NIRAL SHAH

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ACADEMIC APPOINTMENTS

| 2021-present | Associate Professor Learning Sciences & Human Development University of Washington |
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| 2019-2021 | Assistant Professor Learning Sciences & Human Development University of Washington |
| 2014-2019 | Assistant Professor Department of Teacher Education Michigan State University |
| 2013-2014 | Postdoctoral Fellow University of California, Berkeley |
| 2007 | Lecturer Teacher Education Program – Social/Cultural Context of Education California State University, East Bay |

EDUCATION

| 2013 | University of California at Berkeley , Berkeley, CA Ph.D. in Education; Focus on Education in Math, Science, and Technology |
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| 2010 | University of California at Berkeley , Berkeley, CA |
| | W.A. III Education, Focus on Education in Math, Science, and Technology |
| 2004 | California State University, East Bay, Hayward, CA |
| | Teaching Certification in Secondary Mathematics |
| 2002 | University of Pennsylvania, Philadelphia, PA |
| | B.S. in Economics |
| | B.A.S. in Computer Science |

HONORS AND AWARDS

| 2022 | Outstanding Reviewer Award Journal for Research in Mathematics Education |
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| 2021 | UW College of Education Outstanding Faculty Advisor Award |
| 2021 | Article of the Year Award (Shortlisted) International Journal for Academic Development |
| 2017 | National Academy of Education/Spencer Postdoctoral Fellowship |
| 2016 | AERA SIG-RME (Special Interest Group – Research in Mathematics Education) STaR (Service, Teaching, and Research) Fellow |
| 2014 | Best Paper Nominee (1 of 6 nominees, out of 117 papers) International Conference of the Learning Sciences (2014) |
| 2012 | National Academy of Education/Spencer Dissertation Fellowship |
| 2011-2012 | Dean's Normative Time Fellowship |
| 2009-2013 | Research in Cognition and Mathematics Education (RCME) Fellowship |
| 2008-2009 | Diversity in Mathematics Education (DiME) Fellowship |
| 2007-2011 | Eugene Cota Robles Fellowship |
| 2006 | Teacher of the Year Award, Alameda/Contra Costa Counties Mathematics Education |
| 2004 | Symantec Award for Outstanding Innovation in Teaching |
| GRANTS | |

PI, State of California (via UCLA Center for Transformation of Schools) (2021-2023) Using EQUIP to Support CA MTSS Pilot Coaches in Classroom-level Racial Equity Work, \$190,862. PI: **Niral Shah**.

PI, NAEd/Spencer Foundation, Postdoctoral Fellowship (2017-2019)

Reducing the Impact of Implicit Racial and Gender Bias on Mathematics Classroom Discourse, \$70,000. PI: Niral Shah.

Co-PI, National Science Foundation, STEM+C Grant (2017-2020)

Integrating Computation in Science Across Michigan (ICSAM), \$1,362,829. PI: Marcos Daniel Caballero, Co-PIs: **Niral Shah**, David Stroupe, Paul W. Irving.

Co-PI, National Science Foundation, Computer Science for All: RPP Grant (2017-2020)

CT4EDU: Broadening Pathways into Computing by Developing Computational Thinking Competencies in Elementary Classrooms, \$998,737. PI: Aman Yadav, Co-PIs: Emily Bouck, Christina Schwarz, **Niral Shah**.

Co-PI, Michigan State University, CREATE for STEM (2017-2018)

Positioning, Underlying Stereotype Bias, and Humaneness in Teaching Mathematics: A Collaborative Research Investigation of Classroom Discourse Goals, \$65,925. PI: Beth Herbel-Eisenmann, Co-PIs: Niral Shah.

PI, Spencer Foundation, Conference Grant (2016-2017)

Advancing Methods to Examine the Role of Social Identities in Organizing Mathematics Classroom Learning Opportunities, \$50,000. PI: Niral Shah, Co-PI: Jennifer Langer-Osuna.

Co-PI, Michigan State University, S3 Collaborative Grant (2016-2017)

Advancing Methods to Examine the Role of Social Identities in Organizing Mathematics Classroom Learning Opportunities, \$10,000. PI: David Stroupe, Co-PI: Danny Caballero, Niral Shah.

TECHNOLOGIES / PRODUCTS

Shah, N. & Reinholz, D. L. EQUIP: Equity QUantified In Participation (www.equip.ninja) EQUIP is an equity-focused classroom observation tool. It is currently being used by K-12 school districts, higher education teaching/learning centers, and education research teams. The main goal of EQUIP is to support practitioners in identifying biases and making classrooms more equitable.

