

## Rachel B. Baker

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CONTACT INFORMATION	Stanford University Center for Education Policy Analysis 520 Galvez Mall, #407 Stanford, CA 94305	857.488.0350 rbbaker@stanford.edu
	<a href="http://baker.stanford.edu">http://baker.stanford.edu</a>	
RESEARCH INTERESTS	higher education success and persistence, descriptive and causal methods, broad access schools, economics of education, labor market outcomes, educational sorting and equity	
EDUCATION	<b>Stanford University</b> , Stanford, CA <b>Ph.D.</b> , Economics of Education & Education Policy, <i>Dissertation Title</i> : Educational Goals and Pathways in Community Colleges <i>Dissertation Committee</i> : Sean Reardon, Eric Bettinger and Tom Dee, Stanford University; Michal Kurlaender, University of California at Davis <b>Stanford University</b> , Stanford, CA <b>M.A.</b> , Economics	<i>Expected</i> : June 2015    January, 2014
	<b>Dartmouth College</b> , Hanover, NH <b>B.A.</b> , Psychology <i>Summa Cum Laude</i> N.H. Teaching Certification, grades K-6	June, 2004
	<b>Gallaudet University</b> , Washington, D.C. Hearing Undergraduate Transfer; all courses taught in American Sign Language	Fall, 2001
FELLOWSHIPS AND AWARDS	<b>Jack Kent Cooke Foundation Dissertation Fellowship</b> <b>Graduate Public Service Fellowship</b> , Stanford University <b>Institute of Education Sciences 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>	2014-2015 2013-2014 2010-2015 2010-2015 2004 2003

### PUBLICATIONS and PRESENTATIONS

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PEER REVIEWED JOURNAL ARTICLES	1. Bettinger, E.P. and <b>Baker, R.B.</b> , "The Effects of Student Coaching: An Evaluation of a Randomized Experiment in Student Advising." <i>Educational Evaluation and Policy Analysis</i> , 2013.
PUBLICATIONS UNDER REVIEW	1. Reardon, S.F., Kasman, M., Klasik, D.J. and <b>Baker, R.B.</b> , "Agent-based Simulation Models of the College Sorting Process." Revise and resubmit at <i>Journal of Artificial Societies and Social Simulation</i> 2. Evans, B.J., <b>Baker, R.B.</b> and Dee, T. "MOOC Persistence- a Descriptive Analysis" 2014. Submitted to <i>Research in Higher Education</i> .
BOOK CHAPTERS	1. Klasik, D.J., Proctor, K. and <b>Baker, R.B.</b> . "Building Relevant Research on Broad-Access Higher Education" In Stevens, M. and Kirst, M.W. (Eds.), <i>Remaking College: Broad Access Colleges and Universities and the Future of US Higher Education</i> . Stanford, CA: Stanford University Press.

REPORTS AND  
POLICY BRIEFS

1. **Baker, R.B.**. “Competency Based Education Programs: the students’ perspective” 2014. American Enterprise Institute commissioned paper.
2. **Baker, R.B.** and Gurantz, O. “Early Alerts: Predictors of Student Success” 2014. Prepared for the Foothill-De Anza Community College District.
3. Reardon, S.F., **Baker, R.B.**, and Klasik, D.J. “Unequal Access: Race, Income and Enrollment Patterns in Highly Selective Colleges, 1982-2004” Center for Education Policy Analysis Report.

PAPERS IN  
PREPARATION

1. **Baker, R.B.** ”Responses to Increased Structure in Community Colleges.”
2. **Baker, R.B.** ”Evidence for a Multi-Stage Decision Making Model of Major Choice.”
3. **Baker, R.B.** ”Student Goal Uncertainty and Framed Choices in Community Colleges.”
4. Reardon, S.F., **Baker, R.B.**, Kasman, M., Klasik, D.J. and Townsend, J.B. “Workable Alternatives? Simulated Models of Race- and Socioeconomic-Based Affirmative Action Policies” 2014.
5. **Baker, R.B.**, Dee, T. and Evans, B.J. “Precommitment and Persistence in a Massive Open Online Course” 2014.

