

A CONVERSATION ABOUT THE RACIAL DIVERSITY OF GEOSCIENCE STUDENTS

- Race and ethnicity data
- Outward facing approaches
- Inward facing approaches

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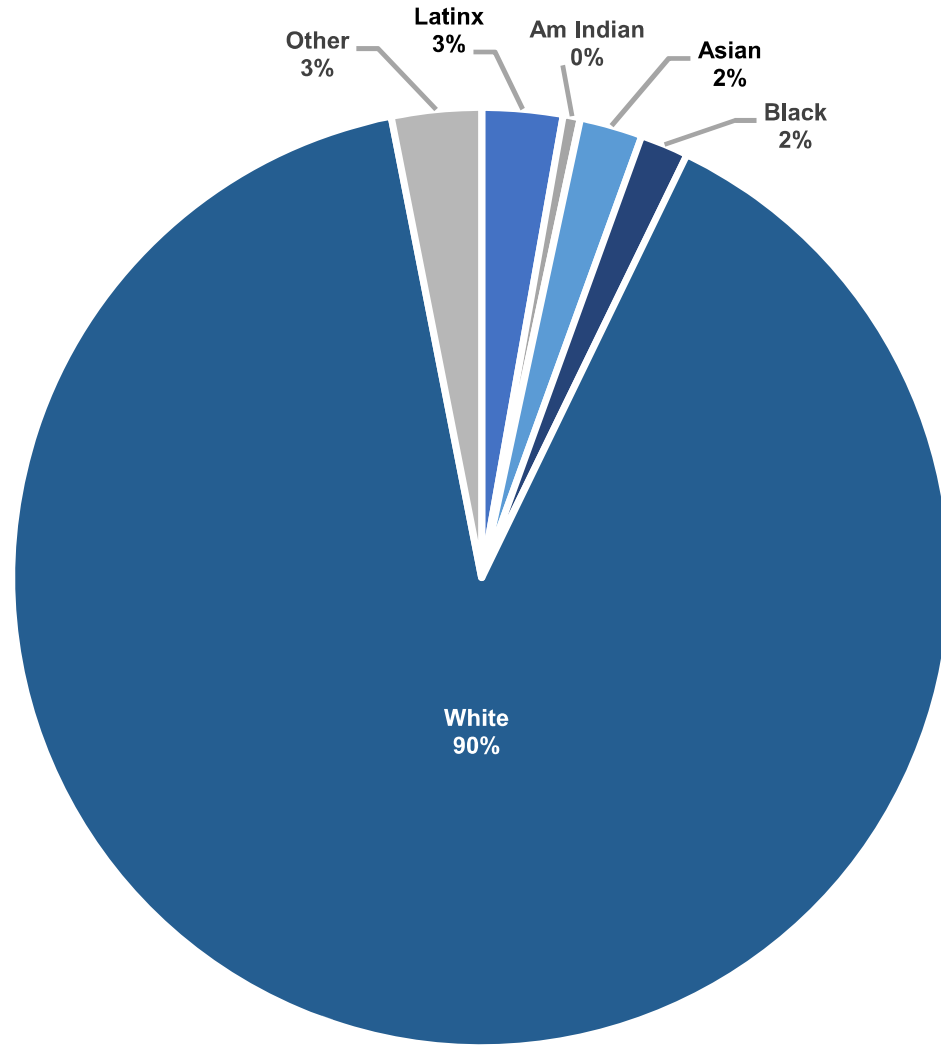
Using data to reveal the issues and opportunities

What are the race and ethnicity trends for undergraduates receiving geoscience degrees?

Beane, R., Baer, E., Lockwood, R., Macdonald, R.H.,
McDaris, J., Morris, V., Villalobos, J., & White, L.,
Communications Earth and Environment, 2021

