

Latino Men in STEM: The First Semester Experience

Charles Lu, Ph.D

*Director, Academic Advancement & Innovation
Longhorn Center for Academic Excellence
Division of Diversity & Community Engagement
The University of Texas at Austin*

STEM Enrollment Rates by Race/Ethnicity and Sex

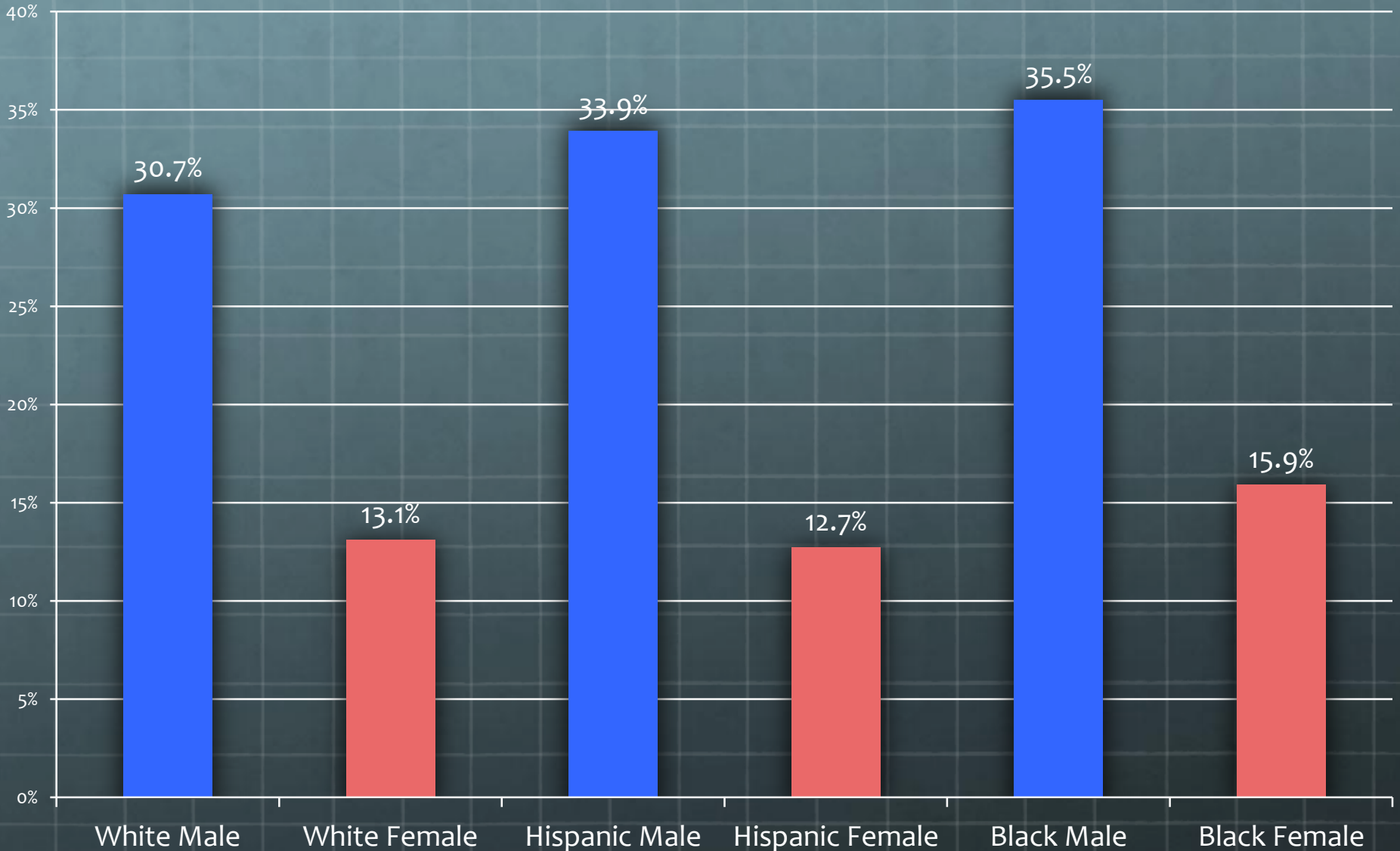


Figure 1. Adapted from Riegle-Crumb and King, 2010. STEM enrollment rates by race/ethnicity and sex.