PUBLICATIONS

Books

Langer-Osuna, J. M., & Shah, N. (Eds.). (2021). Making visible the invisible: The promise and challenges of identity research in mathematics education [Journal for Research in Mathematics Education Monograph Number 17]. National Council of Teachers of Mathematics.

Peer Reviewed Research Articles

- Byun, S., **Shah, N.**, & Reinholz, D. L. (in press). When only White students talk: EQUIPing prospective teachers to notice inequitable participation. *Mathematics Teacher Educator*.
- Shah, N. & Yadav, A. (2023). Racial Justice Amidst the Dangers of Computing Creep: A Dialogue. *Tech Trends*.

- Leigh-Osroosh, K. T., Reinholz, D. L., Sianez Jr., L. M., & Shah, N. (2023). Data Analytics for Counselor Education: EQUIP Tool for Equity-minded Teaching. Association for Counselor Education and Supervision: ACES Teaching Practice Briefs, 1(1), 106-121.
- Christensen, J., **Shah, N.**, Ortiz, N., Stroupe, D., & Reinholz, D. L. (2022). Tracking inequity: An actionable approach to addressing inequities in physics classrooms. *The Physics Teacher*, *60*(6), 414-418.
- Reinholz, D. L., Johnson, E., Andrews-Larson, C., Stone-Johnstone, A., Smith, J., Mullins, B., Fortune, N., Keene, K., & Shah, N. (2022). When active learning is inequitable: Women's participation predicts gender inequities in mathematical performance. *Journal for Research in Mathematics Education*, 53(3), 204-226.
- Reinholz, D. L., Reid, A., & **Shah, N.** (2022). Not Another Bias Workshop: Using Equity Analytics to Promote Antiracist Teaching. *Change: The Magazine of Higher Learning*, 54(4), 11-17.
- Shah, N., Ortiz, N. A., Christensen, J. A., Stroupe, D., & Reinholz, D. L. (2021). Who participates? Making equity work in classrooms actionable. *Educational Leadership*, 78(6), 41-46.
- Reinholz, D. L. & **Shah, N.** (2021). Equity and equality: Data visualizations as mediating artifacts for teacher sensemaking about racial and gender inequity. Contemporary Issues in Technology and Teacher Education (CITE), 21(3).
- Reinholz, D. L., Pelaez, K., & Shah, N. (2021). Capturing who participates and how: the stability of classroom observations using EQUIP. *SN Social Sciences*, *1*(7), 1-18.
- Shah, N., Christensen, J. A., Ortiz, N. A., Nguyen, A., Byun, S., Stroupe, D., & Reinholz, D. L. (2020). Racial hierarchy and masculine space: Participatory in/equity in computational physics classrooms. *Computer Science Education*, 30(3), 254–278. doi:http://dx.doi.org/10.1080/08993408.2020.1805285
- Shah, N. & Coles, J. (2020). Preparing teachers to notice race in classrooms: Contextualizing the competencies of pre-service teachers with anti-racist inclinations. *Journal of Teacher Education*, 71(5), 584-599. doi:https://doi.org/10.1177/0022487119900204
- Shah, N. (2019). "Asians are good at math" is not a compliment: STEM success as threat to personhood. *Harvard Educational Review*, 89(4), 661-686.
- Shah, N. & Lewis, C. M. (2019). Amplifying and attenuating inequity in collaborative learning: Toward an analytical framework. *Cognition and Instruction*, *37*(4), 423-452.
- Reinholz, D. L., Stone-Johnstone, A., & Shah, N. (2019). Walking the walk: Using classroom analytics to support faculty members to address implicit bias in teaching. *International Journal for Academic Development*.

- Earnest, J. B., Reinholz, D. L., & Shah, N. (2019). Hidden competence: Women's mathematical participation in public and private classroom spaces. *Educational Studies in Mathematics*, *102*, 153-172.
- Herbel-Eisenmann, B. & Shah, N. (2019). Detecting and reducing bias in questioning patterns. *Mathematics Teaching in the Middle School*, 24(5), 282-289.
- Reinholz, D. L., & Shah, N. (2018). Equity analytics: A methodological approach for quantifying participation patterns in mathematics classroom discourse. *Journal for Research in Mathematics Education*, 49(2), 140-177.
- Shah, N. (2017). Race, ideology, and academic ability: A relational analysis of racial narratives in mathematics. *Teachers College Record*, 119(7), 1-42.
- Nasir, N. S., Snyder, C. R., Shah, N., & Ross, K. M. (2012). Racial storylines and implications for learning. *Human Development*, 55, 285-301.
- Nasir, N. S., & Shah, N. (2011). On defense: African American males making sense of racialized narratives in mathematics education. *Journal of African American Males in Education*, 2(1), 24-45.