CONFERENCE  
PRESENTATIONS

1. **Baker, R.B.** Structured Transfer Pathways in Community Colleges. Paper presented at Society for Research on Educational Effectiveness Fall Meeting, Washington, D.C., September, 2014.
2. **Baker, R.B.** and LaManque, A. Institutional Research in Community Colleges. Project presented at Research and Planning Conference for California Community Colleges, Pomona, CA, April, 2014.
3. **Baker, R.B.** and Klasik, D. Race, income and the stratification of college enrollment patterns, 1980-2010. Paper presented at American Education Research Association Annual Meeting, Philadelphia, April, 2014.
4. **Baker, R.B.** and Evans, B.J. Persistence Patterns in MOOCs: Course-, Lecture- and Student-level Predictors. Paper presented at American Education Research Association Annual Meeting, Philadelphia, April, 2014.
5. Reardon, S.F., **Baker, R.B.**, Kasman, M., Klasik, D. and Townsend, J.B. “Workable Alternatives? Simulated Models of Race- and Socioeconomic-Based Affirmative Action Policies” Paper presented at AEFPP Conference, San Antonio, March, 2014.
6. Dee, T., Evans, B.J. and **Baker, R.B.**. Describing Persistence in MOOCs. ASHE conference in St. Louis, MO in November, 2013.
7. **Baker, R.B.** and Klasik, D. Online Coursetaking at Foothill-DeAnza. Project presented to senior administrators at Foothill DeAnza Community College District. Los Altos, CA, July, 2013.
8. Reardon, S., Kasman, M., Klasik, D. and **Baker, R.B.**. Agent Based Simulation Models of the College Sorting Process. Paper presented at AEFPP Conference, New Orleans, LA, March, 2013.
9. **Baker, R.B.**, Klasik, D. and Reardon, S. Race and College Enrollment Over Time. Paper presented at SEA conference, Monterey, CA, February 2013.

10. Bettinger, E., and **Baker, R.B.**. The Effects of College Coaching: Evidence from a Randomized Experiment in Student Mentoring. Paper presented at APPAM/INVALSI Conference, Rome, Italy, October 2012.
11. Bettinger, E. and **Baker, R.B.**. Research-based Strategies for Supporting Students from Matriculation Through Graduation. Workshop given at National Partnership for Educational Access annual conference, Chicago, IL. April, 2012.
12. Scott, D., Proctor, K. and **Baker, R.B.**. The Role of Broad Access Colleges in the Silicon Valley Economy. Project presented at Mapping Broad-Access Higher Education conference, Palo Alto, CA, December 2011.
13. Bettinger, E., and **Baker, R.B.**. The Effects of College Coaching: Evidence from a Randomized Experiment in Student Mentoring. Paper presented at APPAM conference, Washington, D.C., November 2011.
14. Bettinger, E., and **Baker, R.B.**. The Effects of College Coaching: Evidence from a Randomized Experiment in Student Mentoring. Roundtable presentation at ASHE conference, Charlotte, NC, November 2011.

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EXPERIENCE

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RESEARCH  
EXPERIENCE

- MOOC Field Experiments, Stanford University**      October 2012 to present  
*Co-Investigator with Tom Dee and Brent Evans*  
Conducted an experiment attempting to increase persistence in online courses using principles of behavioral economics; Designed a field experiment to examine biases and discrimination within MOOC discussion fora; Designed an audit study to examine effects of MOOC participation on labor market outcomes; Managed undergraduate research assistants
- Student Engagement Study, Foothill-De Anza CC**      April 2013 to present  
*Consultant*  
Using administrative and unique survey data, advise community college district on predictors of student success and student perceptions of equity. Designed study and communicated findings to community college faculty and administrators.
- College Program Decisions, Foothill-De Anza CC**      May 2013 to present  
*Co-Investigator with Eric Bettinger, Brian Jacob and Ioana Marinescu*  
Study how community college students select majors based on perceived costs and labor market returns; Designed and administered survey; Lead analytical design.
- Online Courses in Community Colleges, FHDA**      February 2013 to present  
*Co-Investigator with Mitchell Stevens and Daniel Klasik*  
Study patterns of persistence in online courses at community colleges using enrollment records. Use quasi-experimental methods to answer causal questions about the effect of online classes on persistence.
- Simulations of College Sorting, Stanford University**      May 2012 to present  
*Research Assistant, PI: Sean Reardon*  
Created dynamic Agent Based Model program using Stata to simulate student application and admission to four-year colleges. Adjusted the base model to study the effects of socio-economic status and the effects of race- and class-based affirmative action on system-wide college sorting.