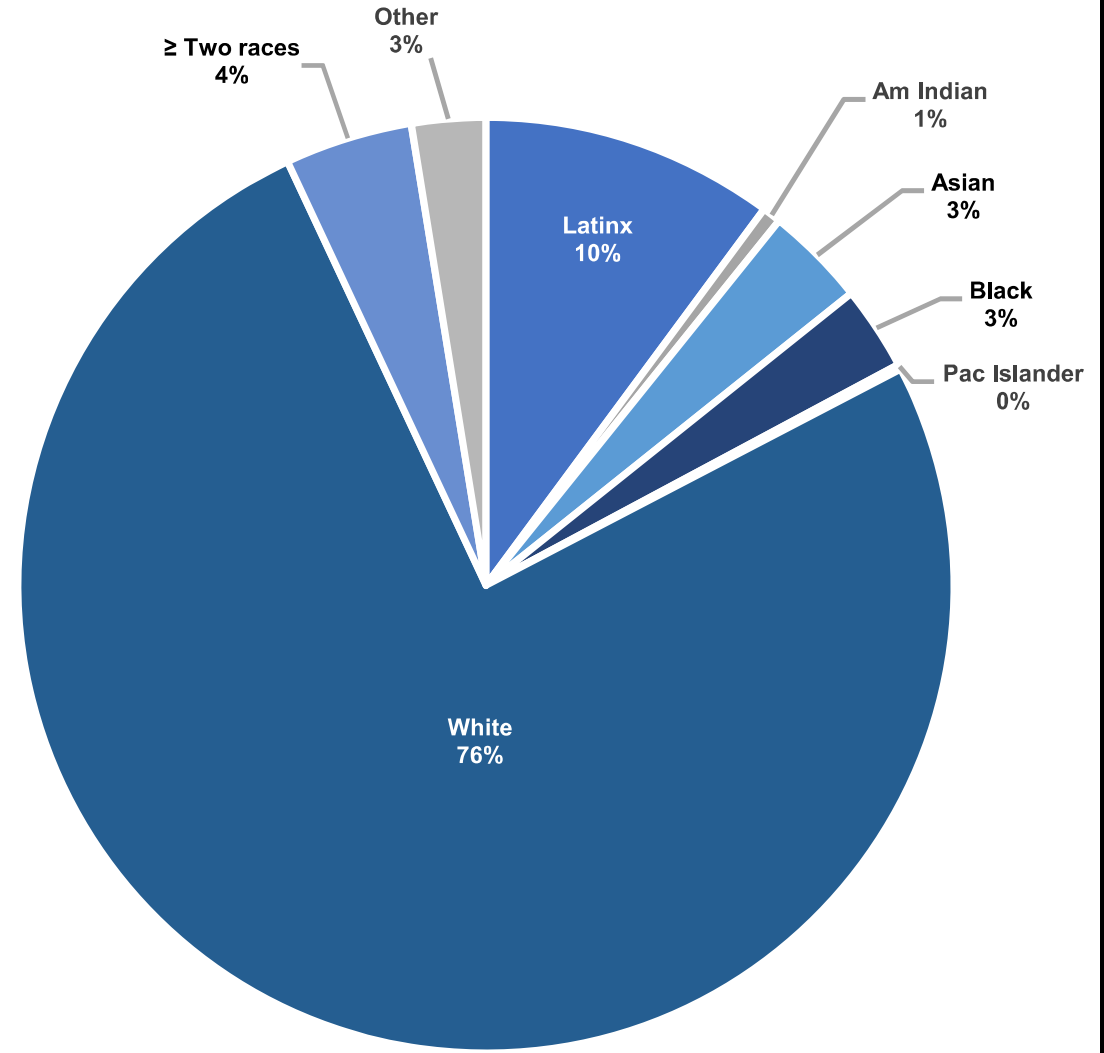
Undergraduate geoscience degree data

a



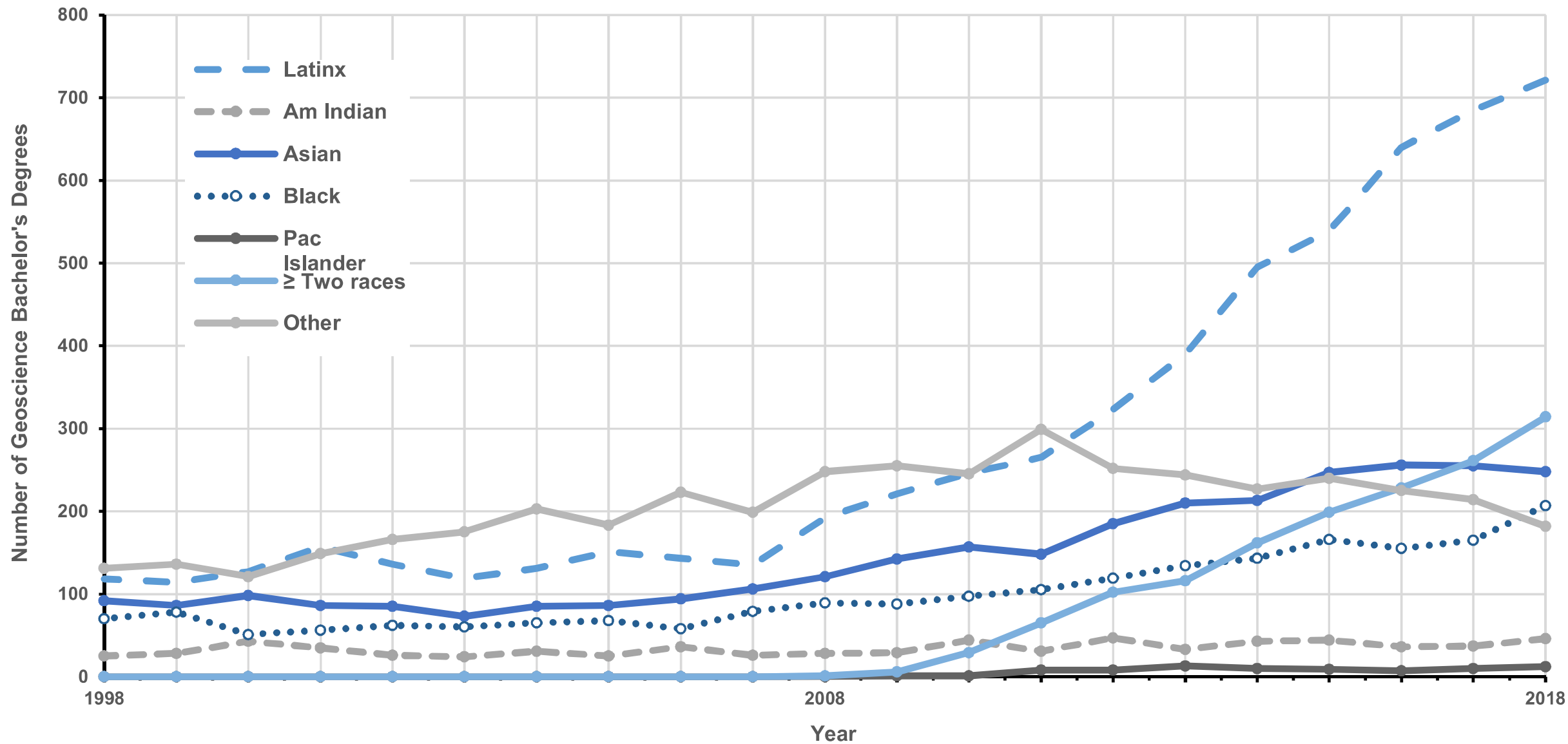
1998
