
BIOGRAPHICAL SKETCH

NAME: Rebecca M. Callahan

eRA COMMONS USER NAME: RC4325

POSITION TITLE: Associate Professor, Department of Curriculum and Instruction

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
University of California, San Diego, San Diego, CA	BA	06/1992	Anthropology
University of California San Diego, San Diego, CA	BCC	06/1993	Bilingual Teacher Certification (K-8)
University of California, Davis, Davis, CA	MA	03/2001	Education
University of California, Davis, Davis, CA	PhD	08/2003	Language Literacy: Second Language Acquisition
University of California, Santa Barbara, Santa Barbara, CA	Postdoc	09/2003-08/2004	
The University of Texas at Austin, Austin, TX	Postdoc	09/2004-08/2006	

A. Personal Statement

My research interests and expertise are in the areas of educational research from a sociological perspective and educational linguistics. In particular, my work with the growing immigrant, language minority population addresses demographic issues of Education, Work, and Inequality. My research to date has examined the academic and civic preparation of immigrant, language minority adolescents as they transition from high school into young adulthood, and at present I have begun inquiry into the academic and linguistic development of elementary age bilingual and English learner (EL) students. My work addresses four areas related to educational inequities experienced by the growing immigrant language minority population: 1) the intersection of language and education policy as it manifests in bilingual EL students' academic stratification in US high schools, 2) immigrant youths' civic development via their experiences in US schools, 3) the cognitive, academic, and linguistic strengths of bilingual youth- framing language as a resource, and 4) teachers' EL and STEM efficacy as a determinant of bilingual EL students' academic and linguistic proficiency. In the first area of research I examine how schools as social institutions reflect the ideologies of the larger society, sorting and stratifying students and their educational experiences based on their alignment with linguistic and ability-based norms. In the second area of inquiry, I explore the tensions which surface in response to federal policy mandating the identification of students requiring linguistic support services and the provision of equitable educational experiences for these students. In the third area, I move beyond policy and school processes to explore additional factors shaping the life course among immigrant, language minority students. In the fourth and most recent area of inquiry, I draw from prior psychological and cognitive research on bilinguals' problem advantage to collaborate with a colleague in Engineering, Dr. Richard Crawford, to provide teacher professional development and training designed to optimize elementary bilingual students' STEM achievement and integration.

The PRC has been critical to my success since my arrival at UT in 2009. Much of my prior work exploring the linguistic and academic processes in US high schools has been in collaboration with Dr. Chandra Muller and Dr. Riegle-Crumb also of the Population Research Center; this work has been supported by the Russell Sage Foundation (role: Co-investigator), as well as the National Science Foundation (role: Principal Investigator). I have benefitted greatly from the PRC infrastructure in the application for and administration of my grants. In addition, my analyses have been supported by the technical and software infrastructure that supports and protects the housing of restricted use data at the PRC. Most recently, I collaborated with two former PRC doctoral students on publications examining how educational processes and systems may work to counteract the immigrant advantage in educational achievement and attainment (AERJ) and the implications of these disparities for educational systems in the face of growing linguistic and demographic diversity (EAQ).

B. Positions and Honors

Positions and Employment

1993-1999	Bilingual Teacher (K-2), Jamul Joint Unified School District, Jamul California
2006-2009	Assistant Professor, Department of Language and Literacy Education, University of Georgia
2006-2009	Faculty Affiliate, Department of Linguistics, University of Georgia
2009-2015	Assistant Professor, Department of Curriculum & Instruction, The University of Texas at Austin
2009-present	Faculty Research Associate, Population Research Center, The University of Texas at Austin
2015-present	Associate Professor, Department of Curriculum & Instruction, The University of Texas at Austin

Other Experience and Professional Memberships

2002-2004	UC LMRI Representative: <i>California Bilingual Coordinators Network</i>
2003-2004	California English Language Development Test Technical Advisory Group
2004-Present	Peer Reviewer: <i>American Educational Research Journal, Educational Evaluation and Policy Analysis, International Migration, Review of Educational Research, Sociology of Education</i>
2005-Present	Proposal Reviewer, <i>American Educational Research Association</i> Conference
2007-2009	Board Member: Sociology of Education Association
2008-2010	Advisory Council Member: NSF grant Pathways to STEM Degrees for Latina/o Students
2009	Invited speaker: Educational Policy and Evaluation Center Annual Conference, UT Austin, TX
2011	Invited speaker: Language, Equity, and Educational Policy Working Group, Stanford University
2014-2016	Member, Editorial Review Board, Teaching Learning & Human Development, <i>American Educational Research Journal</i>

Honors

2008	Reviewer Award, <i>Review of Educational Research</i>
2011	Early Career Award, Bilingual Education Special Interest Group (SIG) American Educational Research Association
2014	Reviewer Award, <i>American Educational Research Journal</i> (AERJ), American Educational Research Association

C. Contributions to Science

1) Examination of intersection of language and education policy as it manifests in bilingual English learner (EL) students' academic stratification in US high schools

