

PRIYANKA AGARWAL

Assistant Professor, Department of Curriculum and Instruction
School of Education, University of Wisconsin-Madison

pagarwal39@wisc.edu

(Updated: 10/25/2022)

EDUCATION

Ph.D., Education , University of California-Irvine <i>Dissertation: Student Participation and Agency in Mathematical Problem Posing.</i>	2019
M.S., Mathematics , Purdue University	2010
Master of Computer Applications , Army Institute of Management Kolkata, India	2003
B.A., Mathematics , University of Delhi, India	2000

EMPLOYMENT

Assistant Professor of Mathematics Education, University of Wisconsin - Madison	2020-Present
Postdoctoral Scholar , University of California-Los Angeles	2019-2020
Mathematics Instructor , Tarrant County College District, Fort Worth, TX	2010-2011

FELLOWSHIPS & AWARDS

Inclusive Mathematics Environment Early Career Fellowship Mindset Scholars Network (funded by Bill and Melinda Gates Foundation)	2019
Michael E. Martinez Award for Outstanding Research and Service, UC Irvine	2018
University of California (UC) President's Dissertation Year Fellowship	2018
Dissertation Fellowship Award, College Preparatory Mathematics	2018
Research Partnership Grant, California Education Research Association	2017

PUBLICATIONS

Refereed Journal Articles:

van Es, E. A., Hand, V., **Agarwal, P.**, & Sandoval, C. (2022). Multidimensional noticing for equity: Theorizing mathematics teachers' systems of noticing to disrupt inequities. *Journal for Research in Mathematics Education*, 53(2), 114-132. <https://doi.org/10.5951/jresematheduc-2019-0018>

Agarwal, P. & Sengupta-Irving, T (2019). Integrating power to advance the study of connective and productive disciplinary engagement in mathematics and science. *Cognition and Instruction*, 37(3), 349-366. <https://doi.org/10.1080/07370008.2019.1624544>

Domina, T., McEachin, A., Hanselman, P., **Agarwal, P.**, Hwang, N., & Lewis, R. (2019). Beyond tracking and detracking: The dimensions of organizational differentiation in schools. *Sociology of Education*. <https://doi.org/10.1177/0038040719851879>

Sengupta-Irving, T. & Agarwal, P. (2017). Conceptualizing perseverance in problem solving as collective enterprise. *Mathematical Thinking and Learning*, 19(2), 115-138.
<https://doi.org/10.1080/10986065.2017.1295417>

Domina, T., Lewis, R., Agarwal, P., & Hanselman, P. (2015). Professional sense-makers: Instructional specialists in contemporary schooling. *Educational Researcher*, 44(6), 359-364.
<https://doi.org/10.3102/0013189X15601644>

Refereed Conference Proceedings:

Agarwal, P. (2020, June). Organizing for Collective Agency: Negotiating Social and Disciplinary Risks of Collaborative Learning. In Gresalfi, M. and Horn, I. S. (Eds.), *Proceedings of the 14th International Conference of the Learning Sciences (ICLS) 2020*, Volume 1 (pp. 223-229). Nashville, Tennessee: International Society of the Learning Sciences.
<https://doi.org/10.22318/icls2020.223>

Vossoughi, S., Bang, M., McDaid-Morgan, N., Hooper, P., Berry, A., Papak, A., Booker, A., Collins, C., Marin, A., Halle-Erby, K., Agarwal, P., *, M., Cortez, A., Nzinga, K., Tayne, K., & Davis, N. (2020, June). Deepening Perceptions of Learning: Studying and Designing Ethical Practice with Researchers, Teachers and Learners. In Gresalfi, M. and Horn, I. S. (Eds.), *Proceedings of the 14th International Conference of the Learning Sciences (ICLS) 2020*, Volume 1 (pp. 430-437). Nashville, Tennessee: International Society of the Learning Sciences.
<https://doi.org/10.22318/icls2020.430>

Agarwal, P. (2019, November). Dimensions of student doubts and mathematical problem posing. *Proceedings of the 41st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, (pp. 929-933). St Louis, MO: University of Missouri.

