

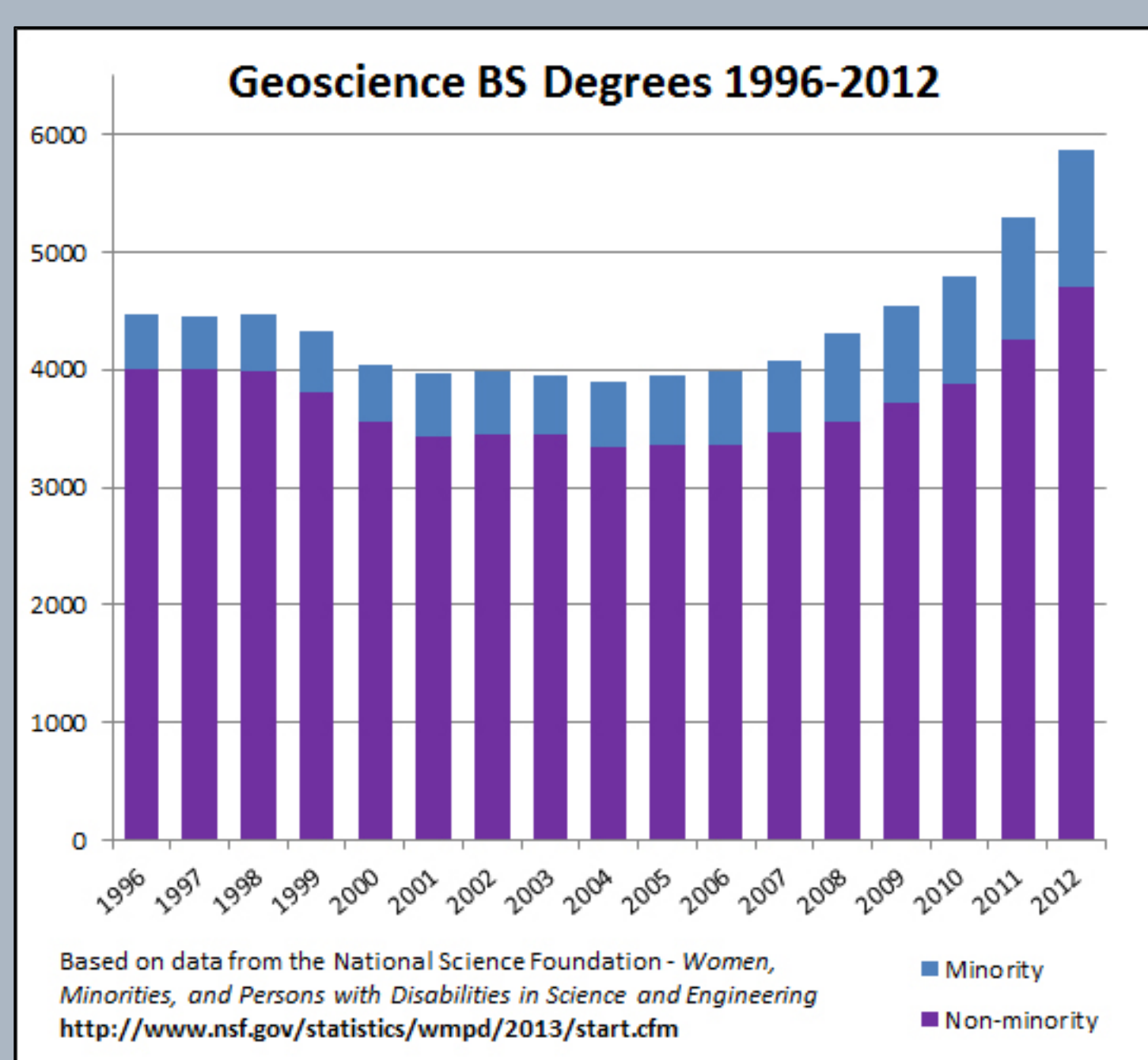


Understanding the Prevalence of Geo-Like Degree Programs at Minority Serving Institutions