According to the 2010 Census, currently 19.3% of youth speak a language in addition to English at home, and independently, 23.4% have at least one immigrant parent. The birthrate among the immigrant and language minority population continues to outpace that of native-born, native English speakers, suggesting that the education of these children will only become more relevant in the coming years. Despite a solid research base suggesting an academic advantage among children of immigrant parents, as well as considerable cross-disciplinary work pointing to a bilingual advantage (over monolinguals) in problem solving (cognitive), empathy (social development), and academic achievement and attainment (educational), one segment of these students, ELs, continues to demonstrate significantly lower levels of academic achievement and attainment despite the fact that they should be positioned for success. Findings from my research suggest that there are ways that the very educational policies designed to support and protect bilingual children of immigrant youth as they learn English—as well as math, science, and civics—may be implemented in such a way as to limit academic achievement and attainment. Specifically, much of this body of work, undertaken with the support of the PRC, finds that identification with EL status ultimately precludes these students' access to the very academic content and course placement that is necessary for them to realize either the bilingual or immigrant advantage, if not both.

Callahan, R.M. & Humphries, M. (2016). Undermatched? School-based linguistic status, college-going, and the immigrant advantage. *American Educational Research Journal*, 53 (2), 263-295. DOI: 10.3102/0002831215627857. PMC4820317

Callahan, R.M. & Shifrer, D. (2016). Equitable access for secondary English learner students: Course taking as evidence of EL program effectiveness. *Educational Administration Quarterly*, 52 (3), 463-496. DOI: 10.1177/0013161X16648190 PMC4941630

Callahan, R.M., Wilkinson, L., & Muller, C. (2010). Academic achievement and course taking among language

minority students in U.S. schools: Effects of ESL placement. *Educational Evaluation and Policy Analysis*, 32(1), 84-117. PMC4244003

Shifrer, D., Callahan, R.M., & Muller, C. (2013). Equity or marginalization? The high school course-taking of students labeled with a learning disability. *American Educational Research Journal*, 50 (4), 656-682. PMC4074008

2) Examination of immigrant youths' civic development via their experiences in US schools

Early in the 20th Century, the US committed to the concept of compulsory education, a shared educational experience would provide a common discourse of democracy for all and the 'Americanization' of immigrant youth. Nearly a century later, schools are still seen as a source of civic development, and this may be especially salient for the children of immigrant parents whose parents, by definition, have less experience with the US political system than do the US-born parents of their peers. In this body of collaborative work carried out through the Population Research Center using large-scale nationally representative data, we find that voting and registering to vote are largely associated with parental education level among the children of US-born parents, but not among the children of immigrant parents. Rather, among first- and second-generation immigrant youth, we find that these political engagement actions are associated instead with the number of social studies courses completed during high school. Further qualitative inquiry following these initial findings suggests that the teachers of immigrant adolescents perceive them to be predisposed to one of the core tenets of civics education—the ability to empathize and consider a situation from another's perspective. Likewise, the young adult children of immigrant parents we interviewed perceived their social studies teachers to hold civic expectations of them, and rose to meet those expectations in the form of volunteering, leadership, and civic engagement during young adulthood.

Callahan, R.M. & Obenchain, K.M. (2016). Garnering civic hope: Social studies, expectations, and the lost civic potential of immigrant youth. *Theory and Research in Social Education*, 44 (1), 36-71. PMC4822713

Callahan, R.M. & Obenchain, K.M. (2013). Bridging worlds in the social studies classroom: Teachers' practices and Latino immigrant youths' civic and political development. *Sociological Studies of Children and Youth*, 16, 97-123. PMC4215544

Callahan, R.M. & Obenchain, K.M. (2012). Finding a civic voice: Latino immigrant youths' experiences in high school social studies. *The High School Journal*, 96 (1), 20-32. PMC3666035

Callahan, R.M., Schiller, K.S., & Muller, C. (2008). Preparing for citizenship: Immigrant high school students' curriculum and socialization. *Theory and Research in Social Education* 36 (2), 6-31. PMC3722905

3) Framing language as a resource: Examination of the cognitive, academic, and linguistic strengths of bilingual youth

Early in my academic career, through the support of the PRC as a post-doctoral fellow, I received support from the Spencer and Ford Foundations to study the relationship between primary language maintenance and development among Spanish speaking youth in Texas and college going. Ultimately, I found the relationship to differ for boys relative to girls, reflecting the different ways language minority youth are socialized in US society. Currently 60 million Americans speak a language in addition to English; this demographic is skewed to the youth population and to the foreign-born, however at the same time, the popularity of dual language bilingual education programs is on the rise as more middle-class parents want to ensure that their children have the benefit of proficiency in English as well as another language. Research on the benefits to bilingualism comes from a variety of disciplines, psychology, cognitive science, sociology, and education, to name a few. One of the few areas that in which research has traditionally found little, if any benefit to bilingualism, however is the labor market. In an edited volume I undertook with a former mentor, we built off the findings of my previous research to examine other potential factors might help to account for this disconnect. The studies that contributed to the resulting edited volume helped to piece apart some of the external variables- including how we operationalize bilingualism and biliteracy, and who we identify as bilingual in any given dataset. Much of the publicity work (op-ed pieces, academic brief, interviews) that resulted from these projects has contributed to the reframing of children's primary language as a resource, rather than as a problem to be dismissed. With nearly a quarter of our youth population speaking a language in addition to English at home, letting proficiencies in those languages lapse results in a considerable loss of social, political, and economic resources for our nation.

