Systemic barriers such as lack of representation, implicit bias, and socioeconomic challenges significantly impede the academic journey of underrepresented minority students in STEM fields. The absence of diverse role models in faculty positions perpetuates feelings of isolation and marginalization, as students may struggle to find mentors who understand their unique experiences (Nguyen 59–60). Furthermore, implicit bias in academic settings can manifest in faculty perceptions, where minority students are often unfairly judged as less prepared or capable, which creates additional hurdles for them to overcome (Nguyen 59–60). Socioeconomic challenges compound these issues, as limited financial resources restrict access to necessary educational materials and extracurricular opportunities. A study highlights that "financial constraints, such as limited funds for research-related supplies and student stipends, disproportionately affect minority students," thus exacerbating the inequities they face (Nguyen 59–60). Addressing these systemic barriers is essential to fostering an inclusive environment that supports the success of all students in STEM disciplines.