

Abstract Submitted
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Quantitative analysis of demographic gaps in STEM persistence

ERIC BURKHOLDER, Auburn University — It is well known that, at the undergraduate level and beyond, many STEM fields, particularly “hard sciences” and engineering, are far less diverse than the US population more broadly. This is usually modeled by the “leaky pipeline,” which posits that we lose STEM talent, particularly from historically marginalized populations, at many points throughout K-16 education – including after students arrive in college. I will present data showing that, in fact, historically marginalized students generally intend to major in STEM at *higher* rates than overrepresented students but graduate with a STEM degree at lower rates – indicating much of the leaky pipeline is within the university itself. I will present a detailed quantitative analysis exploring the factors correlated with receiving a STEM degree for different historically marginalized populations. I find that the data tell different stories for women, students of color, first generation students, and students from lower income families. This analysis is limited to a single public research institution in the United States, but I hope to encourage other institutions to conduct similar analyses to see how consistent these patterns are.

Eric Burkholder
Auburn University

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