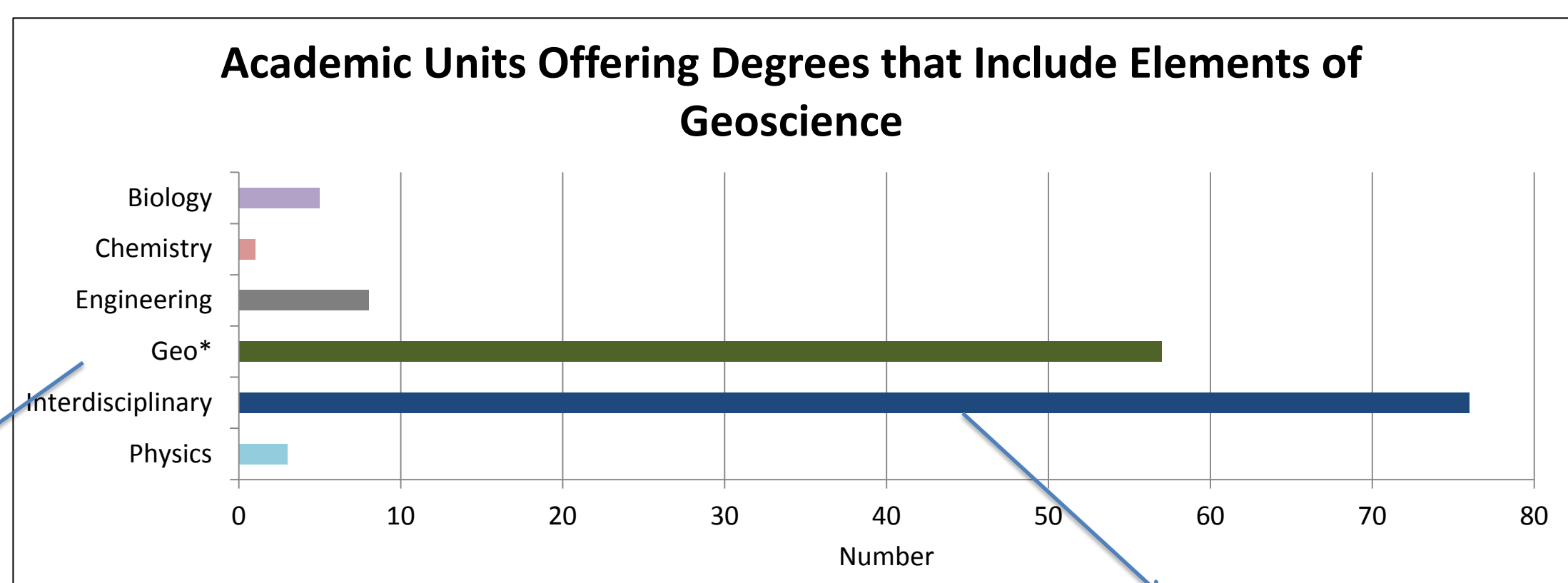
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Over the decade 2002-12, the percentage of minority students graduating with geoscience degrees has increased dramatically. For example, in 2012, of the nearly 6,000 geoscience BS degrees awarded, almost 20% went to minority students and this was up from just over 13% in 2002. But minorities make up nearly a third of the US population, so we still have work to do.

Minority Serving Institutions (MSIs) play an important role in increasing the diversity of geoscience graduates where there are appropriate degree programs or pathways to programs. To better understand opportunities at these institutions, the InTeGrate project collected information on degree programs at MSIs.



Finding 1: Of the 496 officially recognized Minority Serving Institutions in the summer of 2013, 148 (30%) offered degrees that included elements of Geoscience.

