects*
- 8. American Education Research Association, Toronto, Canada. April 2019. Session Organizer: The Potential of Intersectionality for Advancing Research Paradigms in STEM: A Cross-Cutting Conversation
- 9. American Education Research Association, Toronto, Canada. April 2019. Paper: *Institutionalized Efforts to Increase the Participation of Black Women and Girls in STEM*
- 10. Association of Mathematics Teacher Educators, Orlando, FL. February 2019.
 Presenter: A Process of "Becoming": Transitioning into Equity, Social Justice-Oriented Mathematics Teacher Educator Roles
- 11. Association of Mathematics Teacher Educators, Orlando, FL. February 2019. Invited Moderator: Mathematics Teacher Educators Walking to Equity Through Critical Reflection and Analysis of Structural Systems
- 12. Association of Mathematics Teacher Educators, Orlando, FL. February 2019. Presenter: *Moving Toward Emancipatory Pedagogies in the Research, Teaching and Learning of P-20Mathematics*
- 13. Association for the Study of Higher Education, Tampa, FL. October 2018. Invited Moderator: *Black Women Faculty Aspirations*, Moderator.
- 14. Workshop on Diversifying and Deepening Engagement and Learning in STEM: Bringing Together Dutch and U.S. Scholars, Amsterdam, Netherlands. September 2018. Presenter: Black Feminist Mathematics Pedagogy (BLACKFMP): An Emerging Theory of Epistemology, Consciousness, and Empowerment.
- 15. American Education Research Association, New York, NY. April 2018. Invited Speaker: Finding

Balance Across Scholarship, Activism, and Life

- 16. American Education Research Association, New York, NY. April 2018. Paper: Moving Beyond Student-Centered Practices: Fostering Black Girls' Transformative Experiences with Mathematics
- 17. American Education Research Association, New York, NY. April 2018. Paper: *Refusing to be Removed: Black Women's and Girls' Seat at the STEM Table*
- 18. American Education Research Association, New York, NY. April 2018. Roundtable: AERA Committee on Scholars of Color in Education Mentoring Roundtable and Reception
- 19. American Education Research Association, New York, NY. April 2018. Roundtable: Exploring How Mathematics Teachers Use Inclusive Pedagogies to Promote Robust Mathematics Identities Among Black Girls
- 20. American Education Research Association, New York, NY. April 2018. Paper: *Exploring Socialization and Mathematics Identity Among High School Black Girls*
- 21. American Education Research Association, New York, NY. April 2018. Paper: I AM: Intersectionality as Methodology and Black Women as Possibility Models for Educational Research
- 22. American Education Research Association, New York, NY. April 2018. Paper: Black Woman First, Mathematician Second: Toward an Understanding of Black Women's Constructions of Mathematics Identity
- 23. American Education Research Association, New York, NY. April 2018. Roundtable: *Humanizing Mathematics Teaching and Learning for Black Girls*
- 24. Humanities for STEM Research Collaborative, Brooklyn, NY: April 2018.
 Paper: The Affordances of History in Understanding Contemporary Critical Issues in Mathematics Education: A Case Analysis of Black Students and Teachers
- 25. Association of Mathematics Teacher Educators, Houston, TX. February 2018. Paper: AMTE equity committee exploration: To what extent are AMTE members addressing/meeting indicatorstoward equity?
- 26. Research on Equity & Sustained Participation in Computing, Engineering, & Technology (RESPECT) Conference, Baltimore, MD: February 2018 Paper: Speaking truth to power: Exploring the intersectional experiences of Black women in Computing
- 27. Black Women & Girls Symposium: Producers of Knowledge & Agents of Change, Providence, RI. November 2017. Paper: Refusing to be Removed: Black Women's and Girls' Seat at the STEM Table.
- 28. American Education Research Association, San Antonio, TX. May 2017 Roundtable: Black Girls in High School Mathematics: Crossing the Borders of Deficit Discourses
- 29. American Education Research Association, San Antonio, TX. May 2017 Paper: *Measuring and Understanding Black Women's MathematicsIdentity*

