

## Rachel B. Baker

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CONTACT INFORMATION	School of Education University of California, Irvine 2060 Education Irvine, CA 92697	949.824.2859 rachelbb@uci.edu
CURRENT POSITION	<b>University of California, Irvine</b> , School of Education Assistant Professor	2015-present
AREAS OF SPECIALIZATION	education policy, educational sorting and equity, higher education success and persistence, descriptive and causal methods, economics of education, labor market outcomes	
EDUCATION	<b>Stanford University</b> , Stanford, CA <b>Ph.D.</b> , Economics of Education & Education Policy <i>Dissertation Committee</i> : Sean Reardon, Eric Bettinger and Tom Dee, Stanford University; Michal Kurlaender, University of California, Davis	2015
	<b>Stanford University</b> , Stanford, CA <b>M.A.</b> , Economics	2014
	<b>Dartmouth College</b> , Hanover, NH <b>B.A.</b> , Psychology <i>Summa Cum Laude</i> N.H. Teaching Certification, grades K-6	2004
	<b>Gallaudet University</b> , Washington, D.C. Hearing Undergraduate Transfer; all courses taught in American Sign Language	Fall, 2001
FELLOWSHIPS AND AWARDS	<b>NAEd/Spencer Postdoctoral Fellowship</b> <b>UCI School of Education Dean's Honoree for Teaching Excellence</b> <b>AERA Outstanding Reviewer Award for <i>AERA Open</i></b> <b>AERA Outstanding Reviewer Award for <i>EEPA</i></b> <b>Institute of Education Sciences Pre-doctoral Fellow of the Year</b> <b>Albert Shanker Institute Research Fellow</b> <b>Jack Kent Cooke Foundation Dissertation Fellowship</b> <b>Graduate Public Service Fellowship</b> , Stanford University <b>Institute of Education Sciences Pre-doctoral Fellowship</b> <b>Kimball Fellowship</b> , Stanford Graduate Fellowships <b>Grace and James S. Parkes 1920 Prize</b> <b>James O. Freedman Presidential Research Scholar</b>	2019 2018 2018 2017 2016 2015 2014-2015 2013-2014 2010-2015 2010-2015 2004 2003
FUNDED RESEARCH, NATIONALLY COMPETITIVE	<b>National Science Foundation</b> , 2019-2024, \$2,500,000 (Principal Investigator). <i>Improving the Transition of Community College Students into University STEM Programs Through Cross-Enrollment</i> <b>Mellon Foundation</b> , 2018-2021, \$1,115,000 (Co-Investigator). <i>Next Generation Undergraduate Success Measurement Project</i> <b>College Futures Foundation</b> , 2018-2020, \$42,000 sub-award (Co-PI). <i>Effects of Associate Degrees for Transfer on BA Attainment</i> <b>National Science Foundation</b> , 2015-2020, \$2,500,000 (Co-Investigator). <i>Investigating Virtual Learning Environments</i>	

FUNDED  
RESEARCH,  
LOCALLY  
COMPETITIVE

- Education Research Initiative, UC, Irvine**, 2019-2020, \$30,000.  
*Increasing Cross-Enrollment between Local CCCs and UCI*
- Council on Research, Comp. and Lib. Grant, UC, Irvine**, 2019, \$6,600.  
*The Effects of Curricular Complexity in College Majors*
- Council on Research, Comp. and Lib. Grant, UC, Irvine**, 2018, \$1,200.  
*Effect of MOOC Credentials on Probability of Employment*
- Council on Research, Comp. and Lib. Grant, UC, Irvine**, 2017, \$1,300.  
*Effect of Structured Transfer Pathways on BA Receipt*
- Council on Research, Comp. and Lib. Grant, UC, Irvine**, 2016, \$2,100.  
*Telepresence to Address Geographic Barriers in Higher Education*
- Comp. Social Science Research Grant, Stanford University**, 2014, \$10,000.  
*Agent Based Models of Affirmative Action*

