


# Chapter 9

## Teaching to Build a Cleaner World: Developing an Interdisciplinary Humanities Certificate in Environmental Justice

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### **ABSTRACT**

*The collaborative, interdisciplinary intervention offered in this chapter foregrounds an environmental justice (EJ) approach to learning that emphasizes arts and humanities within STEM education. This chapter seeks to mitigate a gap in humanities and environmental education at our home institution via the development of an interdisciplinary, humanities-focused certificate. Certificate coursework is designed to focus on broadening the scope of EJ, emphasizing environmental harm as a social and historical construct, and paying attention to the lived experiences of marginalized, underrepresented, and underserved metro Detroit communities (MDCs).*

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## **INTRODUCTION**

The collaborative, interdisciplinary intervention offered in this chapter foregrounds an Environmental Justice (EJ) approach to learning that emphasizes arts and humanities within STEM education. Our understanding of EJ aligns with that of the EPA (2023), who explain this approach as one that encompasses the “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” and is only achieved when “the same degree of protection from environmental and health hazards” and “[e]qual access to the decision-making process to have a healthy environment in which to live, learn, and work” is held by all community members. Our chapter details our attempt to mitigate a gap in humanities and environmental education at our home institution via the development of an interdisciplinary, humanities-focused certificate, tentatively titled: Environmental Justice through Technology and Culture (EJTC). Certificate coursework is designed to focus on broadening the scope of EJ, emphasizing environmental harm as a social and historical construct, and paying attention to the lived experiences of marginalized, underrepresented, and underserved Metro Detroit Communities (MDCs). We focus our outreach on students who identify as Black Detroiters, a term introduced to us by the 501C3 Detroit Future City. We chose this cohort of students because demographic breakdowns of MDCs resist conventional standards of representation across American higher education student populations; this is normative across STEM-focused universities and colleges. LTU recognizes this trend and is committed to projects and programs that welcome and support underrepresented students. Per the 2022 census, the MDC is broken down as follows: 77.9% Black or African American, 12.9% White, 1.6% Asian, and 7.8% Latino. This is an inverse of reported student attendance across the greater United States, where White students are enrolled at rates four times higher than Black students. Through situating Black Detroit student experiences as EJ learning assets, this chapter works to necessitate a cultural sea change across higher education—one which emphasizes the humanities role in creating inclusive and positive social change via thoughtful, critical inquiry. Our chapter explains how our approach to privileging MDC voices, experiences, and perspectives in interdisciplinary humanities coursework via inclusive approaches to teaching and learning can support necessary cultural and demographic shifts needed in higher education.

The EJTC certificate is dependent upon interdisciplinarity and the inclusion of varied understandings of what EJ is, which marks an important shift in humanities education. Thus, the interdisciplinary composition of our research team is intentional, and provides all students—regardless of background—with an opportunity to align required humanities and humanities-infused coursework with their STEM-focused

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