2008 Male U.S. Population (Ages 15-24) and STEM B.S. Recipients for Selected Racial/Ethnic Groups

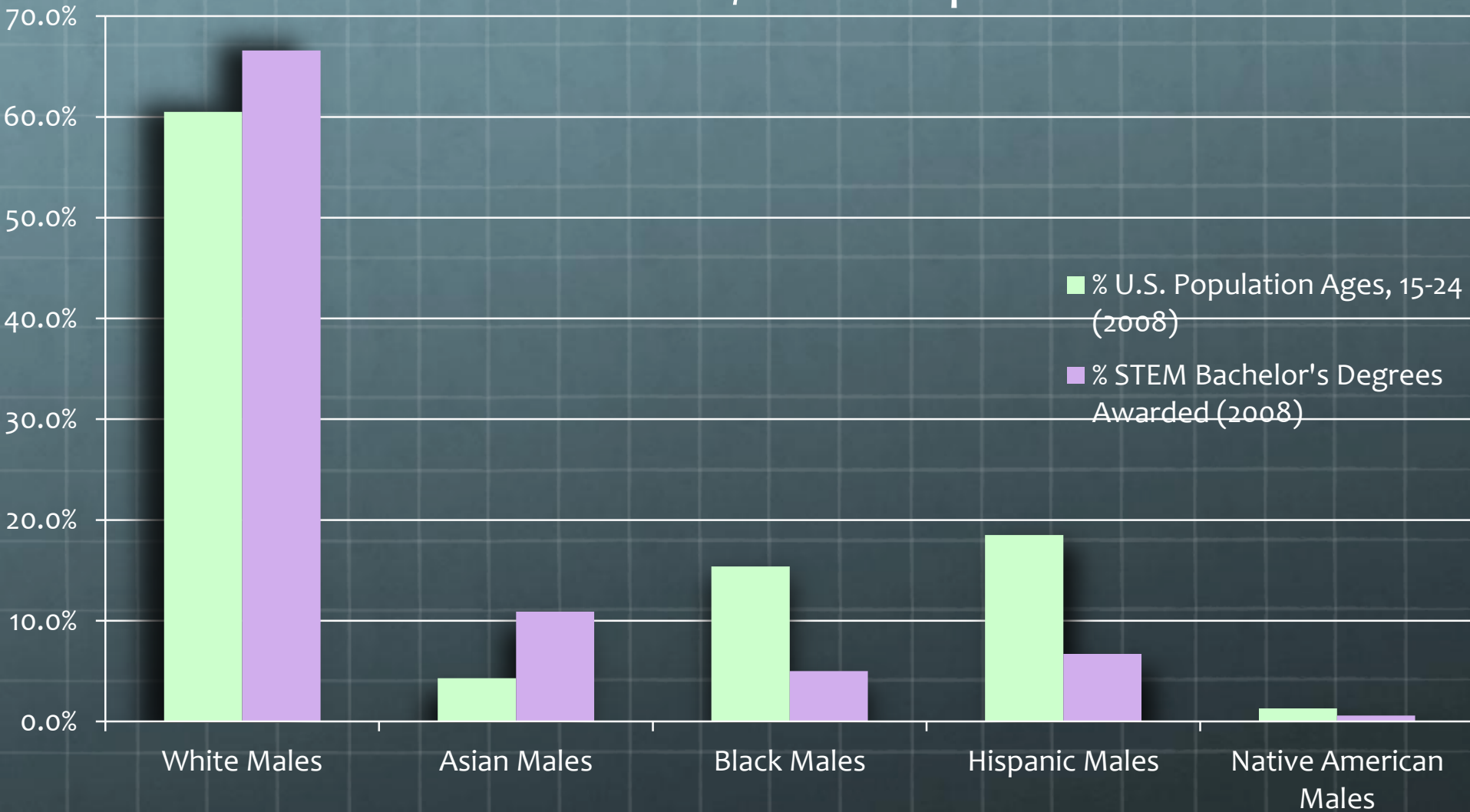





Figure 2. Adapted from Toldson and Esters, 2012. 2008 male U.S. population (ages 15-24) and STEM B.S. recipients for selected racial/ethnic groups. Source: U.S. Census 2009; NCES, 2009.

Research Questions

-  1) How do first-semester Latino males in the STEM disciplines at a PWI perceive and ascribe meaning to their science experiences?
-  2) How do first-semester Latino males' science identities develop in their first semester of college?
-  3) How do first-semester Latino males' science identities interact with other parts of their identity, if at all?