- 30. American Education Research Association, San Antonio, TX. May 2017 Symposium: Problematizing Equal Education Opportunity Reform: Black Women and Girls in Mathematics and Engineering
- 31. PME_NA, Tucson, Arizona; Co-Presenter: Teresa Dunleavy. November 2016 Research Report: *Black girls in Algebra: Crossing Deficit DiscourseBorders*
- 32. American Education Research Association, Centennial Year, Washington DC. April 2016 Symposium: James A. Banks: A Pioneer for the Advancement of Social Justice in a Global World
- 33. American Education Research Association, Centennial Year, Washington DC. April 2016 Roundtable: *Reconstructing History: African American Alumnae at the University of Denver*
- 34. American Education Research Association, Centennial Year, Washington DC. April 2016
 Poster: Technology and Transformation: Two Professors' Experience Teaching Online for the First Time
- 35. Association for Science Teacher Education International Conference, Reno, NV. February 2016 Symposium: *Exploring Racial Consciousness in Science Education*
- 36. Association of Mathematics Teacher Educators, Irvine, CA. January 2016 Symposium: *Exploring Racial Consciousness and Faculty Behavior in STEM Classrooms*
- 37. History of Education Society, St. Louis, MS. November 2015
 Paper: The Mathematics Education of Blacks before Brown: An Examination of Mathematics
 Curriculum in Industrial Schools in the Segregated South, 1854 1954
- 38. HBCUStory Symposium Conference, Nashville, TN. October 2015 Paper: Mathematics Education in the Segregated South, 1854-1954
- 39. University of New Mexico Mentoring Institute Conference, Albuquerque, NM. October 2015 Paper: Sistah Network: Creating a Program Enhancing the Educational and Social Experiences Of Black Women
- 40. American Educational Research Association, Chicago, IL. April 2015 Invited Poster Session—National Academy of Education Post-Doctoral Fellows Excellence in Education Research: Early Career Scholars and Their Work
- 41. American Educational Research Association, Chicago, IL. April 2015
 Paper: Black Girls and School Discipline: The Complexities of Being Overrepresented and Understudied.
- 42. American Association for Teaching and Curriculum, Tampa, FL. October 2014 Paper: Blacks' Mathematics Education before Brown: An Examination of Mathematics Curriculum in Industrial Schools in the Segregated South, 1866-1954
- 43. National Council of Teachers of Mathematics, Research Pre-session, New Orleans, LA. April 2014 Building Research Communities in Mathematics Education. Panel participant with Chazan, D., Civil, M., and Leonard, J.

- 44. American Educational Research Association, Philadelphia, PA. April 2014 Roundtable: Sistah Network: Enhancing the Educational and Social Experiences of Black Graduate Women
- 45. American Educational Research Association, Philadelphia, PA. April 2014 Symposium: *From Baccalaureate to Professorate: Voices of Black Women from within the Academy*
- 46. American Educational Research Association, Philadelphia, PA. April 2014 Symposium: Improving the Education of Multilingual Learners and their Teachers through Interdisciplinary Collaboration and Online Professional Development
- 47. American Educational Research Association, Philadelphia, PA. April 2014 Paper: *The Mathematics Education of African Americans*, 1866-1954
- 48. American Educational Research Association, Philadelphia, PA. April 2014
 Paper: What Plato Took for Granted: An Examination of the First Five African American Female Mathematicians
- **49.** St. Michael's College, Colechester, VT. May 2013. Paper: Collaborative Online Professional Development Focused on Academic Language in Mathematics
- 50. American Educational Research Association, San Francisco, CA. April 2013 Paper: Black Female Adolescents and Racism in Schools: Experiences in a "Post-Racial" Society
- 51. American Educational Research Association, San Francisco, CA. April 2013 Roundtable: Resistance, Resilience, and Reciprocity: Centering the Voices of Black Doctoral Women with Faculty Aspirations
- 52. American Educational Research Association, San Francisco, CA. April 2013 Symposium: Moving beyond the numbers of aggregated achievement gap data and toward a new discourse.
- *53.* National Conference of Teachers of Mathematics Research Pre-session, Denver, CO. April 2013 Symposium: **The brilliance of Black children in mathematics: Toward new discourse.**
- 54. National Council of Teachers of Mathematics, Denver, CO. April 2013 Poster Presentation: Improving Teacher Quality: Developing, Piloting, Evaluating, and Refining a Coached Professional Development Series in Mathematics for K-8 Teachers
- 55. National Council of Teachers of Mathematics, Denver, CO. April 2013 Poster Presentation: Interdisciplinary Collaboration: Creating Online Learning Modules to Support Linguistically Responsive Teaching in Math and Science
- 56. Metropolitan State University of Denver Teacher-Scholar Forum, Denver, CO. February 2013 Workshop: Designing a Professional Development Series in Mathematics for K-8 Teachers
- 57. Colorado Affiliate of Teachers of English to Speakers of Other Languages (CoTESOL). November 2012 Title: Online Professional Development: Language Based Content Instruction (Math/Science) Presenters: Kara Mitchell, Helen Douglass, Boni Hamilton, Elizabeth Mahon, Nicole Russell, and the

