

## Examining the Isolating Relationship Between Race and Ability in College STEM Group Work

Naomi Nishi, PhD. PhD in Education and Human Development from the University of Colorado; MA in International and Intercultural Communication from the University of Denver; BS in Scientific and Technical Communication from Michigan Technological University

[naomi.nishi@colostate.edu](mailto:naomi.nishi@colostate.edu)

Purpose: This presentation portrays the unspoken rules of whiteness and rightness in group work in a college STEM course. Like whiteness, smartness is a social construct, although it is normalized in such a way that it is often seen and assumed to be an objective measure of an individual's intelligence as determined by metrics, such as standardized tests. Yet, they are indeed racialized in the way white students are privileged by high-stakes standardized tests (Au, 2016).

Background: I draw on Dis/ability Critical Race Theory (DisCrit) (Annamma, Connor, & Ferri, 2013; Connor, Ferri, & Annamma, 2016) to examine these metrics and their implications, and show how subjective they are particularly when we notice how students of color are disproportionately referred to lower level courses, special education, or diagnosed with emotional and cognitive dis/abilities (Parrish, 2002). Leonardo and Broderick (2011) discuss the interconnected oppressive systems of whiteness and smartness, drawing on Critical Whiteness Studies, Critical Race Theory (CRT), and Dis/ability Studies. They argue that in the same way that whiteness works as property (Harris, 1993), so too does smartness. They state, "We argue that smartness functions as a form of property that its 'owners' exercise to their enjoyment and privilege" (Leonardo & Broderick, 2011, p. 2221). Beyond the parallels between how whiteness and smartness work as systems of oppression, other dis/ability and race scholars have argued that smartness or intelligence is also cast racially. White people, and specifically white men, have been the ones to define smartness and intelligence and have a long history of framing people of color and women as not smart, unintelligent, and cognitively dis/abled (Annamma, Connor, & Ferri 2013; Hayman, 1998; Leonardo & Broderick, 2011).

Methods: In this paper, I use portraiture (Lawrence-Lightfoot & David, 1997), drawing on ethnography of a college STEM course along with in-depth student and instructor interviews. Portraiture, as I use it, draws on elements of critical ethnography, narrative inquiry, and hermeneutic phenomenology (Ohito, 2017).

Results: The resulting portraits illustrate the unspoken rules of whiteness and rightness, exemplifying the intersection of what these race and dis/ability and DisCrit scholars have argued in terms of the intersections of smartness and whiteness, and the reliance of these two oppressive systems (ableism and racism) on each other in STEM. These rules include that students of color must not correct white students, only white students can demonstrate confidence in algebra (students of color must demonstrate humility), and students of color must never get upset when experiencing racial microaggressions, included when they're assumed to be not smart.

Discussion: Leonardo and Broderick (2011) point out, "Just as Baldwin once complained, What are Whites but people who think they are Whites? So, too, might we ask, What are smart people but people who think they are smart?" (p. 2215). In showing explicitly how whiteness/rightness rules work, I offer strategies for disrupting the unspoken whiteness/rightness rules, particularly in group work within Veterinary Medicine and the Biomedical Sciences.