

ROBIN KETURAH ANDERSON

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College of Education
North Carolina State University
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ACADEMIC APPOINTMENTS

North Carolina State University 2019-Present
Assistant Professor, Mathematics Education

EDUCATION

Ph.D. Stanford University, Graduate School of Education 2019
Curriculum and Teacher Education: Mathematics Education
Learning Sciences and Technology Design
Committee: Professors Jo Boaler (Advisor), Brigid Barron, & Peter Williamson

M.Ed. University of California, San Diego 2008
Credentials: Secondary Mathematics, Physics

B.A. University of California, San Diego 2006
Major: Mathematics

RESEARCH INTERESTS

Mathematics Education, Learning Sciences, Professional Development, Pre-Service Teacher Preparation, Informal Learning, Curriculum, Social Media, Computational Methods in Social Science Research

PUBLICATIONS

Journal Publications

Anderson, R. K., Ruef, J., Reigh, E., Chavez, R.; Williamson, P, Villa III, A. M. (Under Review). "Math is so much more.": The design, implementation, and outcomes of an elective mathematics methods course.

Anderson, R. K., West, H., & Kates, A. (Under Review). Propelling moments: What pushes mathematics teachers to request support online?

Boaler, J., **Anderson, R.** (2018). Considering the rights of learners in classrooms: The Importance of mistakes and growth assessment practices. *Democracy and Education*, 26(2), Article 7.

Anderson, R. K., Boaler, J., & Dieckmann, J. (2018). Achieving elusive teacher change through challenging myths about learning: A blended approach. *Education Sciences*. 8(3), 98. doi: 10.3390/educsci8030098
Media Coverage: Education Week, Quartz, San Jose Mercury News

Borko, H., Carlson, J., Mangram, C., **Anderson, R. K.**, Fong, A. Million, S., Mozenter, S., & Villa III, A. M. (2017). Design-Based implementation research: Adapting a professional development leadership model with

a school district. *International Journal of STEM Education*. 4(29). doi: 10.1186/s40594-017-0090-3

Anderson, R. (2016). When copy machine collaboration is not enough: Building a collaborative online professional network. *New England Mathematics Journal*. 49(1), 57-64.

Refereed Conference Proceeding

West, H., **Anderson, R. K.**, & Kates, A. (2020, forthcoming). Collaborative learning within an informal community: How online spaces can catalyze change. In *Proceedings of the forty-second annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Mazatlán, MX: Cinvestav.

Anderson, R. K. (2020). Social media facilitated collaboration: An analysis of in-the-moment support in a mathematics education facebook group. In *Proceedings of the International Commission on Mathematical Instruction Study 25, Teachers of Mathematics Working and Learning in Collaborative Groups*. Lisbon, Portugal: University of Lisbon. February 3-7, 2020; Pg. 581-588.

Anderson, R. (2019). Networked professional development: An ecological perspective on mathematics teacher learning. *Proceedings of the forty-first annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. St Louis, MO: University of Missouri. November 14-17, 2019; Pg. 525-529.

Anderson, R. K. (2018). Beyond copy room collaboration: A case study of online informal teacher professional learning. *Proceedings of The 13th International Conference of the Learning Sciences*, June 23-27, 2018; London England. Pg. 1511-1512.

Book Chapters

Opinion Articles

Anderson, R. K. (2019). Unlearning deficit language, together: A productive blueprint for supporting change. *Ed Week*. December 11, 2019; Pg. 20.

Working Papers

Anderson, R. K. What do mathematics teachers need, know, and share?: Understanding knowledge for teaching within social media. [In preparation]

Anderson, R. K., Reigh, E., & Williamson, P. Cross training in pre-service teacher education: Teaching and learning across disciplinary lines. [In preparation]

McKie, K., **Anderson, R. K.** A complex look at factors that influence mathematics teacher professional development [In preparation]

RESEARCH EXPERIENCE

Where do Mathematics Teachers Choose to Learn?: Examining Professional Learning within an Informal, Community-Based Mathematics Teacher Collaborative <i>Principal Investigator North Carolina State University</i> Funding: FRPD NCSU Internal Award (\$5,000)	2020 - Present
The Zoom where it happens: Teachers engaging students in online learning <i>Co-Principal Investigator North Carolina State University</i> Collaborator: Dr. Suki Mozenter, UM-Duluth	2020 - Present
Twenty-First Century Teacher Learning: Online Learning Communities as Critical Components of Mathematics Teacher Professional Development <i>Principal Investigator North Carolina State University</i>	2017 - Present
Research on the Impact of an Elective Curriculum and Instruction Course <i>Research Assistant Stanford University PI: Dr. Peter Williamson</i>	2017 - Present
Research on the Impact of a Hybrid Teacher Professional Development Model <i>Research Assistant Stanford University PI: Dr. Jo Boaler</i>	2016 - 2019
Research on Undergraduate Educational Pathways <i>Research Assistant Stanford University PI: Brian Cook</i>	2017 - 2018
Research on Mathematics Teacher Leadership Preparation <i>Research Assistant Stanford University PIs: Dr. Hilda Borko and Dr. Janet Carlson</i>	2015 - 2016