Handbook Chapters

- Lewis, C. M., Shah, N., & Faulkner, K. (2019). Equity and diversity. In S. Fincher & A. Robins (Eds.), *The Cambridge Handbook of Computing Education Research* (pp. 481-510). Cambridge: Cambridge University Press.
- Martin, D. B., Rousseau-Anderson, C., & **Shah**, N. (2017). Race and mathematics education. In J. Cai (Ed.), *Compendium for Research in Mathematics Education* (pp. 607-636). Reston, VA: National Council of Teachers of Mathematics.

Book Chapters

- Shah, N., Cosby, M., Goffney, I. M., Kalinec, C. A., Wood, M. B., Hand, V. M., & Crespo, S. (2021). "Bossy," "boy," and "urban": Troubling coded language in mathematics education research. In J. M. Langer-Osuna & N. Shah (Eds.), *Making visible the invisible: The promise* and challenges of identity research in mathematics education (pp. 13-32).
- Louie, N. L., Reinholz, D. L., & Shah, N. (2019). Getting published: Perspectives from earlycareer scholars. In K. Leatham (Ed.), *Designing, conducting, and publishing quality research in mathematics education*.
- Shah, N., & Crespo, S. (2017). Cultural narratives and status hierarchies. In R. Hunter, M. Civil, B. Herbel-Eisenmann, N. Planas, & D. Wagner (Eds.), *Mathematical discourse that breaks*

barriers and creates space for marginalized learners (pp. 23-38). Rotterdam: Sense Publishers.

- Shah, N. & Leonardo, Z. (2016). Learning discourses of race and mathematics in classroom interaction: A poststructural perspective. In I. Esmonde & A. Booker (Eds.), *Power and privilege in the learning sciences: Critical and sociocultural theories of learning* (pp. 50-69). New York, NY: Routledge Press.
- Shah, N. (2016). Validating and contextualizing preservice teachers' resistance to social justice pedagogy in mathematics. In D. White, S. Crespo, & M. Civil (Eds.), *Cases for teacher educators: Facilitating conversations about inequities in mathematics classrooms* (pp. 149-154). Charlotte, NC: Information Age Publishing.

Published Conference Proceedings

- Shah, N., & Hou, Y. H. (2022). From Queer Feminism to Anti-racism: A Sociocultural Analysis of Activist Learning Across the Lifespan. In C. Chinn, E. Tan, C. Chan, & Y. Kali (Eds.), *Proceedings of the 16th International Conference of the Learning Sciences - ICLS 2022* (pp. 1201-1204). Hiroshima, Japan: International Society of the Learning Sciences.
- Hou, Y. H., & Shah, N. (2022). Feeling Irregularly White: The Role of Emotions in Activist Learning. In C. Chinn, E. Tan, C. Chan, & Y. Kali (Eds.), *Proceedings of the 16th International Conference of the Learning Sciences - ICLS 2022* (pp. 1053-1056). Hiroshima, Japan: International Society of the Learning Sciences.
- Shah, N., Herbel-Eisenmann, B., & Reinholz, D. (2020). Why Mrs. Stone never calls on Debra: A case of race-gender ideology in practice. In M. Gresalfi & I. S. Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 1* (pp. 1974-1981). Nashville, TN: International Society of the Learning Sciences.
- Shah, N. (2019). Should there be less mathematics education? In S. Otten, A. G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.), *Proceedings of the forty-first annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 29-32). St Louis, MO: University of Missouri.
- Shah, N., Reinholz, D. L., Guzman, L., Bradfield, K., Beaudine, G. & Low, S. (2016). Equitable participation in a mathematics classroom from a quantitative perspective. In M. Wood, E. Turner, & M. Civil (Eds.), Sin fronteras: Questioning borders with(in) mathematics education Proceedings of the 38th annual meeting of the North-American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA). (pp. 1259-1265). Tuscon, AZ: University of Arizona.
- Lewis, C. M., & Shah, N. (2015). How equity and inequity can emerge in pair programming. In B. Dorn, J. Sheard, & Q. Cutts (Eds.), *Proceedings of the 11th Annual International*

Conference on International Computing Education Research (ICER 2015) (pp. 41-50). Omaha, NE: ACM.

