Benefits of Social Justice Pedagogy and Ecofeminist Discourse for Engineering Education

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Abstract : A large body of corroborating research provides evidence that traditional undergraduate engineering education fails to provide students with a role and identity that requires social concern and moral reasoning. Engineering students demonstrate a low level of engagement with social and political contexts, which further declines over the course of engineering education. This detachment is thought to stem from beliefs that the role of the engineer is purely to design machines, systems, and structures. In effect, engineers objectify the world. The purpose of this paper is to provide an ecofeminist critique of engineering education and pose the benefits of social justice pedagogies incorporating ecofeminist discourse. The challenges currently facing the world stem from anthropocentric industrialization, an agenda that is historically absent of Environmental, Feminist, People of Color, and Indigenous voices. A future in which the global collective achieves its Sustainable Development Goals requires its engineers to have a solid understanding of the broader social and political contexts in which they manage projects. Engineering education must convey the influence of the professional role of engineer and encourage the practice of critical reflection and social perspective-taking, priming students with the skills to engage with varying perspectives and discourses. There will be discussed the facets of social justice pedagogies that aid students in surpassing threshold concepts in social justice.