

UCI School of Education

Fall 2020 BrownBag Series

The Meaning Beyond the Words: How Language, Race, & Culture Impact Science Teaching & Learning

Featuring [Bryan Brown](#), Associate Dean for Student Affairs and Associate Professor of Education, Stanford University

October 26, 2020

12:00 - 1:00 p.m. PT

Registration Required, Available

Here: https://uci.zoom.us/webinar/register/WN_kkbcVgnMRfm8yFslfyM2EA

Abstract: This presentation explores how race, culture and language intersect to create the condition of contemporary learning. For years, research on the language of classrooms explored how they way we say things impacts students' sense of belonging. Despite this research, Science and Technology Education have failed to adequately explore how issues of race, language, and culture shape the outcomes of teaching and learning in science. Through a sequence of research, this presentation explores the theoretical and pragmatic aspects of this dilemma. From a theoretical perspective, the talk will explore the Language-Identity dilemma. As students learn, the way academic language is taught to them can present a cognitive and cultural conflict. From a cognitive perspective, if science is taught without respect to the implications of how language is learned students can be misunderstood and misunderstand the teacher's complex discourse. From a cultural conflict perspective, students' may feel they are cultural outsiders when the language of the classroom positions them as outsiders. The presentation provides an overview of a series of qualitative and quantitative experiments that document the realities of this complex interaction.

Bio: Bryan A. Brown is an associate professor of science education at the Graduate School of Education at Stanford University. From 2014-2018 he served as the Associate Dean for Student Affairs in the graduate school. He joined Stanford University in the 2004 after working on a post-doctoral fellowship at Michigan State University. His award-winning research focuses on improving urban science education. He focuses on exploring how language and identity impact urban students' learning. Dr. Brown is a former high school science teacher who earned a Bachelor's degree in Biological Sciences from Hampton University, a Master's degree in Educational Psychology from the University of California, and a Ph.D. in Educational Psychology from the University of California, Santa Barbara. His 2009 research project on "Disaggregating Science Instruction" was awarded the Journal of Research in Science Teaching's award as the top research manuscript of 2009. He was the 2007 winner of the National Association for Research in Science Education's (N.A.R.S.T.) award for outstanding early career scholarship. His was named as a prestigious National Academy of Education and Spencer Foundation Fellow for 2005. In 2011, he received tenure at Stanford University in recognition of his research work. Dr. Brown's research in urban schools examines how urban science education has underserved minority students by its failure to design instruction that is sensitive to the language and cultural needs of urban populations. His early research projects lead to the development of an instructional approach, known as Disaggregate Teaching, that is designed to improve learning for underserved populations. He continued that research by examining how the language the similarities, or Conceptual Continuities, between students' informal language and those valued by science have great potential for improved learning. Currently, Dr. Brown leads the Science In The City Research Group. This research group examines how technology can serve as a mediator between a monolingual and monocultural teaching force and the multilingual and multicultural student population.