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ACADEMIC AND SOCIAL BARRIERS TO BLACK AND LATINO MALE COLLEGIANS' SUCCESS IN ENGINEERING AND RELATED STEM FIELDS*

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In order to help AA and LA students overcome "barriers" to their success in STEM, we offer recommendations to educators and practitioners**

Participants

27 African Americans participated in one-on-one interviews

22 Latino Americans participated in one-on-one interviews

Statistics

64% Increase in U.S. college enrollment rates over the past 3 decades

Under represented minority students continue to lag behind their White counterparts in U.S. college graduation rates

4 Academic and social barriers

1 Feel alone and invisible

"...not that it's impossible for a minority to succeed in my major, but the conditions in which to succeed aren't ideal. One because there aren't as many people that look like you."
(Black male bio-chemistry major)

Recommendation

Increase outreach efforts that target AA and LA students to improve the representation of these URMs

2 Lack same race peers and faculty

"Sometimes you feel like you may be able to understand things better..." (Hispanic male chemistry major)

Recommendation

Make intentional efforts to pair AA and LA students with same-race upperclassmen mentors where possible

3 Have difficulty applying theory to practice

"I just got bored, yeah I know about the topic, I see other people they're passionate about it...it's not something where I'm like yeah I'm going to change the whole world."
(Black male environmental science major)

Recommendation

Work with industry partners to create real-world design projects and to help faculty understand what skills and competencies are most important for graduates

4 Lack the pre-college preparation necessary to succeed in STEM fields

"A lot of my troubles with class are normally born with mishandling time, mishandling energy as well, and not have the knowledge to study effectively."
(Black male mechanical engineering major)

Recommendation

Partner with local K-12 schools to increase student exposure to and interest in STEM-related content, and to improve counselor/staff awareness of needed pre- college STEM coursework

NOTE: *This study is part of a larger, longitudinal study titled, Investigating the Critical Junctures: Strategies that Broaden Minority Participation in STEM Fields, funded by the National Science Foundation; **The abbreviation "AA" means African American or Black and "LA" means Latino American or Hispanic

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