

Culturally Relevant Pedagogy in Engineering and Making Whiteness Visible
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There is a need for faculty to have a robust understanding of social inequity, utilize cultural knowledge as an asset, and leverage the insight from perspectives of racially marginalized peoples to formulate new epistemological norms in the professional formation of engineers. While research on the historic ways difference, discrimination, and power have shaped engineering practice is growing, we can use more insight about how to mitigate these issues within courses. The classroom is the place where students learn the various knowledge and skills deemed necessary and proper for them to achieve success as engineers in a global society, and the scholarship on teaching and learning in engineering has largely ignored the ways disciplinary knowledge and forms of racialized power have been co-constructed to minoritize and exclude. This session will involve discussion about the cultural characteristics (e.g., depoliticization, structural racism, romanticized rigor) engineering education that have established and maintained inequity and exclusion since its inception. My scholarship thus far has focused on spotlighting the ways a white supremacist culture has predominated engineering education, which has harmed Black students and tainted the research methods used to analyze their experiences. I will present two concepts I employ to counteract anti-Blackness in engineering by explicating mechanisms of Whiteness and promoting Black intellectualism as a method of reconstructing what it means to know and do engineering.