Key Finding #1:

Being and feeling a part of a scientific community was important and the exclusivity of the community was a draw.

CIRCLE OF TRUST



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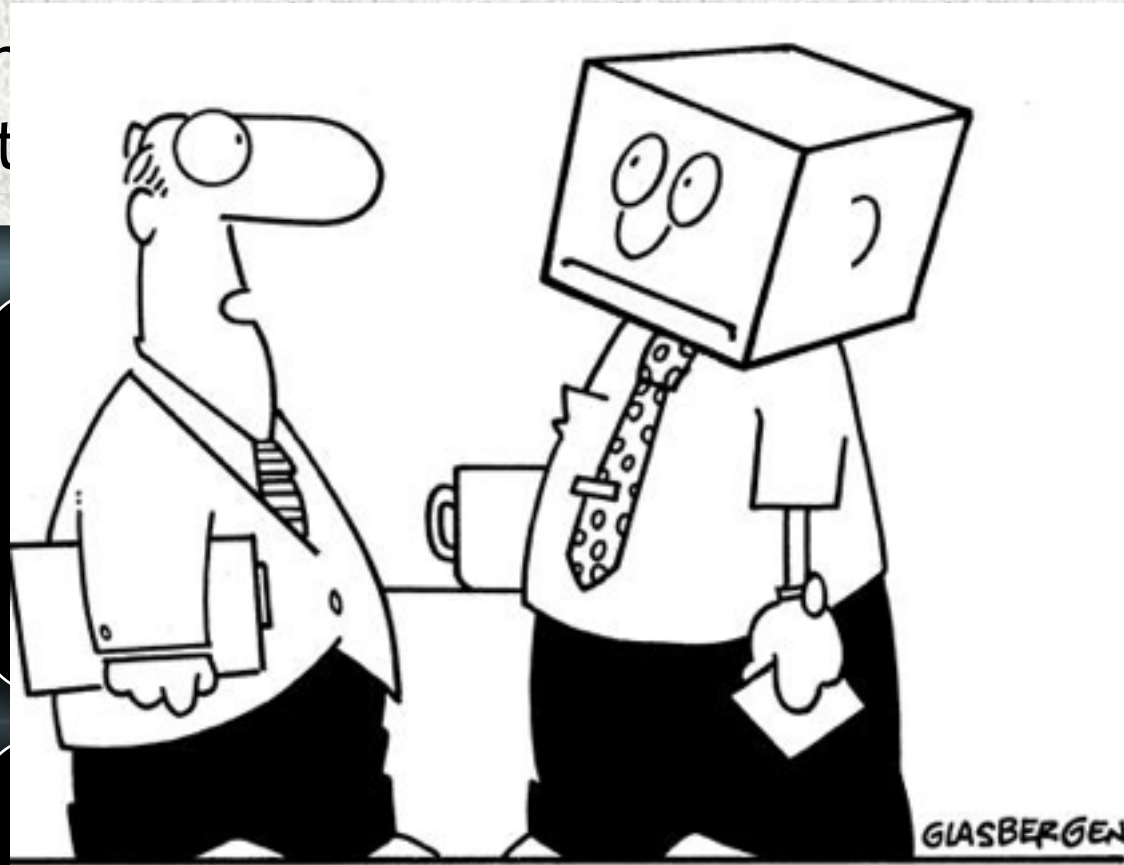
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- Vincent

Key Finding #2:

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**"Thinking outside of the box is difficult
for some people. Keep trying."**

- Gerry

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Key Finding #3:

Students had a tough time negotiating their many identities. Other parts of their identity complemented with, collided against, and/or were negotiated with their science identities.