eCALLMS Module Design Team

- 58. National Council of Teachers of Mathematics, Philadelphia, PA. April 2012 Symposium: *Teaching and Learning: Stories of Equity in High School Mathematics*
- 59. University of Denver Women's Conference, Denver, CO. April2012
 Women's Voices: The Textures of our Lives
 Paper presented: *Resistance, Resilience, and Reciprocity: Centering the Voices of Black Graduate Women with Faculty Aspirations*
- 60. American Educational Research Association, Vancouver, BC. April 2012 Symposium: *High School Students' Identity, Position, and Learning in Mathematics*
- 61. American Educational Research Association, Vancouver, BC. April 2012
 Paper presented: A Historiography of the Mathematics Education of Blacks Schooled in the United States
- 62. 10th Annual Alumni of Color Conference. March 2012 Harvard Graduate School of Education
 Paper presented: *Mathematics Success for Black Learners*
- 63. University of Washington, Seattle, WA. April 2010 Mathematics Engineering Science Education (MESA) Workshop presentation: Why Race and Culture Matter in Mathematics Education
- 64. University of Pittsburgh, Pittsburgh, PA. May 2009
 Dubois-Nkrumah-Dunham International Conference
 Paper presented: *The Mathematics Education of African Americans at Garfield High School, 1960-1970*
- 65. Washington Association for the Education of Young Children (WAEYC), Bellevue, WA. October 2005 29th Annual Conference: Looking Through the Kaleidoscope Workshop presentation: *The Role of Literacy in Mathematics & Science*
- 66. The Praxis Institute for Early Childhood Education, Seattle, WA. April 2005
 2nd Annual Spring Conference: Language & Literacy in a DiverseSociety
 Workshop presentation: *The Role of Language and Literacy in Science & Math*
- 67. National Black Child Development Institute, Los Angeles, CA. September 2004 34th Annual Conference: Shifting the Kaleidoscope—New Possibilities for Children Workshop presentation: *African American Teachers for Academic Achievement*

GRANT ACTIVITY

Grant/PI	Funder	Year	Amount	Status
Measuring Inclusive	Assessment for Good &	2022	\$300,00	Funded
Constructs of	AERDF			
Mathematics Identity				
(MICMI): An				
Instrument for				

Disrupting Systemic Intersectional Racism in STEM				
Measuring Inclusive Constructs of Mathematics Identity (MICMI): An Instrument for Disrupting Systemic Intersectional Racism in STEM	Institute of Education Sciences (IES)	2021	\$625, 354	Not Funded
Measuring Inclusive Constructs of Mathematics Identity (MICMI): An Instrument for Disrupting Systemic Intersectional Racism in STEM	National Science Foundation	2021	\$625, 354	Under Review
Joseph, Black Girls Do STEM Research Practice Partnership	Peabody Small Grant	2021-2023	\$5,000	Funded
Measuring Inclusive Constructs for Mathematics Identity	National Science Foundation	2020	\$999,984	Not Funded
Alliance Mentor Training Project (sub award from Purdue University)	National Science Foundation	2018	\$1.3M	Not Funded
Co-PI with Fisk University/Vanderbilt Bridge Program: Louis Stokes Regional Centers of Excellence in Broadening Participation	National Science Foundation	2018	\$1.4M	Funded
Center for the Study of Black Women and Girls in Society	Vanderbilt TIPs	2018	\$200K	Funded
Collaborative Research: Computing,	National Science Foundation	2018	\$100K	Funded

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Mathematics and				
Intersectionality:				
Understanding and				
Supporting the				
Relationship between				
Computing and Math				
Identities for Black				
Girls and Women				
SEC Travel Grant	Vanderbilt	2018	\$1780	Funded
Reducing Inequality	William T. Grant	2017	\$600K	Not Funded
in Education	Foundation			
ORAU Travel Ward	Oak Ridge Associated	2017	\$800	Funded
	Universities			
CO-PI with Keivan	National Science	2017	\$400K	Funded
Stassun	Foundation,			
Southeastern	INCLUDES			
Compact for				
Inclusive Student				
Transitions in				
Engineering and				
Physical Sciences				
(SCI_STEPS)				
Furthering Black	Furthering Girls Math	2017	\$1000	Funded
Girls' Math Identity	Identity Network in			
5	New York			
Research Studio	Vanderbilt Provost's	2017	\$5000	Funded
Award	Office			
International	U.S. Department of	2017-2022	\$75,000 across 5	Sub-Award to
Consortium for	Education		years	Vanderbilt
Multilingual				
Excellence in				
Education (ICMEE)				
Award Number				
#T365Z16035				
Measuring,	National Science	2016	\$568K	Not Funded
Understanding, and	Foundation, CAREER			
Furthering Black	AWARD			
Women's Math				
Identity				
Understanding Math	Peabody Small Grant	2016	\$8,500	Funded
Identity among Black	······		,	
Undergraduate				
Women				
Co-PI with Teresa	Mathematics	2016	\$5,000	Not Funded
Dunleavy.	Association of America.		40,000	1,001 unded
STEMsational:	Tensor Women and			
Empowering High	Mathematics Grant			
School Girls of Color	Proposal			
through Mentoring	1 TOPOSUL			
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Mathematics Education of Blacks during Segregation	The American Association of University Women (AAUW) Summer Research Grant	2015	\$6,000	Not Funded
Mathematics Education of Blacks during Segregation	The Woodrow Wilson Foundation, Nancy Weiss Malkiel Junior Faculty Fellowship	2015	\$10,000	Semi-Finalist. Not Funded
Understanding Factors Associated with mathematics, engineering, and computer science success	National Science Foundation, CAREER Award	2015	\$563,188	Not Funded
CO-PI with Richard Kitchen and Duan Zhang Assessment in Mathematics for Productive Struggle	National Science Foundation	2015 2014	\$1,097,520	Not Funded
CO-PI with Richard Kitchen. Access in Mathematics for All In Action (AMA2)	National Science Foundation	2013	\$1,450,000	Not Funded
Travel Award	STEM Women of Color Conclave	2014	\$1500	Funded
CO-PI with Richard Kitchen and Alvaro Arias. Access in Mathematics for All (AMA)	National Science Foundation	2014	\$349,971	Funded
Co-Mentors with Gordon, H., Ortega, D., Anyon, Y., Freeman, A., Pasko, L., & Smith, C. Post-Doc for Race, Class, and Gender Inequities in K-12 Education	The University of Denver Interdisciplinary Research Incubator for the Study of (In) Equality or IRISE Two- Year Post-Doctoral Fellow Award	2014	\$70,000	Funded
The Mathematics Education of Blacks, 1854-1954	National Academy of Education Spencer Postdoctoral Fellowship	2014	\$55,000	Funded