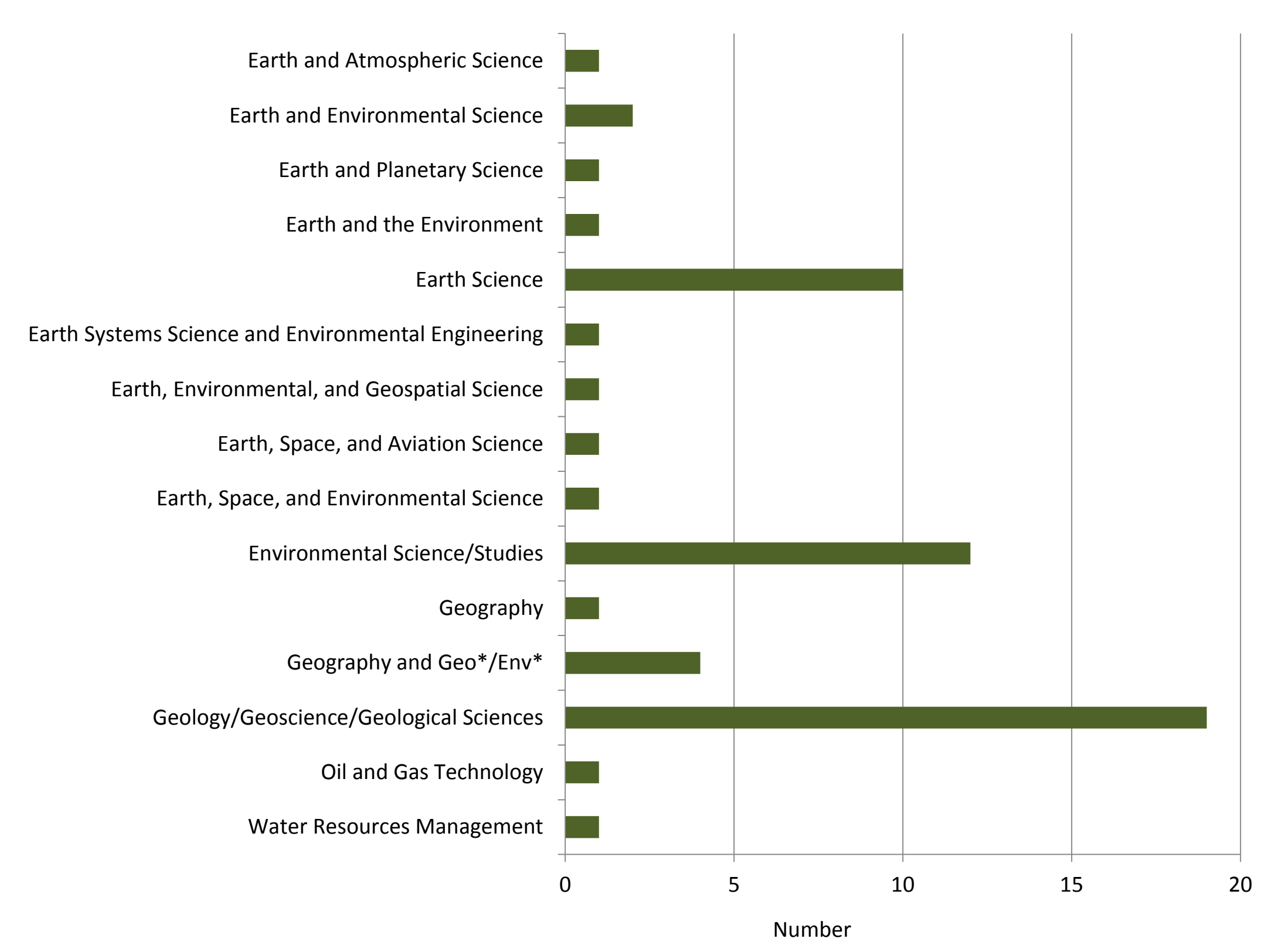


A summer 2013 survey of websites for Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs) and Tribal Colleges confirmed that, while stand-alone Geology, Geoscience, or Environmental Science departments are present, there are a larger number of degree programs that include elements of geoscience or related disciplines offered in interdisciplinary departments or cognate science departments.