Agarwal, P. & Sengupta-Irving, T. (2018, June). Power in the digital age: A critical revision to productive disciplinary engagement (PDE). In Kay, J. and Luckin, R. (Eds.), *Proceedings of the 13th International Conference of the Learning Sciences (ICLS) 2018*, Volume 2 (pp. 832-838). London, UK: International Society of the Learning Sciences.
<https://doi.org/10.22318/csl2018.832>

Other Articles:

Agarwal, P. (2020). Disrupting Gendered Epistemic Injustice in K-12 mathematics—A Research Synthesis. OSF Preprint. <https://osf.io/7merv>

Agarwal, P. (2019). *Student Participation and Agency in Mathematical Problem Posing*. (Doctoral dissertation, University of California, Irvine).
<https://search.proquest.com/docview/2317595975?pq-origsite=gscholar&fromopenview=true>

CONFERENCE PRESENTATIONS

Invited Talks:

Oct, 2021	Lucas Educational Research Engagement Symposium, Virtual
Feb, 2019	College Preparatory Mathematics Teacher Conference, San Francisco, CA
Dec, 2018	San Francisco State University, San Francisco, CA
Nov, 2018	California Educational Research Association Conference, Anaheim, CA

Refereed Conference Presentations:

- Agarwal, P.** (2021, April). *Disrupting Gendered Epistemic Injustice in K-12 mathematics – A Research Synthesis*. In Porter, S. (Chair), *Creating and Interrogating Inclusive Mathematics Environments: Considerations, Barriers, and Recommendations for Practice and Policy*. Structured poster session to be presented at the Annual Meeting of the American Educational Research Association Conference, Virtual.
- Agarwal, P.** (2020, April) Organizing for Collective Agency in Mathematical Problem-Posing [Roundtable Session]. AERA Annual Meeting San Francisco, CA <http://tinyurl.com/u8udroz> (Conference Canceled)
- Agarwal, P.** (2018, October). Function, process, and development of students' mathematical wondering and problem posing. Poster presented at Learning Sciences Graduate Students Conference, Nashville, TN.
- Hand, V., van Es, E. A., Freeman, Q., **Agarwal, P.** (2018, June). Do you see what I see? Mathematics teacher noticing for equity. Poster presented at the 13th International Conference of Learning Sciences (ICLS), London Festival of Learning, London, UK.
- Agarwal, P.** & Sengupta-Irving, T. (2018, April). Recognizing power as a necessary lens to advance the study of productive disciplinary engagement. Paper presented at American Educational Research Association (AERA) annual meeting, New York City, NY.
- van Es, E. A., Hand, V., Mercado, J., **Agarwal, P.**, & Sandoval, C. (2018, April). The role of positionality and noticing in advancing equity in mathematics. Paper presented at American Educational Research Association (AERA) annual meeting, New York City, NY.
- Agarwal, P.** (2018, February). What is equitable about mathematically productive engagement? Paper presented at College Preparatory Mathematics (CPM) Teacher Conference, San Francisco, CA.
- Agarwal, P.** (2018, February) Exploring problem posing as a mathematical practice in classrooms. Paper presented at College Preparatory Mathematics (CPM) Teacher Conference, San Francisco, CA.
- Agarwal, P.** (2017, November). Mathematical problem posing: an innovative approach for fostering student mathematical engagement. Paper presented at California Educational Research Association (CERA) annual conference, Anaheim, CA.
- Agarwal, P.** & Domina, T. (2017, February). Outward and inward attributes of school change: A mixed-method study of three school districts. Paper presented at Sociology of Education Association (SEA), Monterey, CA.
- Domina, T., McEachin, A., **Agarwal, P.**, Hanselman, P., Hwang, N., & Lewis, R. (2016, April). Beyond tracking and detracking: The dimensions of organizational differentiation in schools. Paper presented at American Educational Research Association (AERA) annual meeting, Chicago, IL.
- Sengupta-Irving, T. & **Agarwal, P.** (2016, April). What Does Perseverance in Problem Solving Mean for Collaborative Learning? Paper presented at National Council for Teachers of Mathematics (NCTM) research conference, San Francisco, CA.
- Sengupta-Irving, T. & **Agarwal, P.** (2015, April). Productive struggle and the development of relational equity in a mathematics learning community. Paper presented at American Educational Research Association (AERA) annual meeting, Chicago, IL.