Highlighting the Legacy of Black Women Alumni	University of Denver Sesquicentennial	2013	\$2,832	Funded
The Sistah Network: Black Women Graduates Sustaining and Retaining Each Other	University of Denver Faculty Research Grant	2013	\$2,780	Funded
The Mathematics and Science Education of African Americans: A Historical Perspective	University of Denver PROF Grant	2013	\$29,994	Funded
CO-PI with Richard Kitchen and Alvaro Arias. Track I, Robert Noyce Teacher Scholarship: Access in Mathematics for All (AMA)	National Science Foundation	2013	\$1,449,221	Not Funded
CO-PI with Richard Kitchen. Title II Improving Teacher Quality Grant Developing Secondary Mathematics Leaders to Support College Access and Success	Colorado State Department of Higher Education	2013	\$199,881	Not Funded
Resistance, Resilience, and Reciprocity: Centering the Voices of Black Graduate Women with Faculty Aspirations	University of Denver Faculty Research Grant	2012	\$3,000	Funded
CO-PI with Lori Patton Davis CARE (College Aspirations Readiness & Empowerment) and Adolescent Black Girls	University of Denver Center for Community Engagement & Service Learning Public Good Fellows	2012	\$16,000	Funded

CO-PI with Kent	Colorado State	2011	\$307,299	Funded
Seidel.Title II	Department of Higher			
Improving Teacher	Education			
Quality Grant				
K-8 STEM Content				
Specific Professional				
Development to				
Improve Elementary				
Student Achievement				

TEACHING, ADVISING, and MENTORING

Vanderbilt University

- EDUC 3280-1: Planning and Assessment (Spring 2022)
- EDUC 7500: College Teaching and the Professoriate (Spring 2022)
- EDUC 8040 Equity, Diversity, & Inclusion (Fall 2021)
- EDUC 3890-1: Intersectionality (Summer 2021)
- SPED 2160/7100—EDUC 2160/6060 Diversity in American Education (Fall 2019)
- EDUC 7500: Intersectionality Seminar (Maymester 2019, Summer 2021)
- EDUC 7500 Politics, Power, and Learning in Mathematics Curricula (Fall 2018)
- EDUC 1001 What Makes You Angry About the World: Pre-Immersion Work for Experiences in Social Justice (Spring2018)
- EDUC 8020 Teaching as a Social Practice (Spring 2019)
- EDUC 7500 The Centrality of Race in Mathematics Education (Fall 2016)
- EDUC 6300 Advanced Social and Philosophical Aspects of Education (Fall 2016, Fall 2017, Fall2018, Fall 2019, Fall 2020, Fall 2021, Fall 2022)
- EDUC 7140 Discourse in STEM Classrooms (Spring 2017, Spring 2018, Spring 2019, Fall 2020)
- EDUC 8040 Diversity, Equity, and Inclusion in Education (Fall 2021)
- EDUC 9700 Intersectionality Research Group (Fall 2017, Spring 2018, Fall 2019, Spring 2020)
- EDUC 7500 Historiography of Educational Research (Spring 2018, Spring 2020)

Masters student advising: Mentoring: Ariel Smith (2016-2018), Jewel Williams (2016-2018), and Amanda Ketner (2016-2017)

Doctoral student advising: Micaela Harris (Fall 2019 – present) Taylor McNeill (co-advisory with Professor Leyva, Fall 2019-present) Mariah Harmon (Dissertation committee member, 2019-present) Sara Jones (Dissertation committee member, 2019-present) Samantha Marshall (Spring 2019-2020) Unofficial mentoring, professional development, writing, and letters of recommendation—(Mariah Harmon, Grace Chen, Portia Botchway, Sara Jones, Lauren Vogelstein, Megan Wongkamalasai)

University of Denver

- Elementary Mathematics Methods (Fall 2014, Fall 2015)
- Diversity in Mathematics Education (Spring 2014)
- Classroom Discourse in the Mathematics Classroom (Winter 2015)
- Seminar on Researching Race in Mathematics Education (Spring 2013)
- Race, Class, & Gender in Education (Spring 2012)

- Analysis of Teaching (Fall 2011)
- Teacher as Researcher (Fall 2011)
- Transformational Teaching and Learning (Fall 2012)
- Teaching Ethnic Minorities (Winter 2014)
- Curriculum Development & Teaching Strategies in Higher Education (Winter 2013)
- Teacher Education Field Experience Seminar (Fall 2014)
- Qualitative Data Collection and Analysis (Spring 2015)

