

Resilient Engineering Identity

Monique Ross, Ohio State University

Literature suggests that one's ability to identify with a profession through what is considered a professional *identity* can have immense impact on a person's engagement and persistence in a field (Godwin et al., 2016; Huff, 2014; Huff et al., 2018; Perez et al., 2014; Pierrakos et al., 2009; Ross & Godwin, 2016; Tonso, 2006). Engineering is no exception to the rule. Researcher's that focus on how to increase participation and retention in fields like engineering and computer science have used their understanding of one's *interest* in engineering, *recognition* by others in engineering, and their self-assessed *performance/competence* as a means of measuring one's identity as an *engineer* (Godwin et al., 2016; Ross & Godwin, 2016; Ross et al., 2017). This tried-and-true approach to understanding engagement has held up largely when investigating those that align with the norms of those that occupy the field as the majority – White men. This is largely due to the stereotypes and tropes that are associated with being an engineer. These images and ideals have dominated mainstream media and have been propagated to and through the education system, creating the illusion that only “nerdy men” exist in and succeed in engineering and computing (Cheryan et al., 2015; Dou et al., 2020; Master et al., 2021). This apparition constructed from the historical participation of a limited subset of the population has resulted in a professional identity of an *engineer* that is limited and that perpetuates the unequal patterns of participation in engineering and computing that we see today. This means scholars must acknowledge that what constitutes an engineering identity has variation - largely because the most widely accepted means of describing an engineer does not apply to those least represented in the field of engineering. This phenomenon results in the necessity of women, Blacks, Latinx, and Indigenous people to construct a more individualized definition/description/descriptor of identity that includes personal identity/self – a racialized and gendered variant (Ross et al., 2021). This convergence of identities results in a *resilient engineering identity* - an identity that is constructed not solely on the basis of *interest*, *performance/competence*, and *recognition* but also includes the multiple social identities that a person is ascribed. Through the narratives of Black women from undergraduate programs to engineering industry for more than 10 years, we learn about the *resilient engineering identity* they have constructed that can withstand the challenges of being marginalized in the engineering field (Ross, et al., 2022). Furthermore, how understanding this broader definition of an engineer could broaden participation for all.

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