- Enrollment Patterns in Selective Colleges, Stanford University** 2012-2014  
*Research Assistant, PI: Sean Reardon*  
 Used novel nonparametric achievement-gap estimation technique to study gaps in college attendance by race and socioeconomic status.
- RtI and Disability Identification, Stanford University** 2013  
*Research Assistant, PI: Tom Dee*  
 Collected data on state implementation of Response to Intervention policies to determine if the policies had an effect on the rates of identification of learning disabilities (using a difference-in-difference-in-difference strategy).
- Broad-Access Colleges in Silicon Valley, Stanford University** 2010-2011  
*Research Assistant, PIs: Mitchell Stevens and Mike Kirst*  
 Collected data on the ecology of colleges in the Silicon Valley. Focused on ways in which broad access schools (community colleges and open-access four-year schools) interacted with their immediate environment, including hiring, focused academic programs, and alumni engagement.
- College Coaching, Stanford University** 2010-2011  
*Research Assistant, PI: Eric Bettinger*  
 Analyzed administrative data from a third-party company to assess the effects of individualized college coaching on student persistence. Conducted literature review and wrote paper.
- Signed-Spoken Bilingualism, Dartmouth College** 2002-2003  
*Research Assistant, PI: Laura Ann Petitto*  
 Coded video data of young children growing up in signed-spoken bilingual environments. Noted key markers of linguistic development.
- UNIVERSITY**  
**TEACHING**  
**EXPERIENCE**
- Course Designer and Instructor** July 2014  
*Intermediate Statistics for Educational Research and Evaluation*  
 Save the Children, Kigali, Rwanda  
 Developed a 20-hour curriculum designed to give NGO and government education professionals a foundation in data analysis and data consumption. 40 students, all of whom had Masters or PhD degrees.
- Teaching Assistant** Winter 2013  
*EDUC 255B: Causal Inference in Quantitative Educational and Social Science Research*  
 with Tom Dee  
 Stanford University  
 Led weekly methods section and graded all assignments (12 graduate students)
- Seminar Instructor** Fall 2012 and Winter 2013  
*UAR-42: Freshman Seminar*  
 Leland Scholars Program  
 Stanford University  
 Devised curriculum and taught weekly meta-academic seminar for Stanford STEM freshman from disadvantaged backgrounds; Met individually with students; Graded all assignments and provided written feedback weekly (33 students)
- Course Designer and Instructor** Spring 2012  
*Broad Access Higher Education*  
 Stanford University  
 Co-designed and taught a Master's-level seminar on community colleges, for-profit colleges, and other open-access institutions. Topics included research on student pathways, online education, and the sociological and economic role of this sector.

	<b>Course Designer and Instructor</b>	2002-2004
	<i>American Sign Language</i> Dartmouth College Designed and taught 10-week evening beginner course on American Sign Language, including grammar, vocabulary and conversation.	
K-12 TEACHING EXPERIENCE	<b>Special Education and Literacy Teacher</b>	2006 - 2008
	The Learning Center for the Deaf, Framingham, MA Taught first grade special education class and 2nd-5th grade oral access literacy. Taught primarily in American Sign Language.	
	<b>Elementary School Teacher</b>	2004 - 2006
	Ejit Elementary School, Ejit, Majuro, Marshall Islands Taught first-third grade English, math and science to non-English speaking children. Led professional development for school's staff Taught weekly English lesson to adult community members Taught American Sign Language to parents of Deaf children	
SELECTED PROFESSIONAL EXPERIENCE	<b>The Gorilla Foundation</b> , Woodside, CA	2013-present
	<i>Sign Language Instructor and Curriculum Consultant</i> Teach Koko the Gorilla's caretakers introductory sign language; Consulted with the organization on a mobile app to teach sign language to pre-readers using pictures and videos of Koko the Gorilla.	
	<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; advised 100+ middle- and high- school students and created a college preparation curriculum	
	<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 in low income areas across the country; trained and supervised 15 residential staff and 50 volunteers at five-week summer program	

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 PROFESSIONAL SERVICE
 

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ADVISOR	Haas Center for Public Service, High School Tutoring Program, Stanford University
REVIWER	Economics of Education Review Journal of Economic Behavior & Organization
MEMBER	Society for Research on Educational Effectiveness The Association for Education Financy and Policy Association for Public Policy Analysis and Management Association for the Study of Higher Education California Community College Research and Planning Group

MEDIA MENTIONS

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NEWSPAPERS

“Schooling Ourselves in an Unequal America,” *New York Times*, June 16, 2013.

“Editorial: Class-Based vs. Race-Based Admissions,” *New York Times*, November 18, 2012.

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

“Study: Student Coaching Increases Retention, Graduation Rates,” *Huffington Post*, March 11, 2011.

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

REFERENCES for RACHEL BAKER

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**Sean F. Reardon** Professor, Stanford University School of Education  
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(650)736-8517 [sreardon@stanford.edu](mailto:sreardon@stanford.edu)

**Eric P. Bettinger** Professor, Stanford University School of Education  
520 Galvez Mall #522, CERAS Building, Stanford, CA 94305-3084  
(650)736-7727 [ebettinger@stanford.edu](mailto:ebettinger@stanford.edu)

**Tom Dee** Professor, Stanford University School of Education  
520 Galvez Mall #514, CERAS Building, Stanford, CA 94305-3084  
(650)723-6847 [tdee@stanford.edu](mailto:tdee@stanford.edu)

**Andrew LaManque** Associate Vice President for Instruction, Foothill College  
12345 El Monte Rd, Los Altos Hills, CA 94022  
(650)949-7179 [lamanqueandrew@fhda.edu](mailto:lamanqueandrew@fhda.edu)