Average Teaching Evaluation Score "Overall this is an Effective Instructor": 5.75/6

Advising: 15 Doctoral Students and 5 Masters Students

DISSERTATIONS (*Denotes Chair)

- Taylor McNeill (2021 present): Engaging Mathematics Faculty in Equity-Oriented Departmental Reform
- Madison Knowe (2021 present): Understanding Students' Joy as a Liberating Pedagogical Practice in Math Education
- Mariah Harmon (2019 present): Finally, a Space for Us: Examining the Developmental Needs of Black Women Pre-Service Teachers
- Sara Jones (2019 present): Reimagining Reading Motivation as a Collective, Critical Endeavor: Centering the Perspectives of Black Girl Readers
- Brittany Marshall, Rutgers University (2021 present): Black Girls Thriving in Mathematics
- Mariah Harmon (2019 present): Black Teachers and Teacher Education
- William Crear (Spring 2015): A Case Study Exploring Organizational Development and Performance Management in the Operational Infrastructure of a Professional Working Organization Using Academic Constructs
- Floyd Cobb (Spring 2012): It's about access: How the curricular system and unequal learning opportunities predict the racial test score gap in mathematics
- Shannon Jones (Spring 2012): Places of Purpose, Purposeful Places: An Exploration of the Physical Environment of Primary Level Classrooms

SERVICE

<u>NATIONAL</u>

Board Member: The Mathematics Learning Center, profile here <u>https://www.mathlearningcenter.org/about/team</u> (December 2021 - present).

Committee: AERA Research Focus on Mathematics Education: Communications Chair (2019-2021)

Committee: AERA Socio-Political Issues in Math/Science Education SIG, Communications Chari (2021-present)

Editorial Board

- Journal for Research in Mathematics Education (JRME)—2019–2022
- Journal of Urban Learning, Teaching, and Research (JULTR)-2014-2015/2015-2016

Manuscript Reviewer

- Genealogy (2019 present)
- Journal of Research of Mathematics Education (2018- present)
- Educational Researcher (2019 present)

- Review of Educational Research (2018 present)
- Journal of Teacher Education (2017 present)
- Review of Research in Education (2017 present)
- The High School Journal (2017 present)
- SAGE Open (2016- present)
- American Education Research Journal (2015-present)
- Urban Education (2015-present)
- Journal of Negro Education (2015-present)
- Action in Teacher Education (2015-present)
- Curriculum and Teaching Dialogue Journal (2012-2015)
- NCTM Teaching Mathematics in the Middle School (2012-2015)
- Sociology of Education (2012-2015)

Conference Proposal Reviewer

- Research on Equity & Sustained Participation in Computing, Engineering, and Technology (RESPECT; 2018)
- American Education Research Association (2012-present)
 - Division C Learning and Instruction/Section 1c: Mathematics
 - SIG-Research Focus on Black Education
 - o SIG- Multicultural/Multiethnic Education: Theory, Research, and Practice
- National Council of Teachers of Mathematics Research Conference (2012-2015)
- Association of Mathematics Teacher Educators (2012-present)

Book Reviewer

• Routledge (2017 – present)

External Reviewer

• Handbook of Research on Teachers of Color (2018)

National Course Guest Speaker

- Holmes Scholar Speaker, Intersectionality as a Methodology, University of Las Vegas Nevada, May 2, 2022.
- Holmes Scholar Speaker, Writing with Authority, University of Las Vegas Nevada, February 5, 2022.
- EDAD 690 : Social Context of Education and Learning Through Film, Dr. Haynes Davison, Texas A & M
- ECE 9110: Critical Dimensions of Building a Professional Agenda, Dr. Jessup, Georgia State University
- EDEC 1101-02 Race and Racism, Jacqueline Leonard, University of Wyoming, September 2020.
- EDUC 359E Research on Mathematics Education, Jo Boaler, Stanford University, November 2018.
- ED 9470: Current Scholarship in Mathematics Education, Nicole Bannister, ClemsonUniversity, October 2018.
- EMAT 5100: Theory & Research in Learning and Development, Richard Kitchen, University of Wyoming, September 2018.

Advisory Board Member

- Peabody Initiative for Race Research and Justice: Dr. Richard Milner founder (2021 present)
- Inclusive Graduate Education Network, funded by the National Science Foundation (2019-2022)
- Designing Modules to Support the Development of Mathematics Pre-Service Teachers' Critical Consciousness through Statistical Investigations of Systemic Racism, funded by NSF (2021-2024)
- A Longitudinal Study Predicting Postsecondary STEM Readiness among Low-Income Minority

Students, funded by the National Science Foundation (2018-2021)

- Examining the Trajectories of Black Mathematics Teachers, funded by the National Science Foundation (2018-2021)
- Conference on Equity in Discipline-Based Education Research in the Mathematical and Physical Sciences, funded by the National Science Foundation. (2018)

Committee Member

- Division G Early Career Award (2019)
- AERA Division K Awards (2019)