TEACHING EXPERIENCE

Post-Secondary Teaching Experience

Seminar on STEM Teacher Professional Development , graduate-PhD, NCSU	2020
Introduction to Mathematics Education , undergraduate, NCSU	2019-2020
Teaching Mathematics with Technology , graduate-masters, NCSU	2019-2020
Curriculum and Instruction for Mathematics III , graduate-masters, Stanford University	2017-2018
Curriculum and Instruction for Mathematics II , graduate-masters, Stanford University	2018
Curriculum and Instruction Elective in Math , graduate-masters, Stanford University	2018

Secondary Teaching Experience

Mathematics and Physics Teacher – Guajome Park Academy (Public K-12 School)	2007 - 2015
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Professional Development Experience

Hollyhock Teacher Fellowship - Stanford University	2016, 2018
How to Learn Math for Teachers (Online Course) - Stanford University Online	2016
Problem-Solving Cycle – Stanford University	2015 - 2016

CONFERENCE PRESENTATIONS AND INVITED TALKS

Anderson, R. K. Social media facilitated collaboration: An analysis of in-the-moment support in a mathematics education facebook group. International Commission on Mathematical Instruction Study 25, Teachers of Mathematics Working and Learning in Collaborative Groups. <i>Lisbon, Portugal.</i>	2020
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- Anderson, R.** Networked professional development: An ecological perspective on mathematics teacher learning. *Psychology of Mathematics Education - North America Conference, St. Louis, Mo.* 2019
- Anderson, R., & Chavez, R.** Rehearsing ways to practice creative insubordination with Pre-Service Teachers. Paper in Symposium: Political Conocimiento for Teaching Mathematics: Context Matters. Chair: Rochelle Gutierrez. American Mathematics Teacher Educators (AMTE) Annual Meeting, *Orlando, FL.* 2019
- Williamson, P., **Anderson, R.**, Reigh, E., & Lange, K. Re-imagining pre-service teacher education: Teaching and learning across disciplinary lines. American Education Research Association (AERA) Annual meeting, *Toronto, Canada.* 2019
- Anderson, R., & Chavez, R.** Engaging in political conversations around mathematics: Rehearsing ways to practice creative insubordination with pre-service teachers. So, What Are You Working On? Conference, *Stanford, CA.* 2018
- Boaler, J., **Anderson, R., & Fieldstien, S.** The creation and development of mathematical mindset coaching tools: A partnership between Youcubed at Stanford University and Tulare County. National Council of Supervisors of Mathematics (NCSM) National Conference, *Washington, D.C.* 2018
- Lang, D., **Anderson, R., & Lee, M.** Teacher professional development: Social networks and influence maximization. BayLAN, *Berkeley, CA.* 2017
- Anderson, R., & Dieckmann, J.** Researching the impact of an online course designed to transform student engagement and achievement in mathematics. TELOS: Technology for Equity in Learning Opportunities, *Stanford, CA.* 2017

HONORS AND AWARDS

- Faculty Research and Professional Development Grant (\$5,000)** 2020-2021
Research grant to study local mathematics teacher collaborative
- STEM Education Initiative Grant (\$9,749)** 2019
Funding for course (Teaching Mathematics with Technology) redesign
- VPGE SCORE: Strengthening the Core – Academic Innovation Grant (\$15,000)** 2018
Research grant to study an innovative curriculum and instruction course. (with Peter Williamson)
- Technology for Equity in Learning Opportunities Research Grant (\$100,000)** 2016
Research grant to study the implementation of hybrid teacher professional development (with Jo Boaler)
- Noyce Master Teacher Fellowship (\$40,000)** 2012 – 2015
Curriculum development, new teacher mentoring, networking, professional development

PROFESSIONAL TRAINING

- Computational Social Science Certificate.** Stanford University
Technology-Enhanced Teaching Certificate. Stanford University

ACADEMIC LEADERSHIP & SERVICE

<i>Dissertation Advisor (NCSU)</i> , Jonathan Lopes Torres (Co-advisor) Luke Carman (Co-advisor)	2019 - present
<i>Dissertation Committee Member (NCSU)</i> , Emily Elrod, Heather Barker, James Smiling, Latoya Brewer, Charles Johnson	2019 - Present
<i>Reviewer, Education Sciences, AMTE, PME-NA, MTE, AERA Open</i>	2017 – Present
<i>Panel Reviewer</i> , NSF	2021
<i>Facilitator & Mentor</i> , Mathematics Education Research Group, Stanford University	2017 - 2019
<i>Founding Member & Facilitator</i> , Computational Text Analysis for Social Sciences, Stanford University	2017 - 2019

MEDIA MENTIONS

“Best way to improve student math scores? Change teachers’ attitudes, study says” *San Jose Mercury News*, August 5, 2018
<https://www.mercurynews.com/2018/08/05/best-way-to-improve-student-math-scores-change-teachers-attitudes-study-says/>

“To Up Students' Math Ability, Try Working on Their Teachers' Growth Mindset” *Education Week*, July 19, 2018
https://blogs.edweek.org/teachers/teaching_now/2018/07/up_students_math_ability_teachers_growth_mindset.html

“Stanford research shows that students do better on tests when teachers face down their math demons” *Quartz*, July 12, 2018
<https://qz.com/1326592/stanford-research-shows-that-students-do-better-on-tests-when-elementary-school-teachers-face-down-their-own-math-demons/>

PROFESSIONAL AFFILIATIONS

American Educational Research Association (AERA)
Association of Mathematics Teacher Educators (AMTE)
International Society of the Learning Sciences (ISLS)
National Council of Supervisors of Mathematics (NCSM)
National Council of Teachers of Mathematics (NCTM)