Bachelor's Degrees
n = 4239

b



2018
Bachelor's Degrees
n = 7113

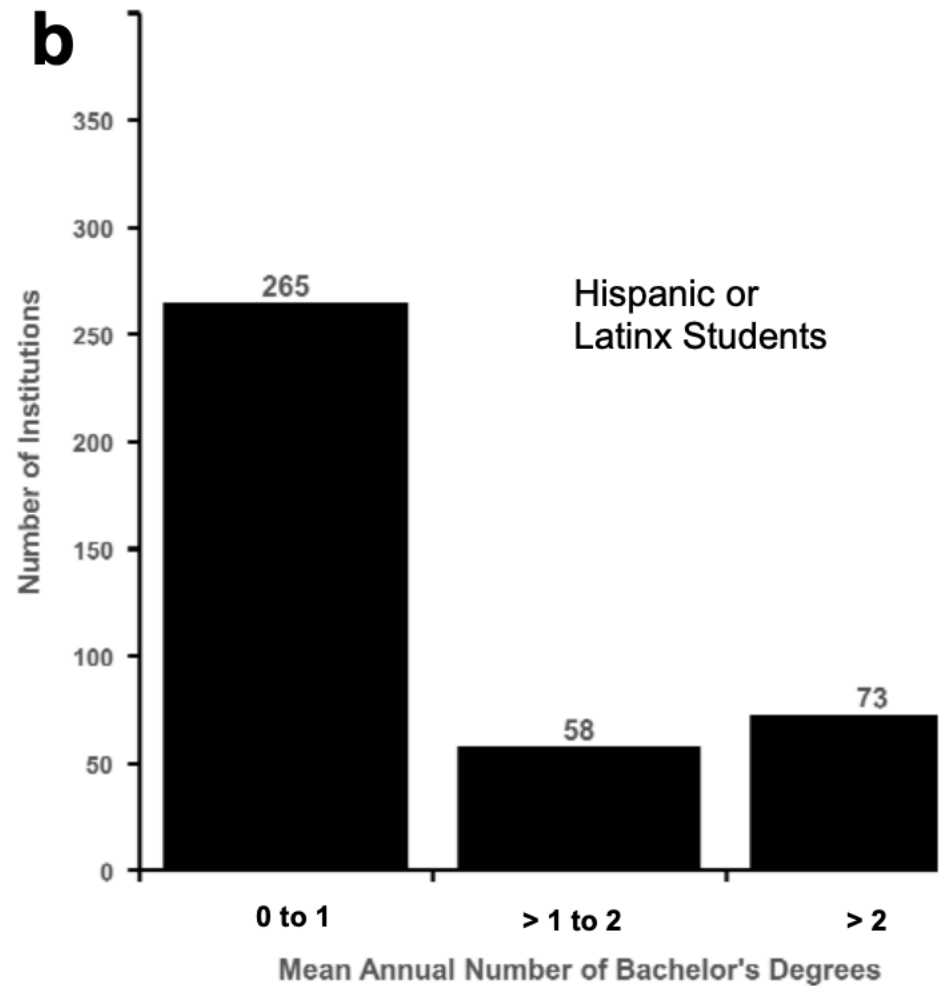