UNIVERSITY SERVICE

Vanderbilt University

- Dissertation Committee Member for Amina McIntyre, Divinity School, Summer 2021 present
- Destination Vanderbilt Peabody Search Community for Dismantling Inequalities Faculty position (Spring 2021)
- Guest Lecturer: Vanderbilt Divinity School--Theology and Practice Colloquy (Fall 2020)
- University Committee on Teaching (Fall 2020)
- University Faculty Research Awards Committee (Spring 2020)
- Invited Panelist: Organizing for Equity (March 2020). Graduate Student Workers project
- Invited Panelist: Teaching While Black, Authority in the Classroom (Fall 2019)
- McGill Hour Guest Lecture (January 2019)
- Peabody Faculty Lecture (September 2018)
- Peabody Career Services presents the PhD Panel (September 2018)
- Vanderbilt University Library Collections Initiative Review Panel Member (April 2018-)
- EDI Proposal Reviewer (Spring 2017)
- Invited Workshop Facilitator: Racial Justice Conference (November 10, 2017)
- Invited Speaker: Physics and Astronomy Colloquium Series (October 5, 2017)
- Invited Panel Speaker: *Women in STEM*, Vanderbilt School of Engineering (2017)
- Invited Speaker: Biological Sciences Seminar Series Regarding Inequity in STEM Fields (2017)
- Peabody Bridges: Invited panelist on How Harmful Stereotypes Affect African American Students' Educational Outcomes (2017)
- Peabody Bridges: Invited panelist on Race in America Symposium (2016)
- Public Theology and Racial Justice Collaborative Planning Committee, 2016-present
- Department of Sociology Postdoctoral Research Fellow Search Committee, 2016
- The Center for Medicine, Health, and Society (MHS) in the College of Arts & Science tenure-track professor with expertise in the intersectional study of women and girls of color andhealth/mental health/science Search Committee, 2016
- Discussion Facilitator: Margaret Cuninggim Women's Center Community Post-Screening Discussion of Hidden Figures (March 19, 2017)

University of Denver

- Co-Chair, University of Denver's Women's Coalition, 2013-2014.
- Workshop Facilitator, Graduate Career Services, Fall 2013/2014 *Acing the Job Talk*! The Academic Job Search Series
- Advisory Board Member, University of Denver Office of Teaching and Learning, 2012-present.

- Founder, *Sistah Network* at the University of Denver. A campus organization comprised of 93 current graduate Black women in doctoral programs across DU. Purpose is to provide academic support and professoriate professional development, Fall 2012 present
- Workshop Facilitator, University College Master Teachers Program. Professional development workshops for faculty on Planning Effective, Rich and Meaningful Learning Experiences, Fall 2012
- Co-Lead for Pedagogy Standard. Council for the Accreditation of Educator Program (CAEP) review
- Senior Grants Administrator Search Committee, Fall 2014
- Higher Education Tenure Track Assistant Professor Search Committee, 2012, 2013
- Urban Education Endowed Chair Search Committee, 2012
- Mathematics Education Tenure Track Assistant Professor Search Committee, 2013
- Co-chair Morgridge College of Education Outreach Committee, 2011-2013
- Mathematics Education Concentration Planning Committee
- 2012 Pre-Presidential Debate Event: What does it mean to be an ELL learner in the 21st century...What Every Teacher Should Know. A co-collaborated event with a Curriculum and Instruction student who teaches government courses to ELL students @ Lincoln High School (President Obama visited this school in 2012)

COLLEGE SERVICE

- Faculty Advisor, Peabody Black Graduate Coalition (Spring 2022 present)
- Peabody East High School Partnership Professional Development: Listening to Our Black Students in Mathematics Classrooms: Dr. Rittle-Johnson & Dr. Dunleavy (Fall 2021- present)
- Introduced Dr. Cynthia Dillard, invited scholar for a book talk of *The Spirit of Our Work: Black Women Teachers Remember*. Sponsored by Peabody Office of EDI, the Initiative for Race Research and Justice, & Vanderbilt Intersectional Study of Black Women and Girls in Society. January 24, 2022.
- Meetings with Faculty of Color candidates who requested to meet with me. Search committee chairs requests included Leadership Policy and Organization (3 candidates), Education Psychology (2 candidates), and Human and Organizational Development (1 candidate).
- Introductory Remarks for the 2020 Special Issue of the *Peabody Journal*: Critically Examining the Trajectories of Black Male Pre-service Teachers (January 2021)
- Peabody East High School Partnership Professional Development: *Listening to Our Black Students in Mathematics Classrooms*: Dr. Rittle-Johnson & Dr. Dunleavy (Fall 2021- present)
- Search Committee Member Destination Vanderbilt Peabody Search Community for Dismantling Inequalities Faculty position (January 2021-December 2021))
- Faculty Face Time with Dr. Joseph, Equity, Diversity & Inclusion Committee (Summer 2020)
- Invited TEDx talk speaker for Peabody Diversity Recruitment Weekend (Fall, 2017)