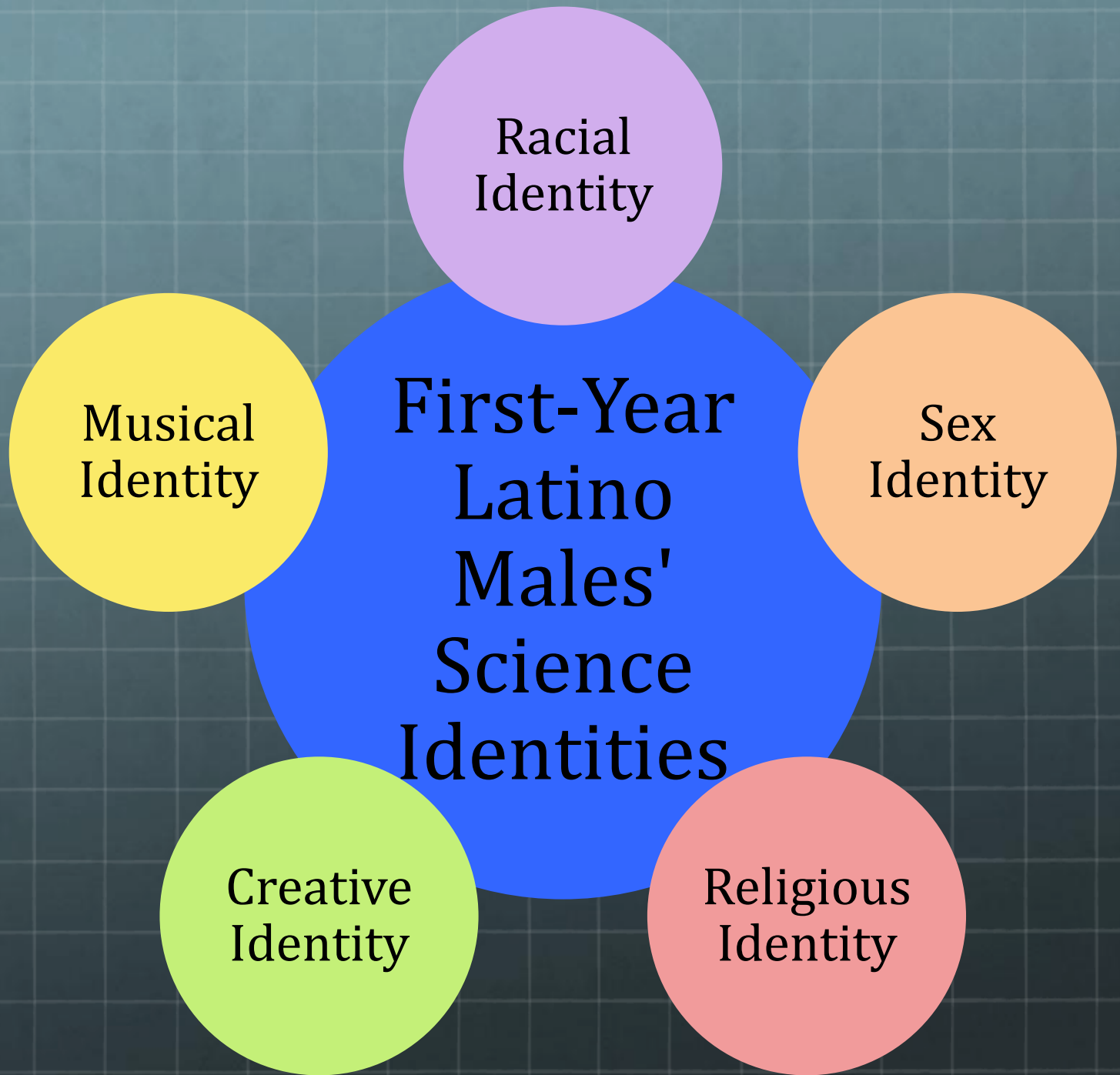
“[My science and math classes] are ... just a bunch of white girls who won’t look my way who are in sororities, and a bunch of white guys who definitely won’t even look my way because I’m this scrawny little Hispanic/African American looking kid. So I was kind of disappointed in that sense just I wasn’t expecting that anti-social kind of feel.”

-Allen



“So I was talking to my dad about it when I was younger and he said that he believes in evolution but he’s Catholic. But he says, ‘I’m a hypocrite but I keep my faith and science separate.’ And I do the same thing. So I keep my faith and science separate.”

- Mateo



Racial
Identity

Musical
Identity

First-Year
Latino
Males'
Science
Identities

Sex
Identity

Creative
Identity

Religious
Identity

Future Recommendations

Research

- Explore the second semester and second year experience (“sophomore slump”).
- Investigate the Latino male experience in STEM at a HSI, community college, other geographic areas

Practice

- Mandate all freshmen majoring in STEM to be a part of scientific communities and implement friendly competition between communities using incentives
- Have students go through research and industry rotations within their first two years so they can figure out what they are really interested in
- Encourage all first-semester freshmen to take a course in critical thinking with an emphasis on STEM

Policy

- Increase rigor in curriculum by creating multiple tiers of knowledge where standards in science and math are the expectation, not the bar.
- Increase research in areas of creativity and innovation; provide additional funding to art, music, and other areas that allow room for creativity as they have a link to STEM