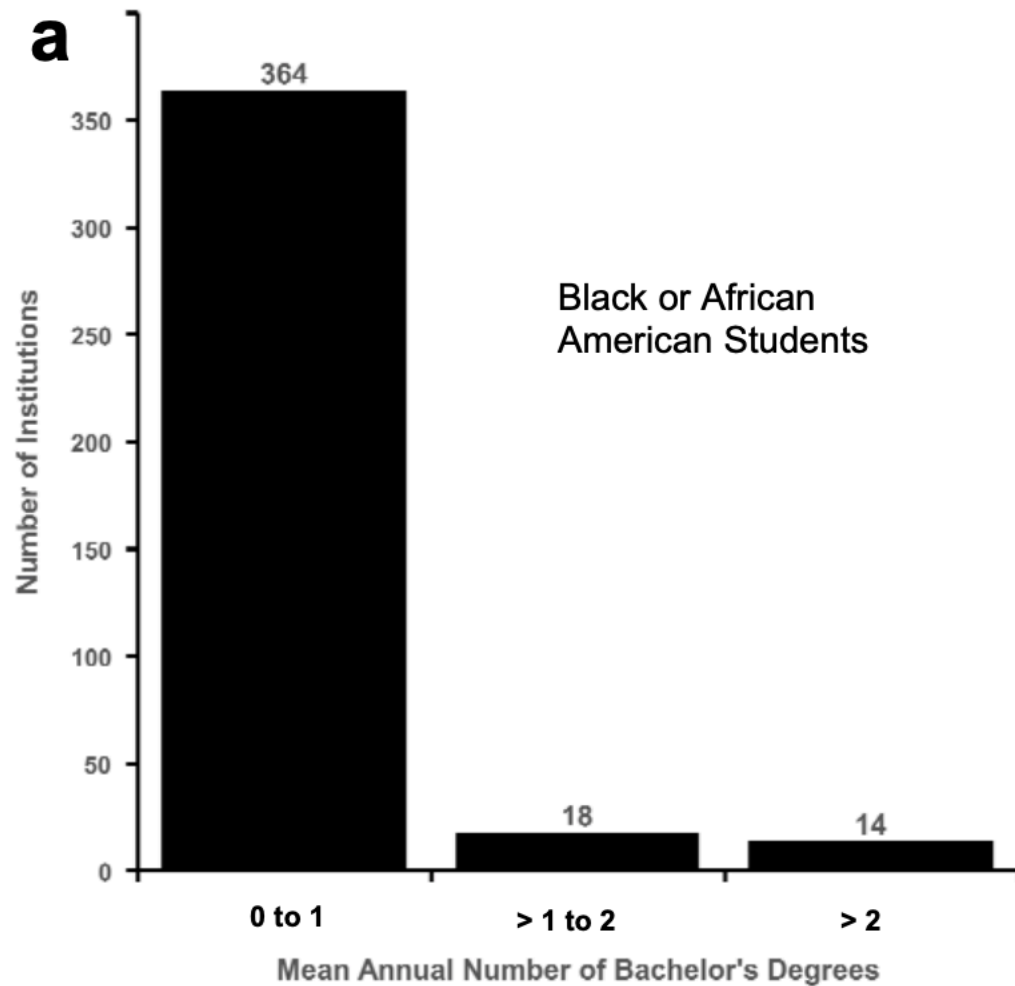
Increase from 7% (1998) to 21% (2018) based on Integrated Postsecondary Education Data System (IPEDS).