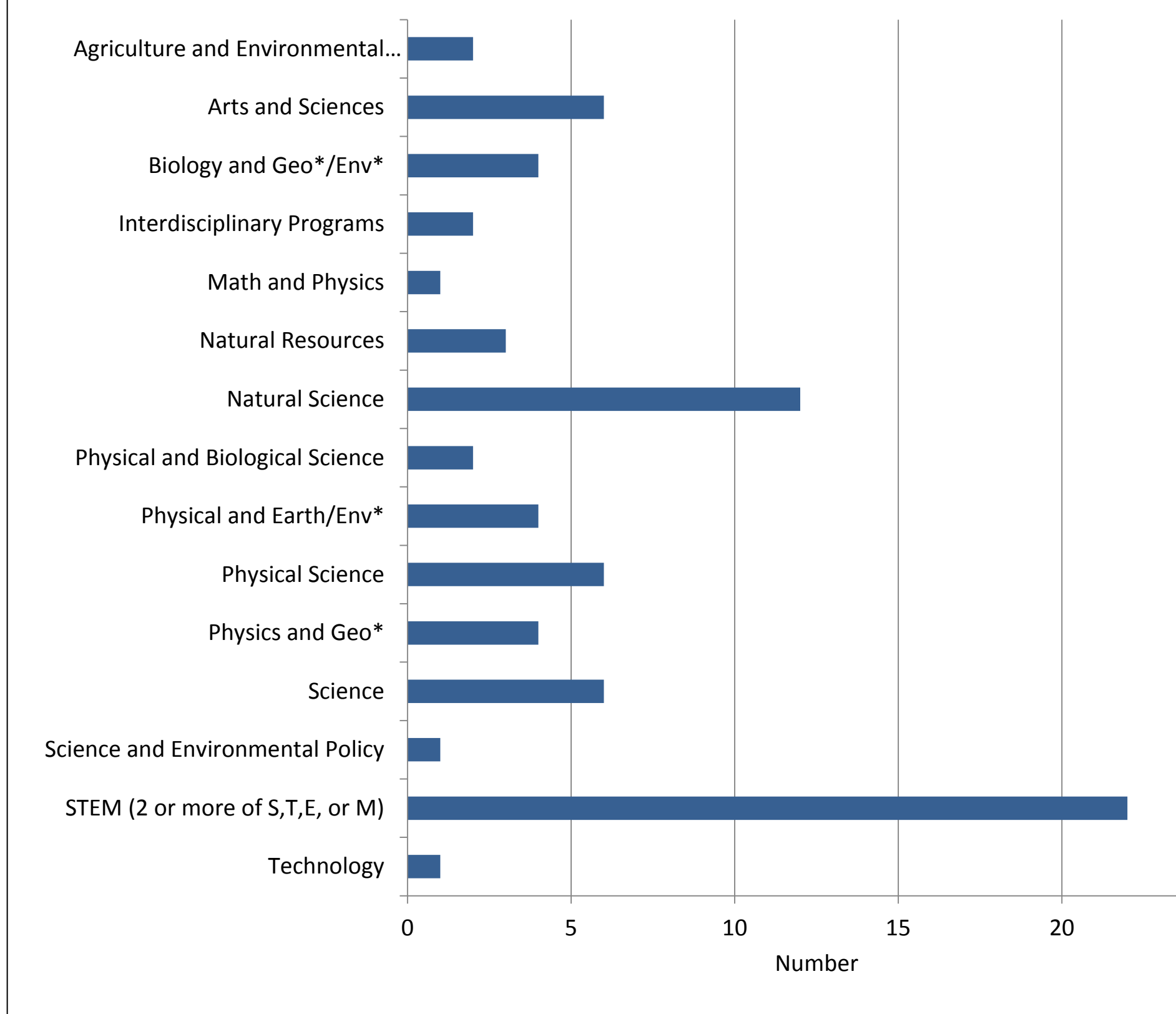
Finding 2: There are more “geo-like” degree programs at MSIs than we expected there would be.

Finding 3: The name of the academic unit is not a good proxy for the presence of a degree program with elements of geoscience.