TEACHING

University of Wisconsin – Madison, Department of Curriculum & Instruction 2020-present

- Curric 319 “Pedagogical Content Knowledge for Elementary Mathematics” (Undergraduate)
- Curric 760 “Gender/Sex-related Issues in Curriculum and Instruction” (Graduate)
- Curric 712 “Introduction to Curriculum and Instruction” (Graduate)

University of California - Irvine, School of Education 2014

Graduate Teaching Assistant

- Education 50 “Origins, Purposes, and Central Issues in K-12 Education” (Undergraduate)
- Education 55 “Knowing and Learning in Mathematics and Science” (Undergraduate)
- Education 207 “Cognition and Pedagogy in Quantitative Literacy” (Graduate MAT)

Guest Lectures

- “Advanced Qualitative Methods”, Topic: Theming data and representing findings (Graduate)
- “Knowing and Learning in Math and Science”, Topic: Disposition and identity (Undergraduate)
- “Knowing and Learning in Math and Science”, Topic: Meaningful learning (Undergraduate)

Tarrant County College District, Department of Mathematics, Fort Worth, TX 2010-2011

Full-time Mathematics Instructor

- Math 361 “Developmental Mathematics I” (Undergraduate)
- Math 362 “Developmental Mathematics II” (Undergraduate)
- Math 1314 “College Algebra” (Undergraduate)

Purdue University, Department of Mathematics 2008-2010

Graduate Teaching Assistant

- MA 153 “College Algebra and Trigonometry”
- MA 161 “Calculus-I”
- MA 165 “Analytic Geometry”
- MA 261 “Multi-variate Calculus”

SERVICE PARTICIPATION & CONTRIBUTIONS

National

Invited workgroup participant, National Conference on Doctoral Programs in Mathematics Education, Oct 25-28 2022. (funded by NSF)

Virtual Research Lab Member (2019-present)

South Asian Learning Sciences Research Collective (SALSRC) Member (2018-present)

Research Consultant, Research & Evaluation, Santa Ana Unified School District (2016)

Ad Hoc Reviewer, Journals: *Cognition & Instruction*, *Educational Studies in Mathematics*

Ad Hoc Reviewer, Conference Associations: *International Conference of Learning Sciences (ICLS)*,

Psychology of Mathematics Education-North American Chapter Conference (PME-NA),

American Educational Research Association (AERA)

External Reviewer, Grants: *Bill & Melinda Gates Foundation*, *National Science Foundation*

School/ Department

Department of Curriculum & Instruction, UW-Madison:

Faculty Hiring and Search Committee Member (2020-23)

Racial Equity Fund Committee Member (Fall 2020)

School of Education, UC-Irvine:

Faculty Search Committee Student Member (2017-2018)
PhD Student Admissions Committee Student Member (2016-2017)
Workshop Facilitator, “Presenting Undergraduate Research Posters/Talks”, DECADE (2018)
Invited Panel Member, “Adviser/Advisee Relationship”, DECADE (2017)
Undergraduate Student Mentor, Undergraduate Research Opportunities Program (2016-18)
Graduate Student Peer Mentor, DECADE (2015-2018)
International Student Representative, Associated Doctoral Students of Education (2013-2015)

OTHER EMPLOYMENT

Business Analyst, GENPACT Analytics/ General Electric (GE) 2003-2007
Atlanta, GA, USA (2006-2007) and Bangalore, India (2003-2006)

PROFESSIONAL AFFILIATIONS

International Society of Learning Sciences (ISLS)
Psychology of Mathematics Education-North American Chapter (PMENA)
American Educational Research Association (AERA)
National Council for Teachers of Mathematics (NCTM)