## PUBLICATIONS

PEER-REVIEWED  
JOURNAL  
ARTICLES

- \* indicates graduate student coauthor, # indicates research-practice partnership coauthor
14. Fesler, L., Dee, T., **Baker, R.B.**, and Evans, B. "Using Text as Data to Understand Gender Equity in Education." *Journal of Research on Educational Effectiveness*, forthcoming.
  13. Holzman, B., Klasik, D., and **Baker, R.B.**. "Gaps in the College Application Gauntlet." *Research in Higher Education*, 2019.
  12. Bahr, P. R., Fagioli, L.#, Hetts, J.#, Hayward, C.#, Willett, T.#, Lamoree, D#., Newell, M.#, Sorey, K.#, and **Baker, R.B.**. "Improving Placement Accuracy in California's Community Colleges Using Multiple Measures of High School Achievement." *Community College Review*, 2019.
  11. Li, Q.\* and **Baker, R.B.**. "The different relationships between engagement and outcomes across participant subgroups in Massive Online Open Courses." *Computers and Education*, 2018.
  10. **Baker, R.B.**, Evans, B., Li, Q.\*, and Cung, B.\* "Does inducing students to schedule lecture watching in online classes improve their academic performance? An experimental analysis of a time management intervention" *Research in Higher Education*, 2018.
  9. **Baker, R.B.**, Bettinger, E., Jacob, B. and Marinescu, I. "The Effect of Labor Market Information on Community College Students' Major Choice." *Economics of Education Review*, 2018.
  8. Reardon, S.F., **Baker, R.B.**, Kasman, M., Klasik, D.J. and Townsend, J.B. "What levels of racial diversity can be achieved with socioeconomic-based affirmative action? Evidence from a simulation model." *Journal of Policy Analysis and Management*, 2018.
  7. **Baker, R.B.**, Klasik, D.J. and Reardon, S.F.. "Race and Stratification in College Enrollment over Time" *AERA Open*, 2018.
  6. **Baker, R.B.** "Understanding College Students' Major Choice Using Social Network Analysis" *Research in Higher Education*, 2017.

5. **Baker, R.B.**, Evans, B. and Dee, T. “A Randomized Experiment Testing the Efficacy of a Scheduling Nudge in a Massive Open Online Course (MOOC).” *AERA Open*, 2016.
4. **Baker, R.B.** “The effects of structured transfer pathways in community colleges.” *Educational Evaluation and Policy Analysis*, 2016.
3. Reardon, S.F., Kasman, M., Klasik, D.J. and **Baker, R.B.** “Student Resources and Stratification among Colleges: An Agent-based Simulation of Five Mechanisms of the College Sorting Process.” *Journal of Artificial Societies and Social Simulation*, 2016.
2. Evans, B.J., **Baker, R.B.** and Dee, T. “Persistence Patterns in Massive Open Online Classes.” *Journal of Higher Education*, 2016.
1. Bettinger, E.P. and **Baker, R.B.** “The Effects of Student Coaching: An Evaluation of a Randomized Experiment in Student Advising.” *Educational Evaluation and Policy Analysis*, 2014.

PEER-REVIEWED  
CONFERENCE  
PROCEEDINGS

1. Park, J.\*, Yu, R. \*, Rodriguez, F., **Baker, R.B.**, Smyth, P. and Warschauer, M. “Understanding Student Procrastination via Mixture Models” Proceedings of the Educational Data Mining 2018 Conference.

PUBLICATIONS  
UNDER REVIEW

7. Fischer, C., Pardos, Z., Baker, R. S., Williams., J. J., Smyth, P., Yu, R.\*, Slater, S., **Baker, R.B.**, and Warschauer, M. “Mining big data in education: Affordances and challenges” Conditionally accepted with revisions at *Review of Research in Education*.
6. Fagioli, L.#, **Baker, R.B.**, and Orona, G.\* “The Role of Non-Cognitive Variables in Identifying Community College Students in Need of Targeted Supports” Revise and Resubmit at *Research in Higher Education*.
5. **Baker, R.B.**, Solanki, S.\*, and Kang, C.\* “Conceptualizing Racial Segregation in Higher Education: Examining Within- and Between-Sector Trends in California Public Higher Education, 1994-2014”
4. Li, Q.\*, **Baker, R.B.** and Warschauer, M. “Using Clickstream Data to Measure Self-Regulated Learning in an Online Course”
3. Fischer, C., **Baker, R.B.**, Li, Q.\*, Orona, G.\*, and Warschauer, M. ”The Relationship of Online Course Taking to College Completion and Time-to-Degree”
2. Rivas, M.\*, **Baker, R.B.**, and Evans, B. “Does a MOOC Make You More Marketable?: An Experimental Analysis of the Value of MOOCs Relative to Professional Experience and Traditional Higher Education Credentials”
1. **Baker, R.B.**, Dee, T., Evans, B., and John, J. “Bias in Online Classes: Evidence from a Field Experiment.”