DEPARTMENT SERVICE

Vanderbilt University

- Panelist, Black Lives in Research and Academia, March 28, 2022
- Search Committee Member for Destination Vanderbilt Disrupting Inequalities in Education (Fall 2021)
- Search Committee Member for Secondary Mathematics Practice Faculty (Fall 2021)
- Search Committee Member for ELL Practice Faculty (Spring 2021)
- Guest Lecturer: EDCU 6610: Seminar in Learning, Diversity, and Urban Studies (Fall 2020)
- Guest Lecturer: EDUC 1220: Curated Book Club (Fall 2020)

- Guest Lecturer: EDUC 7190: Building your Toolkit: Planning & Assessment Strategies for Teaching (July 2020)
- Guest Lecturer: EDUC 7100 Learning Out of School, (July 2020)
- Guest Lecturer: EDUC 80XX: Power and Identity in STEM (Spring 2020)
- Guest Lecturer: EDUC8010 Inquiry into Education (Spring 2020)
- Math Area Chair for Research Faculty (Fall 2019- present)
- PhD Presentation Day Reviews (2016, 2017, 2018, 2019)
- Masters' Capstone Reviews (2016 2018)
- DLD Applicant Reviews (2018 present)
- Math/Science Applicant Reviews (2016 present)
- Guest Lecturer: EDUC8010 Inquiry into Education (Spring 2019)
- Guest Lecturer: EDUC 8030 Learning and Instruction (Fall 2016, Fall 2017)
- Guest Lecturer: EDUC 8040: Diversity & Equity in Education (Fall 2017)
- Guest Lecturer: EDUC 9700: Identities Across Educational Contexts (Fall 2016)

COMMUNITY SERVICE

- Annual March for Black Women in STEM (October 2017-present)
- Math Tutor (twice a month): 3rd Grade Classroom at Knowledge is Power Program (KIPP) Nashville Killpatrick (2017 – present)
- Invited Speaker: Radical STEMM Educators of the Bay Area (Oct 11, 2017)
- Panelist for *Hidden Figures* Screening and Community Conversation at Belcout Theater (Spring 2017)

MEDIA SPOTS

Book Review of my edited volume, Understanding the Intersections of Race, Gender, and Gifted Education: An Anthology by and about Talented Black Girls and Women in STEM. Teachers College Record retrieved here <u>https://www.tcrecord.org/Content.asp?ContentID=23942</u>. January 3, 2022.

Seeking Grace: Black Women Findings Self. Retrieved from <u>Seeking Grace: Black Women Finding Self |</u> <u>University of Denver - YouTube</u> March 16, 2021.

H.E.A.R.T. Podcast Co-Panelist: Teaching STEM from an Intersectional Lens. January 2021. California Math Council (CMC) Online Book Study: Featured "Black Girls Fear No Number". December 2020

#ShiftingTheNarrative4BlackGirls Podcast. December 2020.

TODOS Podcast Guest Feature <u>TODOS Podcast: S02 E09 Dr. Nicole Joseph, Advocate for Black Women in</u> <u>STEM and Beyond on Apple Podcasts</u>. December 2020

August 6, 2020. Mentioned. Dismantling Systemic Racism Starts in Schools, Educators Say, https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.wgbh.org%2Fnews%2Feducation% 2F2020%2F08%2F06%2Fdismantling-systemic-racism-starts-in-schools-educatorssay&data=02%7C01%7Cnicole.m.joseph%40vanderbilt.edu%7C28bdd525e1f24ec0d94f08d8501e7b99%7C ba5a7f39e3be4ab3b45067fa80faecad%7C0%7C0%7C637347439137533854&sdata=Oj4ne6V%2FvaFvcSZ X272JAmVH%2FuQL3OV4FE23qtwpTGY%3D&reserved=0

April 2020. Featured Faculty. Peabody engages, supports and adapts during COVID-19 outbreak <u>https://news.vanderbilt.edu/2020/04/22/peabody-engages-supports-and-adapts-during-covid-19-outbreak/</u>

April 2020. Featured Guest on STEMming in Stilettos <u>www.anchor.fm/stemminginstilettos</u>

July 2019. Quoted in Girls' Superb Verbal Skills May Contribute to the Gender Gap in Math <u>https://www.pbs.org/wgbh/nova/article/gender-gap-math-comparative-advantage/</u>

June 2019. Quoted in 5 Ways Society Sabotages Girls' Interest in Science and Math, <u>https://www.forbes.com/sites/marshallshepherd/2019/06/09/5-ways-society-sabotages-girls-interest-in-science-and-math/#1436d5f37844</u>

March 2019. Quoted in Keeping Girls in STEM: 3 Barriers, 3 Solutions. Edutopia, <u>https://www.edutopia.org/article/keeping-girls-stem-3-barriers-3-solutions</u>

News from Peabody (November 2018). March for Black Women in STEM Draws Advocates for Diversity at <u>https://peabody.vanderbilt.edu/news/stories/black-women-in-stem.php</u>

July 2018. Featured in "Creating Pathways for Women of Color in Mathematics." Women in Higher Education, Volume 27, Number 7 at <u>https://doi.org/10.1002/whe.20597</u>