- Shah, N., Lewis, C.M., & Caires, R. (2014). Analyzing equity in collaborative learning situations: A comparative case study in elementary computer science. In J. L. Polman, E. A. Kyza, D. K. O'Neill, I. Tabak, W. R. Penuel, A. S. Jurow, K. O'Connor, T. Lee & L. D'Amico (Eds.), *11th International Conference of the Learning Sciences* (pp. 495-502). Boulder, CO.
- Shah, N., Lewis, C. M., Caires, R., Khan, N., Qureshi, A., Ehsanipour, D., & Gupta, N. (2013). Building equitable computer science classrooms: Elements of a teaching approach. ACM SIGCSE Bulletin, 44(1), 263-268.
- Shah, N. (2012). Mathematics learning in a racial context: Unpacking students' reasoning about "Asians are good at math." In J. van Aalst, K. Thompson, M. J. Jacobson & P. Reimann (Eds.), *The Future of Learning: Proceedings of the 10th International Conference of the Learning Sciences (ICLS 2012)* (Vol. 2, pp. 222-226). Sydney, NSW, Australia: International Society of the Learning Sciences.
- Lewis, C. M., & Shah, N. (2012). Building upon and enriching grade four mathematics standards with programming curriculum. *ACM SIGCSE Bulletin*, 43(1), 57-62.
- Shah, N. (2009). A student's causal explanations of the racial achievement gap in mathematics education. In Swars, S. L., Stinson, D. W., & Lemons-Smith, S. (Eds.), Proceedings of the Thirty-First Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Vol. 5 (pp. 444-452). Atlanta, GA: Georgia State University.
- Adiredja, A. P., Engle, R. A., Champney, D., Huang, A., Howison, M., Shah, N. & Ghaneian, P. (2008). Explaining student success in one PDP calculus section: A progress report. In *Proceedings of the 11th Conference on Research in Undergraduate Mathematics Education*.

Other Publications

- Shah, N. (2022). Improving the Preparation Pipeline for Black Teachers: 5 Ideas From Experts. *Education Week*. Retrieved from <u>https://www.edweek.org/</u>
- Shah, N. (2021). Racial equity and justice in teaching and teacher education: Progress, tensions, and open questions. *Spencer Foundation*. Retrieved from <u>https://www.spencer.org/</u>
- Ishimaru, A., Barajas-López, F., Sun, M., Shah, N., Li, A., Scarlett, K., Anderson, E., Al-ansi, M., Mead, K., Schneider, L., & Prinzing, M., & Northern, D., (2021). *Centering Black families and justice-focused educators during pandemic remote learning (spring-fall 2020)*. Partnering for Racial Equity Research Practice Partnership.
- Shah, N. (2020). Asians are good at math? Why dressing up racism as a compliment just doesn't add up. *The Conversation*. Retrieved from <u>https://theconversation.com/us</u>

*Also translated into the official language of Indonesia for *The Conversation Indonesia*.

- Coles, J. A. & **Shah**, N. (2020). Teacher racial noticing amid contemporary U.S. racial injustices and COVID-19. Retrieved from <u>https://perspectivesblog.sagepub.com/</u>
- Dunn, A. H., **Shah, N.,** & Warren, C. (2014). Talking taboo: Discussing race and racism in classrooms. *New Educator*, Fall Issue, 26-27.
- Nasir, N.S., Shah, N., Gutierrez, J. F., Seashore, K., Louie, N., & Baldinger, E. (2011). Mathematics learning and diverse students. Background paper for National Research Council Report: "Successful K-12 STEM education: Identifying effective approaches in science, technology, engineering, and mathematics."

Manuscripts Under Review / In Preparation

Shah, N. (in preparation). Conceptualizing alignments between discourses of race and mathematics.

REFEREED CONFERENCE PRESENTATIONS

- Shah, N. & Hou, Y. H. (2022). What Do We Mean by "Anti-racism"? Mapping Definitions of Anti-racism in Education. Paper to be presented at the annual meeting of the American Educational Research Association, San Diego, CA, April 22-25.
- Shah, N. (2020, March). Researching race in computer science education: Demystifying key vocabulary and methods. Invited panel discussion at the 51st Annual ACM Technical Symposium on Computer Science Education, Portland, OR, March 11-14. (Conference canceled; instead recorded and distributed as webinar)
- Christensen, J., Ortiz, N. A., Stroupe, D., Byun, S., Nguyen, A. & Shah, N. (2020, April). Who Gets to Participate in Computational Physics? Racial and Gender Patterns in Group Work [Structured Poster Session]. AERA Annual Meeting San Francisco, CA, April 17-21. <u>http://tinyurl.com/y2tp5g35</u> (Conference Canceled)
- Ortiz, N. A., Christensen, J., Stroupe, D., Byun, S., Nguyen, A. & Shah, N. (2020, April). *Physics Teachers' Reflections on Their Analysis of Equity Patterns in Group Work* [Structured Poster Session]. AERA Annual Meeting San Francisco, CA, April 17-21. <u>http://tinyurl.com/yxdev4l2</u> (Conference Canceled)
- Shah, N. & Langer-Osuna, J. M. (2019, April). Advancing methods for studying social identities in mathematics education: New possibilities and perspectives. Symposium organized and presented at the annual meeting of the American Educational Research Association, Toronto, Canada, April 5-9.