Geoscience bachelor's degrees by race and ethnicity based on IPEDS data. <https://nces.ed.gov/ipeds/>

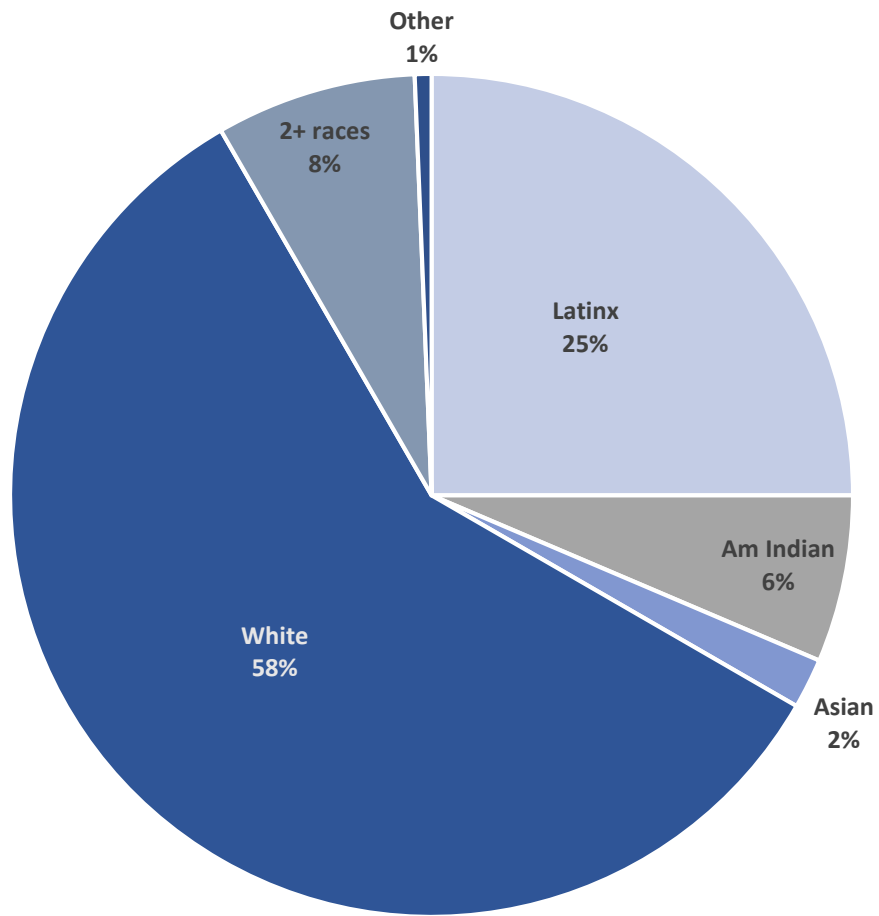
Over the past 20 years, the proportion of US geoscience undergraduate degree recipients from marginalized racial groups has increased, more than for graduate degrees, which is encouraging.

However, much of this progress currently is concentrated at relatively few universities.