February 2018. Featured on "Technology Access Foundation Presents: This is the Work" podcast at <u>https://itunes.apple.com/us/podcast/taf-presents-this-is-the-work-podcast/id1342476918?mt=2</u>

February 2018. STEM's New Guard: 15 Black Women who are Paving the way and Paying it Forward. Essence Magazine at <u>https://www.essence.com/holidays/black-history-month/black-women-stem-careers/</u>

October 1, 2017. March for Black Women in STEM. Vanderbilt Hustler story at http://vanderbilthustler.com/featured/march-for-black-women-in-stem-to-take-place-saturday-sept-30.html

February 2017. Dr. Nicole M. Joseph, Featured Woman of Color in STEM. Vanguard STEM at <u>http://vanguardstem.com/wcwinstem-nicole-m-joseph-ph-d/</u>

March 2017. **I DO (NOT) Belong: Experiences of Black Women and Girls in Mathematics Education**. Plenary talk at the Mathematical Sciences Research Institute. Retrieved from <u>https://www.msri.org/workshops/836/schedules/21852</u>

March 2017. **Math Education in the Berkeley Hills: CIME 2017**. Retrieved from <u>https://blogs.ams.org/inclusionexclusion/2017/03/29/math-education-in-the-berkeley-hills-cime-2017/</u>

October 2016. Research News @ Vanderbilt. New faculty: Nicole Joseph teaches math and advocates for educational opportunity. Retrieved from https://news.vanderbilt.edu/2016/10/13/new-faculty-nicole-joseph-teaches-math-and-advocates-for-educational-opportunity/

October 2016. Why Become a Teacher? Vanderbilt Interview on YouTube at https://www.voutube.com/watch?v=qYYqDVvmVOc

April 2016. Book Signing hosted by Peter Lang Publishers American Education Research Association. Interrogating Whiteness and Relinquishing Power: White Faculy's Commitment to Racial Consciousness in STEM Classrooms.

March 24, 2016. Book Talk. University of Denver Libraries. Interrogating Whiteness and Relinquishing Power: White Faculy's Commitment to Racial Consciousness in STEM Classrooms.

February 2015. Feature story by Channel 9 News Anchor, TaRhonda Thomas about *Reconstructing History: African American Women Alumni at the University of Denver*, an ongoing oral histories project to create a more complete picture of the University of Denver's historical record. http://www.9news.com/videos/news/local/black-history-month/2015/02/03/22815317/

February 26, 2015. Feature story in the University of Denver Magazine about the *Sistah Network*. <u>http://magazine.du.edu/campus-community/dus-sistah-network-empowers-black-women-negotiate-graduate</u> <u>programs/</u>

March 24, 2015. Feature story in the *Journal of Blacks in Higher Education* about the Sistah Network. <u>http://www.jbhe.com/2015/03/the-sistah-network-support-group-at-the-university-of-denver/</u>

May 9, 2012. Feature story in the University of Denver Magazine about **College Aspirations Readiness and Empowerment community project**. <u>http://magazine.du.edu/campus-community/african-american-girls-learn about-college-opportunities-at-campus-event/</u>

PROFESSIONAL ORGANIZATIONS

- PME-NA (2015 2019)
- American Educational Research Association (2000- present)
- National Council of Teachers of Mathematics (2012-present)
- Association of Mathematics Teacher Educators (2012-present)
- History of Education Society (2012-2015)

CONSULTANTIES

- Advisory Board, Supporting the Development of Mathematics Preservice Teachers' Critical Consciousness through Statistical Investigations of Systemic Racism), funded by NSF (2021-2023)
- Gates Foundation & WestEd: Mathematics Dimensions of Quality Charrettes (Fall 2021)
- Advisory Board, Inclusive Graduate Education Network, funded by the National Science Foundation (2019-2022)
- Gates Foundation & American Institute of Research: Algebra I Grand Challenge (2020-present)
- Gates Foundation & Redstone: Efficacy and Enactment Design Charrettes (Summer 2020)
- Advisory Board, A Longitudinal Study Predicting Postsecondary STEM Readiness among Low-Income Minority Students, funded by the National Science Foundation (2018-2021)
- Advisory Board, Efficacy and Enactment Research Study. Bill and Melinda Gates Foundation. Summer 2020
- Senior Personnel, (EXI Lab Diverse Talent for Research and Development). Bill and Melinda Gates Foundation
- Senior Personnel, University of Nevada Las Vegas. *Project E3: Enhancing, Engaging, and Empowering Teachers for the Next Generation of Teacher Leaders*

• Senior Personnel, University of Colorado Denver. *E-Learning Communities for Academic Language Learning in Math and Science (ECALLMS) Grant*

FACULTY PROFESSIONAL DEVELOPMENT

- Center for Teaching, Vanderbilt University, Semester Small Group Analysis (2016, 2017, 2018, 2019)
- Research, Advocacy, Collaboration, and Empowerment (RACE) Mentoring (2016 present)
- Publish, not Perish RACE Mentoring Webinar (Summer 2016)
- Mathematics Education Scholars of Color (MESOC Wichitowin), U of Illinois, Chicago (Fall 2016)