- Herbel-Eisenmann, B. & Shah, N. (2019, April). Using action research to detect and reduce bias in mathematics classroom discourse. Poster presented in symposium (Teacher learning to position students as capable in class discussions: Looking across subject-matter domains) at the annual meeting of the American Educational Research Association, Toronto, Canada, April 5-9.
- Shah, N. & Reinholz, D. L. (2019, February). Using EQUIP for professional development and teacher education. Presentation delivered at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL, February 7-9.
- Reinholz, D. L. & Shah, N. (2017, April). *EQUIP-ing teachers to address issues of classroom equity*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX, April 8-12.
- Shah, N., Reinholz, D. L., Guzman, L., Bradfield, K., & Fernandes, J. A. (2016, April). Analyzing equity in whole-class discussions in mathematics classrooms. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC, April 27-May 1.
- Shah, N. & Leonardo, Z. (2016, April). Learning about race and mathematics in classroom interaction: A poststructural perspective. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC, April 8-12, as part of symposium entitled, "Power and Privilege in the Learning Sciences: Critical and Sociocultural Theories."
- McClintock, D. & **Shah, N.** (2016, March). *Coding, designing, and logistics: How modes affect equity in computer science education*. Poster presented at the 47th Annual ACM Technical Symposium on Computer Science Education, Memphis, March 2-5.
- Martin, D. B. & **Shah. N.** (2015, June). *Race and mathematics education: Advancing theory in the field.* Presentation at the 8th Mathematics and Education Society Conference, Portland, OR, June 21-26.
- Shah, N. (2015, April). *The problem with a compliment: Asians as mathematical and racial subjects*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL, April 16-20.
- Shah, N. (2015, April). Mixed-race learners and the reification of mathematical ability as genetic. Paper presented at the annual meeting of the National Council of Teachers of Mathematics Research Presession, Boston, MA, April 15-18.
- Shah, N. (2013, April). Social practices and suture: A hybrid framework for analyzing identity formation. Paper presented at the annual meeting of the National Council of Teachers of Mathematics Research Presession, Denver, April 15-17, as part of symposium entitled, "Moving Mathematics Identity Forward: New Developments in Theory and Research."

- Shah, N. & Louie, N. (2013, April). A conversation on culture-cognition relations (featuring Michael Cole, Fred Erickson, Elliott Turiel, Geoff Saxe, and Na'ilah Nasir). Symposium conceived and organized at the University of California, Berkeley, April 26.
- Shah, N. (2012, May). Exclusivity, universality, and innateness: Implicit themes in student talk about racial-mathematical narratives. Poster presented at the "Racing Language, Languaging Race" symposium for Stanford University's Center for Race, Ethnicity, and Language (CREAL), Palo Alto, May 3-4.
- Shah, N. (2012, April). *Beyond achievement gaps: The role of racial narratives in mathematics education*. Poster presented at the annual meeting of the American Educational Research Association, Vancouver, April 13-17.
- Nasir, N.S., Shah, N., Gutierrez, J.F., Seashore, K., Louie, N., & Baldinger, E. (2012, April). *Mathematics learning and diverse students*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, April 13-17.
- Reinholz, D. L., **Shah, N.**, & Kim, H. (2011, April). *Capturing what counts: Classroom practices that lead to robust understanding of algebra*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Kim, H., Lepak, J., Levin, M., Louie, N. L., Reinholz, D. L., Shah, N., Wernet, J., & Floden, R. (2011, January). *Capturing classroom practices that lead to competence with complex algebraic tasks*. Symposium presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- **Shah, N.** (2010, May). *Race and mathematics learning in discursive alignment: A new theoretical vector.* Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.

INVITED LECTURES & INVITED WORKING GROUPS

- Shah, N. (2022, April). *Mathematics Education Under the Permanence of Racism*. University of Maryland, College Park, MD.
- Shah, N. (2022, April). *STEM Teacher Recruitment, Preparation, Retention*. Invited panel speaker United States Department of Education, Washington, DC.
- **Shah, N.** (2022, March). *Advancing the Study of Identities in Mathematics Education Research*. Panel presentation at RILE, Stanford, CA.
- **Shah, N.** (2021, November). *Navigating the Academic Job Market*. Invited panel speaker as part of National Academy of Education/Spencer Fall Fellows Retreat (remote conference due to COVID-19 pandemic).