Callahan, R.M. (2015) *Know More Than One Language? Don't Give It Up!*TheConversation.Com: Published March 9, 2015 : <http://theconversation.com/know-more-than-one-language-dont-give-it-up-37573>

- Callahan, R.M. & Gándara, P.C. (Eds.). (2014). *The Bilingual Advantage: Language, Literacy, and the U.S. Labor Market*. Multilingual Matters: Clevedon, U.K.
- Callahan, R.M. (2008). Latino college-going: Adolescent boys' language use and girls' social integration. *Bilingual Research Journal* 31(1-2), 175-200.
- Riegle-Crumb, C. & Callahan, R.M. (2009). Exploring the academic benefits of friendship ties for Latino boys and girls. *Social Science Quarterly*, 90(3), 611-631. PMC2843913

4) Examination of the relationship between teachers' EL and STEM efficacy and bilingual EL students' academic and linguistic proficiency

My present and upcoming research continues to focus on the disparate achievement of immigrant language minority youth, but shifts away from large-scale data analysis to propose and examine interventions at the classroom and school level. Specifically, this work attempts to address overarching EL instructional dilemma from a novel perspective. Historically, teachers have struggle to meet EL students' academic and linguistic needs simultaneously, frequently prioritizing language learning at the expense of academic development. Too often, EL instruction is framed with a deficit perspective, focused on what students lack (English proficiency), rather than the resources they bring to the classroom. A resource orientation toward EL education optimizes the linguistic and cultural strengths of emergent bilinguals, e.g., the ability to negotiate two languages and two cultures from a young age. The bilingual problem-solving advantage suggests that EL students and other emergent bilinguals, well-versed in analyzing their worlds from two perspectives, may be predisposed to benefit from an engineering systems thinking approach. Through this PRC supported initiative, I propose to train teachers to use engineering systems thinking to improve EL students' opportunities for effective STEM learning capitalizing on the bilingual problem solving advantage. This approach to the EL instructional dilemma supports bilingual EL students' overall achievement, their timely exit from EL status, and improving their opportunities to learn STEM effectively. Traditionally, teachers and most EL instructional programs have focused on rigorous STEM instruction only once students have attained English proficiency; training teachers to recognize students' bilingual problem solving skills through engineering systems thinking will improve EL STEM instructional practices.

- 2015-2018 *Design Technology and Engineering Education for English Learner Students (DTEEL)*. National Science Foundation (NSF) Discovery Research K-12 (DRK-12) PI: Callahan, R.M.; Co-Investigator, Crawford, R.H. NSF # 1503428 (\$445,964)
- Callahan, R.M. & Hurie, A.H. (In Preparation) Foregrounding bilingual students' academic and linguistic resources through linguistically-focused engineering education professional development.
- Callahan, R.M. & Pallais, D.M. (In Preparation). An examination of Mexican immigrant parents' engineering funds of knowledge in the home and in the workplace: A forgotten resource. See conference presentation
- 2017-2021 (In Preparation) *Collaborative Research: Argument-Driven Inquiry for English Language Literacy (ADI-ELL)*. National Science Foundation (NSF), Discovery Research K-12 (DRK-12). PI: Callahan, R.M.; Co-Investigators, Sampson, V., Rivale, S. DUE 12-05-2016

A full list of published work is available here in MyBibliography:

<https://www.ncbi.nlm.nih.gov/sites/myncbi/rebecca.callahan.1/bibliography/50955528/public/?sort=date&direction=descending>

D. Research Support

Ongoing Research Support

DRL-1503428 (R. Callahan, PI)
National Science Foundation

06/01/15-05/31/18

Design Technology and Engineering Education for English Learner Students: Project DTEEL

The project addresses this with an innovative use of engineering curriculum to build on the English-language learners' prior experiences and will support teachers' learning about strategies for teaching English-language learners and using engineering design tasks as learning opportunities for mathematics, science and communication skills.

Role: Principal Investigator

Responsibilities: Coordinate development of EL Focused engineering education curriculum for grades K-5; coordinate and develop week-long professional development institute and training for elementary teachers of

bilingual EL students; supervise graduate research assistants in data collection, coding, and analysis. Direct the writing and development of manuscripts for submission to peer reviewed outlets.

Completed Research Support

UTEX-4-10 (R. Crosnoe, PI)

09/01/10-01/31/15

Foundation for Child Development

The Dynamic Nature of Classroom Quality in the PK-3 Years

The major goal of this project is to assess continuity and change in classroom quality between a public pre-K program and the elementary schools it feeds into in Texas.

Role: Co-Investigator

Responsibilities: Provided consultation for graduate researchers regarding classroom observations of bilingual and English learning students.