BOOK CHAPTERS

2. Evans, B.J. and **Baker, R.B.** (2016) “MOOCs and Persistence: Definitions and Predictors” In Blackmon, S. and Major, C. (Eds.), *New Directions in Institutional Research, MOOCs*. Wiley Periodicals.
1. Klasik, D.J., Proctor, K. and **Baker, R.B.** (2015) “Building Relevant Research on Broad-Access Higher Education” In Stevens, M. and Kirst, M.W. (Eds.), *Remaking College: Broad Access Colleges and Universities and the Future of US Higher Education*. Stanford, CA: Stanford University Press.

REPORTS AND  
POLICY BRIEFS

4. **Baker, R.B.**, Dee, T., Evans, B., and John, J. "Race and Gender Biases Appear in Online Education." 2018. Brookings Institute: Brown Center Chalkboard.
3. **Baker, R.B.**, Friedmann, E., and Kurlaender, M. "Associate Degrees for Transfer: A Snapshot of Progress Across California Community Colleges." 2018. Wheelhouse: The Center for Community College Leadership and Research.
2. **Baker, R.B.** "Associate Degrees for Transfer: Early Effects on Degree Completion in California Community Colleges." 2017. Wheelhouse: The Center for Community College Leadership and Research.
1. **Baker, R.B.** "Competency Based Education Programs: The Students' Perspective" 2015. American Enterprise Institute commissioned paper.

PRESENTATIONS

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PEER-REVIEWED  
PRESENTATIONS

2019	Association for Education Finance and Policy, American Educational Research Association, Society for Research on Educational Effectiveness, Association for Public Policy Analysis and Management
2018	Association for Education Finance and Policy, Learning Analytics and Knowledge Conference, Educational Data Mining, Association for Public Policy Analysis and Management, Association for the Study of Higher Education, California Strengthening Student Success Conference
2017	Association for Education Finance and Policy, Association for Public Policy Analysis and Management, American Economic Association, American Educational Research Association
2016	Association for Education Finance and Policy, Association for Public Policy Analysis and Management, American Economic Association
2015	Association for Education Finance and Policy, Association for Public Policy Analysis and Management, Association for the Study of Higher Education
2014	Association for Education Finance and Policy, Society for Research on Educational Effectiveness, Research and Planning Conference for California Community Colleges, American Educational Research Association
2013	Association for Education Finance and Policy, Sociology of Education Association, Association for the Study of Higher Education
2012	Association for Public Policy Analysis and Management
2011	Association for Public Policy Analysis and Management, Association for the Study of Higher Education

INVITED  
PRESENTATIONS

- 2019 **Stanford University Undergraduate Pathways Workshop** (Invited Talk), **Wheelhouse Center for Community College Leadership** (Invited Talk)
- 2018 **Saddleback Community College** (Keynote Address at Basic Skills Initiative Institute), **Institute of Education Sciences PI Meeting** (Invited Address), **UCLA Community College 2 PhD Saturday Academy** (Invited Address), **Southwestern Community College** (Keynote Address at Guided Pathways Faculty Institute), **Stanford University** (Invited Talk at Center for Education Policy Analysis), **New York University** (Invited Talk at Steinhardt School), **UC Santa Barbara** (Invited Talk at Gervirtz Graduate School of Education)
- 2017 **Mt. San Jacinto Community College** (Keynote Address at Annual Full Faculty Meeting), **North Carolina Community Colleges** (Keynote Address at Annual Student Success Summit), **California State University, Fullerton** (Invited Talk in Econ. Dept.), **Wheelhouse Center for Community College Leadership** (Invited Talk)
- 2016 **Mt. San Antonio Community College** (Keynote Address at Annual Academic Planning Summit), **Policy Analysis for California Education** (Seminar for Senior Policy Makers)
- 2013 **Foothill DeAnza Community College District** (Presentation at Senior Administrators Meeting)

EXPERIENCE

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UNIVERSITY  
TEACHING  
EXPERIENCE