- Shah, N. (2021, September). *Racism and Anti-racism in STEM Education*. Institute for the Quantitative Study of Inclusion, Diversity, and Equity.
- Shah, N. (2021, July). *Anti-racism in STEM Classrooms: Putting Theory into Practice*. Keynote address to the Annual Meeting of the Society for the Advancement of Biology Education Research (remote conference due to COVID-19 pandemic).
- Shah, N. (2021, May). Anti-Asian violence, dehumanization, & STEM Education: The trouble with being "good at math." California Institute of Technology, Pasadena, CA.
- Shah, N. (2021, March). *Racial equity and justice in the classroom: Lessons learned from STEM education.* Bellevue College, Bellevue, WA.
- Shah, N. (2020, November). *Learning racism, learning anti-racism: Short course* (4 weeks). Race and Social Justice Initiative, University of Michigan, Ann Arbor, MI.
- Shah, N. (2020, October May). *Invited Working Group: Racial justice in early mathematics*. Organized by Jennifer McCray and Danny Martin, Erickson Institute, Chicago, IL.
- Shah, N. (2020, September). *STEM teacher preparation for racial equity*. Webinar on "STEM Teacher Prep" United States Department of Education, Washington, DC.
- Shah, N. (2019, November). Is STEM education compatible with racial justice? Sowder Mathematics and Science Education Research Seminar Series – University of California, San Diego, CA.
- Shah, N. (2019, November). Should there be less mathematics education? Plenary Address 41st annual meeting of the Psychology of Mathematics Education – North America, St. Louis, MO.
- Shah, N. (2019, November). *Too much and not enough: How STEM learners experience racism*. Scholars of Color Lecture Series University of Southern California, Los Angeles, CA.
- Shah, N. (2019, October). Using EQUIP to address inequity: Classroom-level feedback for teachers. Mindset Scholars Funders Briefing, Seattle, WA.
- Shah, N. (2019, October). *What does race have to do with mathematics education?* Featured Speaker Northwest Mathematics Conference, Tacoma, WA. Using EQUIP to address inequity: Classroom-level feedback for teachers
- Shah, N. (2019, August). Using EQUIP to address inequity: Classroom-level data with potential for scale. Center for the Transformation of Schools, Los Angeles, CA.
- Shah, N. (2019, April). From Michael Brown to STEM education: Race and racism in classrooms. Tulsa Community College, Tulsa, OK.

- Shah, N. (2019, April). *Mathematics learning in racial context: Understanding marginalization & countering bias.* Western Michigan University, Kalamazoo, MI.
- Shah, N. (2018, October). *Race and racism in classroom interaction: What teachers need to know and what they can do.* Early Career Lecture University of Missouri, Columbia, MO.
- Shah, N. (2018, April). *Revising & resubmitting for JRME: Tips from the trenches*. Invited talk at the annual meeting of the National Council of Teachers of Mathematics Research Conference, Washington, DC, April 23-25.
- Shah, N. (2017, May). *Using the EQUIP web app to support equitable teaching*. Intel Corporation, Portland, OR.
- Shah, N. (2017, April). Conceptualizing and measuring equity in STEM at the interactional level. Invited symposium talk at the annual meeting of the National Council of Teachers of Mathematics Research Conference, San Antonio, TX, April 3-5.
- Shah, N. (2016, December). *Analyzing racialization in mathematics classrooms: Toward a mixed methods approach*. TERC (Technical Education Research Center), Boston, MA.
- Shah, N. (2016, December). Racial narratives in math classrooms. Google, Ann Arbor, MI.
- Shah, N. (2016, October). *Detecting and reducing the impact of implicit bias in whole-class discussions*. McDonald Middle School, East Lansing, MI.
- Shah, N. (2016, September). *MSU job search panel*. Organized by CITE Steering Committee, East Lansing, MI.
- Shah, N. (2016, April & September). Invited Working Group: Mathematical knowledge for teaching and equity. Organized by Deborah Ball, Imani Goffney, and Mark Hoover, University of Michigan, Ann Arbor, MI.
- Shah, N. (2016, April). *Strategies for engaging students in online courses*. Brown Bag Series for MATC program (Organized by Janine Certo), East Lansing, MI.
- Shah, N. (2016, January & March). *Examining implicit bias in whole-class discussions*. Launch into Teaching Project (PI: Randi Stanulis), Detroit, MI.
- Shah, N. (2015, September). *Race in classroom interaction: Lessons learned from mathematics education*. Presentation to Physics Education Research Group at Michigan State University (led by Danny Caballero and Vashti Sawtelle) East Lansing, MI.
- Shah, N. (2015, May). Analyzing issues of equity in classroom discussions. Launch into Teaching Project (PI: Randi Stanulis), Detroit, MI.