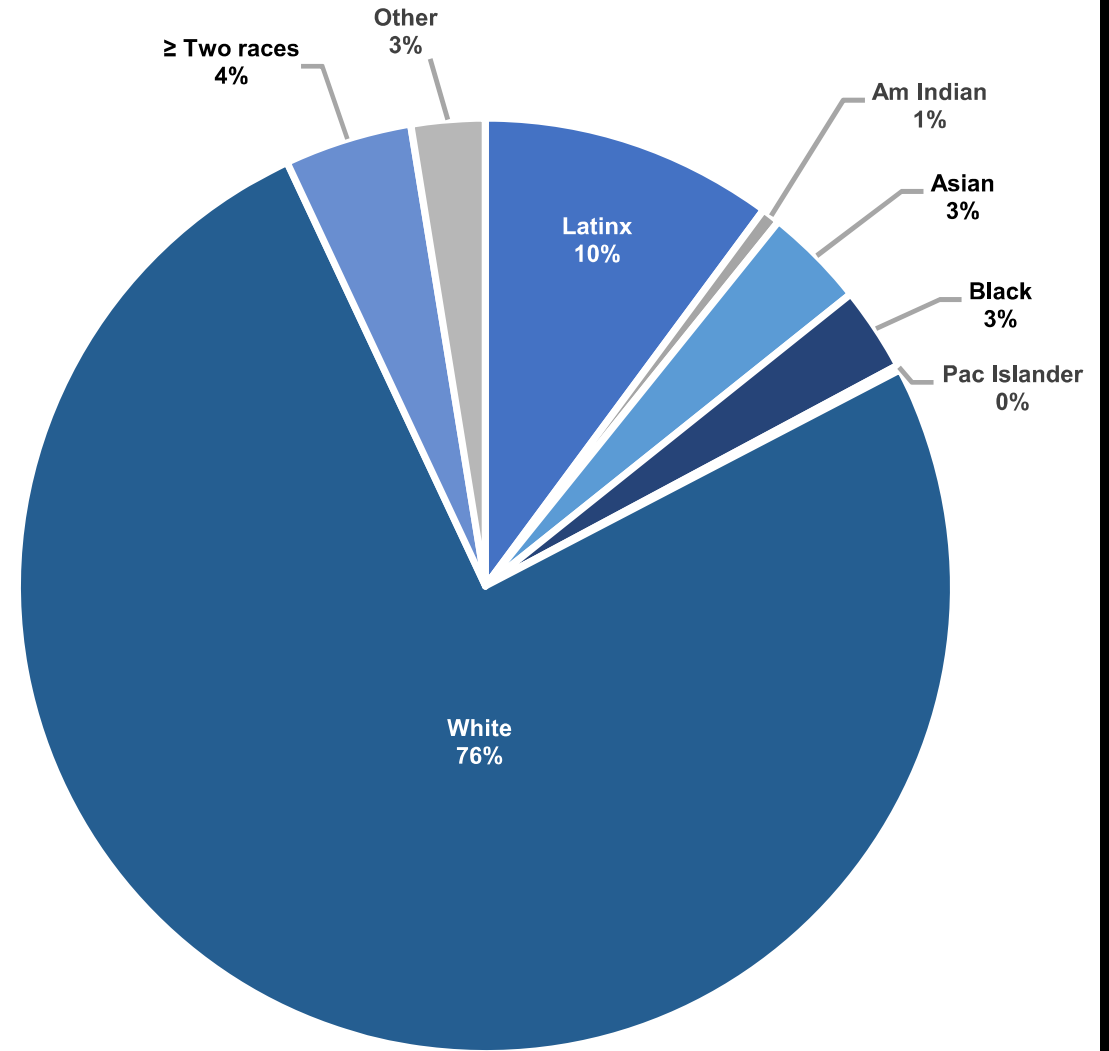
Number of institutions that averaged 0 to 1, >1 to 2, or > 2 geoscience bachelor's degrees per year to Black or African American students (**a**) and Hispanic or Latinx students (**b**) from 2014-2018.