**University of California, Irvine**

EDUC 25: Introduction to Education

EDUC 50: Origins, Purposes and Central Issues in K-12 Education

EDUC 254: Graduate Seminar: Issues of Access and Persistence in Higher Education

EDUC 265: Applied Regression in the Social Sciences

**Stanford University**

EDUC 480: Broad Access Higher Education

UAR42: Freshman Meta-Academic Seminar

*Teaching Assistant*: EDUC 255B: Causal Inference in Quantitative Educational and Social Science Research

**Save the Children**

Intermediate Statistics for Educational Research and Evaluation *Kigali, Rwanda*

**Dartmouth College**

Beginner American Sign Language

K-12 TEACHING  
EXPERIENCE

**The Learning Center for the Deaf**, Framingham, MA

2006 - 2008

*Special Education and Literacy Teacher*

Taught first grade special education class and 2nd-5th grade oral access literacy.

Taught primarily in American Sign Language.

**Ejit Elementary School**, Ejit, Majuro, Marshall Islands

2004 - 2006

*Elementary School Teacher*

Taught first-third grade English, math and science. Taught weekly English lesson to adult community members. Taught American Sign Language to parents of Deaf children.

SELECTED PROFESSIONAL EXPERIENCE	<p><b>The Gorilla Foundation</b>, Woodside, CA 2013-2014  <i>Curriculum Consultant</i>          Consulted with the organization on a mobile app to teach sign language to pre-readers using pictures and videos of Koko the Gorilla.</p> <p><b>The Steppingstone Foundation</b>, Boston, MA 2008-2010  <i>Assistant Director of College Programming</i>          Conducted research on graduation and transfer rates and college experiences of Steppingstone Alumni; created a college preparation curriculum</p> <p><b>Summer Enrichment at Dartmouth</b>, Hanover, NH 2003-2006  <i>Assistant Director, Student Director</i>          Oversaw school year planning and development of social and academic enrichment curriculum for 40 high school students from five high schools</p>
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PROFESSIONAL SERVICE

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CONSULTANT	<p><b>DVP-PRAXIS</b>: Technical Consultant for multi-site RCT  <b>Research and Planning Group, California Community Colleges</b>: Methodological Consultant for Multiple Measures Assessment Project  <b>College Futures Foundation</b>: Technical Consultant for Through the Gate Project  <b>Grad Guru</b>: Technical Consultant for App-Based Community College Advising Experiment</p>
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EDITORIAL BOARDS	<p><i>Educational Evaluation &amp; Policy Analysis</i></p>
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REVIEWER, JOURNALS	<p><i>American Economic Journal: Applied Economics; American Educational Research Association Open; American Educational Research Journal; Community College Review; Computers &amp; Education; Economics of Education Review; Educational Researcher; Educational Evaluation &amp; Policy Analysis; Education Finance &amp; Policy; Journal of Artificial Societies and Social Simulation Journal of Economic Behavior &amp; Organization; Journal of Higher Education; Journal of Human Capital; Journal of Human Resources; Research in Higher Education</i></p>
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REVIEWER, CONFERENCES	<p>American Educational Research Association; Society for Research on Educational Effectiveness; Association for Education Finance and Policy</p>
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UNIVERSITY APPOINTMENTS	<p>University Academic Integrity Review Board, UC Irvine 2016-2019          Undergraduate Steering Committee, UC Irvine School of Education 2016-2019          Faculty Mentor for UCI Summer Ed. Research Internship Program 2016          Organizer, UCI School of Education Seminar Series 2015-2017</p>
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MEDIA MENTIONS

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“California’s Still a Long Way from Tuition-Free Community College” *LAist*, December 4, 2018

“Race and Gender Bias in Online Classes” *Inside Higher Ed*, March 8, 2018

“Bias Affects Instructors’ Interactions With Online Students, Study Finds” *The Chronicle of Higher Education*, March 7, 2018

“Seven years later, California college program helping to fix transfer process” *KPCC: Southern California Public Radio*, November 9, 2017.

“Low-income Students Remain Rare at Elite Universities,” *Boston Globe*, August 12, 2017.

“New community college chief has eyes on Trump education agenda,” *KPCC: Southern California Public Radio*, December 19, 2016.

“Minority Enrollment: Black and Hispanic Students Underrepresented at Highly Selective Colleges, Stanford Study Finds,” *The Huffington Post*, July 17, 2012.

“The Choice: Study Finds Academic ‘Coaching’ Boosts Graduation Rates,” *New York Times*, March 11, 2011.