- Dominguez, H. & Shah, N. (2015, February). Exploring equity in teacher-student interactions in mathematics. Creating Inclusive Excellence in Teacher Education (CIETE) Workshop, Michigan State University, East Lansing.
- Shah, N. (2014, December). *Patterns of (in)equity in elementary computer science: What they look like and why they emerge*. CREATE for STEM Institute's Co-Integrate Math Seminar Series, Michigan State University, East Lansing.
- Martin, D. B., & **Shah**, N. (2014, December). *Writing about race in White institutional space*. PRIME Colloquium Series, Michigan State University, East Lansing.
- Shah, N. (2014, February). Racialized episodes and narratives in math classrooms. School of Education class visit: "Adolescent Psychology and Development for Teachers" (Instructor: Prof. Victoria Hand), University of Colorado, Boulder.
- Shah, N. (2013, December). *Equity, identity, and learning: Racial narratives in mathematics classrooms.* Presentation at College of Education, University of Maryland, College Park, MD.
- Shah, N. (2013, November). *Methodological possibilities and pitfalls in studying race in educational settings*. Colloquium Series in Graduate School of Education, University of California at Berkeley.
- Shah, N. (2013, March). *Racial discourse in mathematics and its impact on student learning, identity, and participation.* Presentation at the National Academy of Education/Spencer Foundation Meeting, Washington, DC.
- Shah, N. (2013, January). Racial discourse in mathematics: Considerations for designing and implementing equitable STEM learning environments. Presentation at School of Education and Social Policy, Northwestern University, Evanston, IL.
- Shah, N. (2012, October). Content, gatekeeper, identity, personhood: Evolving views on math and equity. Presentation at CalTeach program for undergraduate minors in education, University of California at Berkeley.
- Shah, N. (2012, February). Conceptualizing racial narratives as identity artifacts. Department of Curriculum and Instruction class visit: "Race, Identity, and Agency in Mathematics and Science Education" (Instructor: Prof. Danny Martin), University of Illinois at Chicago.
- Shah, N. (2011, June). Techniques for increasing the number and engagement of underrepresented minorities. Panelist at CS4HS (Computer Science for High School) Conference, Berkeley, CA.
- **Shah, N.** (2011, April). *The challenges of mathematics education reform in lower-performing urban schools*. Presentation at the People's Test Preparation Service (a non-profit serving under-resourced high schools in the Bay Area), University of California at Berkeley.

TEACHING EXPERIENCE

Graduate Courses

EDPSY 581A: Learning Racism, Learning Anti-racism, University of Washington EDTEP 561: Teaching for Learning II, University of Washington EDTEP 560: Teaching for Learning I, University of Washington EDC&I 581: Design-based Research Methods in Education, University of Washington EDPSY 581B: Becoming a Member of the Learning Sciences & Human Development Community (LSHD Proseminar), University of Washington

TE 991: Sociocultural and Critical Perspectives on Learning, Michigan State University
TE 931: Introduction to Qualitative Methods, Michigan State University
TE 823 (Online): Learning Communities and Equity, Michigan State University
TE 822 (Online): Issues of Culture in Classroom and Curriculum, Michigan State University
MTHE 927: Proseminar in Mathematics Education II, Michigan State University
EDUC 228A: Qualitative Methods, University of California, Berkeley
EDUC 224D: Survey of Research in Mathematics Education, University of California, Berkeley
TED 5305: Social/Cultural Context of Education, California State University, East Bay

Undergraduate Courses

TE 408: Crafting Secondary Mathematics Teaching Practice, Michigan State University TE 406: Teaching Mathematics to Diverse Learners – Elementary, Michigan State University

K-12 Courses

"Making Music, Movies, and Games with Computers" – An Introduction to Computer Programming for 6th Grade Students, Academic Talent Development Program, Berkeley, CA Pre-algebra, Algebra 1, Geometry, Algebra 2, Math Analysis, AP Calculus AB, AP Calculus BC Richmond High School, Richmond, CA

ADVISING & SUPERVISION

Graduated Advisees

Meg Narwold Tongyu Jin Missy Cosby

Advisor

Susan Hou Audrey Harris Kaleb Germinaro Juliana Ayala-Flores Maria Tsen Lee M. Ed. (2022), LSHD, University of Washington M. Ed. (2021), LSHD, University of Washington Ph.D. (2020), EPET, Michigan State University

