

TOBI ODELEYE & OLUWASEUN AGUNBLADE. Department of Chemistry, West Virginia University, Morgantown, WV. Science Through Students' Eyes: Connecting Definitions, Attitudes, and Chemistry Performance

This study explores the relationship between students' personal definitions of science, their attitudes toward STEM, and their academic achievement in a general chemistry course. Over 800 general chemistry students responded to an open-ended survey item asking them to define science, and their attitudes were assessed using a validated survey instrument. Final course grades served as a measure of academic achievement. We analyzed the connection between students' conceptualizations of science, their attitudes towards science and performance in a general chemistry course. This presentation will share key findings and offer recommendations for educators and curriculum designers seeking to improve STEM engagement, especially in introductory STEM courses, and outcomes by addressing how science is framed and understood by students.