NAU NORTHERN ARIZONA UNIVERSITY

Department of STEM Education | Center for Science Teaching and Learning

October 5, 2022
3:00 pm-4:00 pm (MST)

STEM EDUCATION
Seminar Series

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

Dr. Bryan Brown, Ph.D.
Associate Professor, Science Education
Graduate School of Education
Stanford University

Dr. Bryan A. Brown joined Stanford University in 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.

Seminar 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 the 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 will provide an overview of a series of qualitative and quantitative experiments that document the realities of this complex interaction.

ZOOM information:
https://nau.zoom.us/j/89005894167
Meeting ID: 890 0589 4167
Password: 142510

For questions or more information, contact: Dr. Max Dass at (928) 523-7120 or email pradeep.dass@nau.edu.