Status

Ph.D. student, LSHD, University of Washington Ph.D. student, LSHD, University of Washington Ph.D. candidate, LSHD, University of Washington Masters student, LSHD, University of Washington Masters student, LSHD, University of Washington

Dissertation Committee Member Status

| Vivian Huang | Ed.S. Completed, SP, University of Washington |
|----------------------------|---------------------------------------------------|
| Dawit Alemayehu | Ph.D. candidate, TLC, University of Washington |
| Sarah Arvey | Ph.D. candidate, SE, University of Washington |
| Lindsey Kaiser | Ph.D. student, EDFLP, University of Washington |
| Anastasia Sanchez | Ph.D. student, LSHD, University of Washington |
| Ali Raza | Ph.D. candidate, University of Colorado – Boulder |
| Ivy Farguheson | Ph.D. candidate, University of Utah |
| General Exam Committee | Status |
| Kathleen Arada | Ph.D. student, LSHD, University of Washington |
| Zach LeClair | Ph.D. student, EDFLP, University of Washington |
| Brett Baldauf | Ph.D. student, EDFLP, University of Washington |
| R&I Committee Member | Status |
| Ai-Khanh Nguyen | Ph.D. student, LSHD, University of Washington |
| Christina Guevara | Ph.D. student, LSHD, University of Washington |
| Research Assistants | |

| Anastasia Sanchez |
|-------------------|
| Audrey Harris |
| Susan Hou |
| Ai-Khanh Nguyen |

Winter 2023 – Spring 2023 Fall 2021 – Spring 2023 Fall 2020 – Summer 2021 Fall 2019 – Spring 2020

SERVICE

National

Associate Editor, Educational Researcher. 2019-2022.

Reviewer (Invited), Spencer Foundation Large Grants Program. 2022-2023.

Panelist (Invited), AERA Division K (Teaching and Teacher Education) Doctoral Mentoring Panel. 2021.

Member (Invited), AERA Division K (Teaching and Teacher Education) Outstanding Dissertation Award Selection Committee. 2021.

Senior Reviewer (Invited), International Conference of the Learning Sciences (ICLS). 2020.

Executive Board Member - Communications (Elected), AERA SIG-RME (Special Interest Group – Research in Mathematics Education). 2017-2019.

Member (Invited), STaR (Service, Teaching, and Research) Program Committee, Association of Mathematics Teacher Educators (AMTE). 2016 – 2019.

Strand Leader (Invited), North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA). 2015.

Reviewer: Grants

National Science Foundation (NSF) review panel (invited): Spring 2015 National Science Foundation (NSF) review panel (invited): Fall 2015

Reviewer: Journals

American Educational Research Journal (AERJ) Anthropology and Education Quarterly (AEQ) Cognition and Instruction (C&I) Computer Science Education (CSE) Educational Studies in Mathematics (ESM) Information and Learning Sciences (ILS) Journal for Research in Mathematics Education (JRME) Journal of the Learning Sciences (JLS) Journal of Teacher Education (JTE) Mathematics Teacher Educator (MTE) Multicultural Perspectives (NAME) Race, Ethnicity, and Education (REE) Review of Educational Research (RER) Science Education (SE) Teachers College Record (TCR) Transactions on Computing Education (TOCE)

Reviewer: Conference

American Educational Research Association Conference (AERA) International Conference of the Learning Sciences (ICLS) National Council of Teachers of Mathematics (NCTM) Psychology of Mathematics Education (PME-NA) Conference.

State

Member (Invited), Information Technology Empowerment Center (ITEC) Program Committee (2015 – 2016), Lansing, Michigan.

University, College, and Department

Member & Chair, Student Advancement & Support, University of Washington (2019-2022; Chair: 2021-2022)

Co-chair, Boeing Professorship Search Committee, University of Washington (2021-2022)

Member, Faculty Senate, University of Washington (2020-2022)

- Member, Online Instruction Working Group, University of Washington (2020)
- Member, University Grievance Hearing Board, Michigan State University (2016-2017)
- **Member**, Department of Teacher Education, Teacher Preparation Committee (TPC), Michigan State University (2016-2017)
- Member, Program in Mathematics Education (PRIME), Admissions Committee, Michigan State University (2016-2017)
- **Member (Elected).** Department of Teacher Education, Review, Promotion, Tenure and Evaluation Committee (RPTE), Michigan State University (2015 2016)
- **Member,** Department of Teacher Education, Comprehensive Examinations Committee (2014-2015).

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

American Educational Research Association (AERA)

International Society of the Learning Sciences (ISLS)