Outward facing approaches: Partnerships with community colleges



2019 Associates Degrees n=156

b

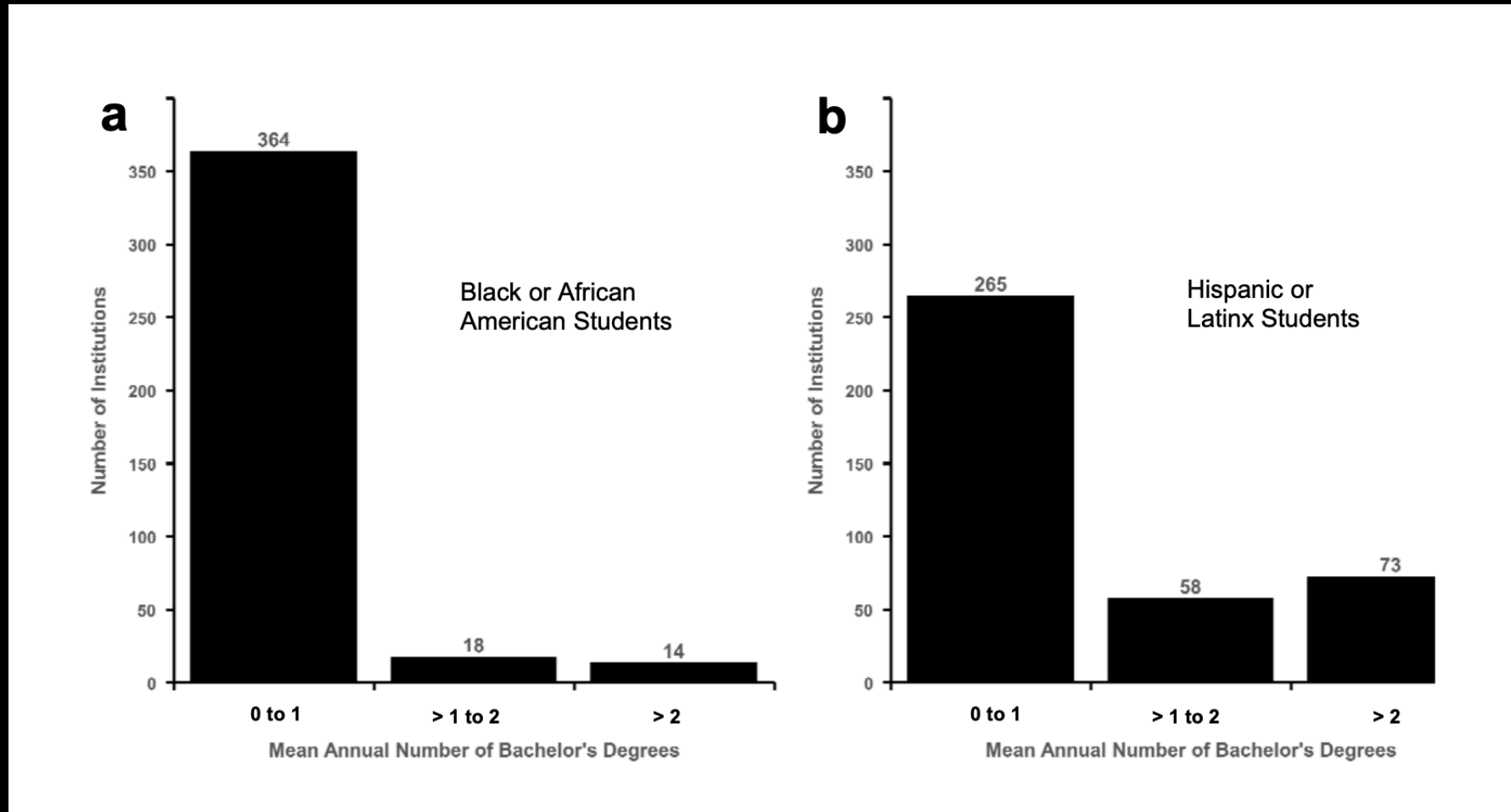


2018
Bachelor's Degrees
n = 7113

Outward facing approaches:

- **Sharing examples**
- **What has worked at your institution?** *(type in chat)*
- **What have been the successes or challenges?** *(type in chat)*

Recall racialized students in most geoscience department are isolated.
What approaches might we take?



Inward facing approaches: Teaching recommendations based on study of 2016 Geoscience Faculty Survey

- Use active learning approaches
- Incorporate socio-scientific issues
- Increase students' awareness of the learning process
- Provide info on geoscience careers to intro & major students
- Include more photos & stories of geoscientists, and more from groups historically marginalized
- Share teaching ideas & strategies with colleagues

Beane, R., McNeal, K. & Macdonald, R. H.,
Journal of Geoscience Education, 2019.

Inward facing approaches: What points of leverage might you have as chair?

Use data to reveal issues and opportunities

Address department culture and build relationships

Evaluate policies and procedures with lens of equity

As department chair or program head what will you do to
transform department culture,
build relationships, and
change policies & procedures?

