Earth 194 DE: Readings in Geoscience DEI

Week Four: Geoscience Programs at Minority Serving Institutions

What I need to bring:

- Ipad with papers annotated
- These notes printed

Agenda:

- ☐ Attendance during introductions
- Check in about syllabus / progress /quizes What is working? What is not working?
- Might be a good time to start thinking about what paper you want to present 8 enrolled students + 1 auditor 10 minutes each maybe 5 minutes of presentation + 5 minutes of questions? come to class on week 8 or 9 with a paper in mind and a back up in case people choose the same paper

Serial Testimony

1 of 3 questions in 1 round

- 1. In your opinion, what was the biggest strength and biggest weakness for each of the two programs (NOAA's ISETCSC atmospheric science and NSF's OEDG geophysics) evaluated in Bililign 2019? Did they successfully build capacity in the geosciences?
- 2. In the introduction, Bililign 2019 argues that the <u>best</u> way to increase diversity in geosciences is to build capacity in the geosciences at Minority Serving Institutions (MSIs), and specifically Historically Black Colleges and Universities (HBCUs). Do you agree that these are the best places for interventions? Why or why not?
 - a. I think I agree that for STEM in general, Minority Serving Institutions are probably the best or one of the best places for interventions most of the stats the author presented were about all of STEM, and I thought it was so telling and remarkable that 30% of african americans with doctorates start at HBCUs! But for geoscience I disagree. We had two programs evaluated here one of them had 2.5 million dollars, which is a crazy amount of money, and still struggled with long term outcomes and longevity! I think once geosciences are already in place to a greater extent these programs would have a larger impact.
- What are some barriers to the geosciences for aspiring Black scientists? Feel free to draw from barriers discussed in the paper or from your own reflections/experiences.

Potential Group Activity:

- Make a list of what each program did on the whiteboard

Discussion questions:

- Is UCSB a minority serving institution? Whats the difference between MSI, HSI, and HBCUs? Do these institutions do research?
 - In 2015, UCSB was designated a Hispanic-Serving Institution by the Hispanic Association of Colleges and Universities, and it was the first member of the prestigious Association of American Universities to become an HSI. HSIs are defined as colleges or universities in which Hispanic enrollment comprises a minimum of 25 percent of the total undergraduate enrollment. It is also an Asian American and Native American Pacific Islander-Serving Institution (AANAPISI), indicating an enrollment of undergraduate students that is at least 10 percent Asian American or Native American Pacific Islander. With these designations, UCSB faculty, staff and students are eligible to apply for Minority-Serving Institution (MSI) grants, internships, and partnerships.
 - Tribal Colleges and Universities (TCUs) are also MSIs
 - UC Riverside, Merced and Santa Cruz are also HSI
 - 102 HBCUs across the US HBCUs were originally founded (all before 1964 - before the Civil Rights Act) to serve african americans but over time have changed - so in 2020 about 25% of students are non-black - in the 1960s was more like 15%
 - Congress <u>defines</u> a historically black college or university (HBCU) as a school "established prior to 1964, whose principal mission was, and is, the education of black Americans.
- How can we increase the capacity for geoscience at HBCUs when there is little formal infrastructure for geoscience? How do we implement institutional changes at the strategic level? big contrast from a couple weeks ago when we were just showing pictures of scientists in a class
 - What sustainable interventions can be done?
- What was the role of partnerships in this paper for the two programs? What partnerships could we engage with at UCSB?
- How did the interventions in these programs compare to the pillars in Blake paper? (1 professional development, 2 summer geoscience research 3-virtually exploring the geosciences 4- geoscience exposure events 5 geoscience community outreach programs)
- What were the goals of each program? (maybe part of group activity)
- How was "success" defined for each of these programs?