Geo* Academic Units

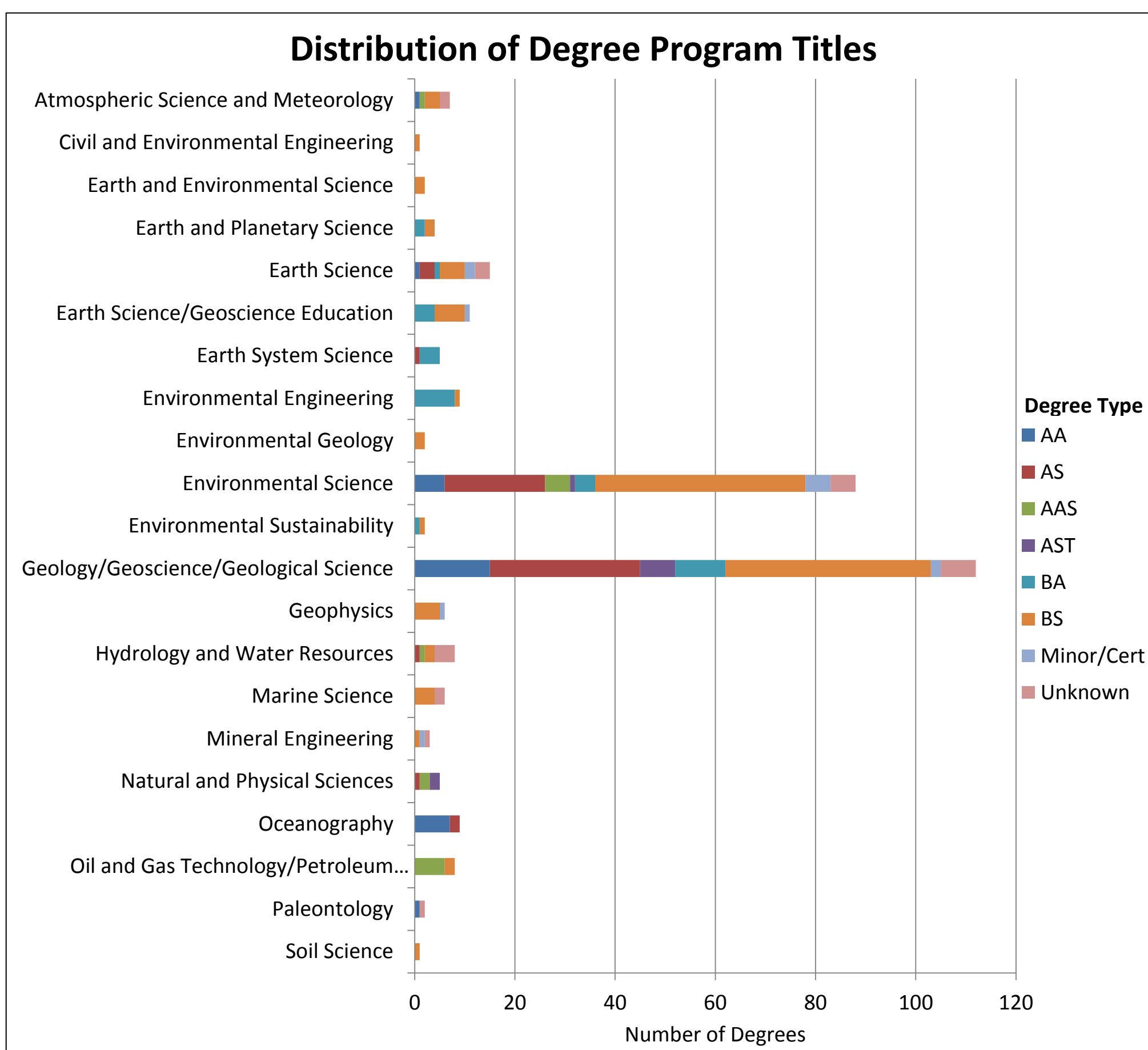


Interdisciplinary Academic Units Titles

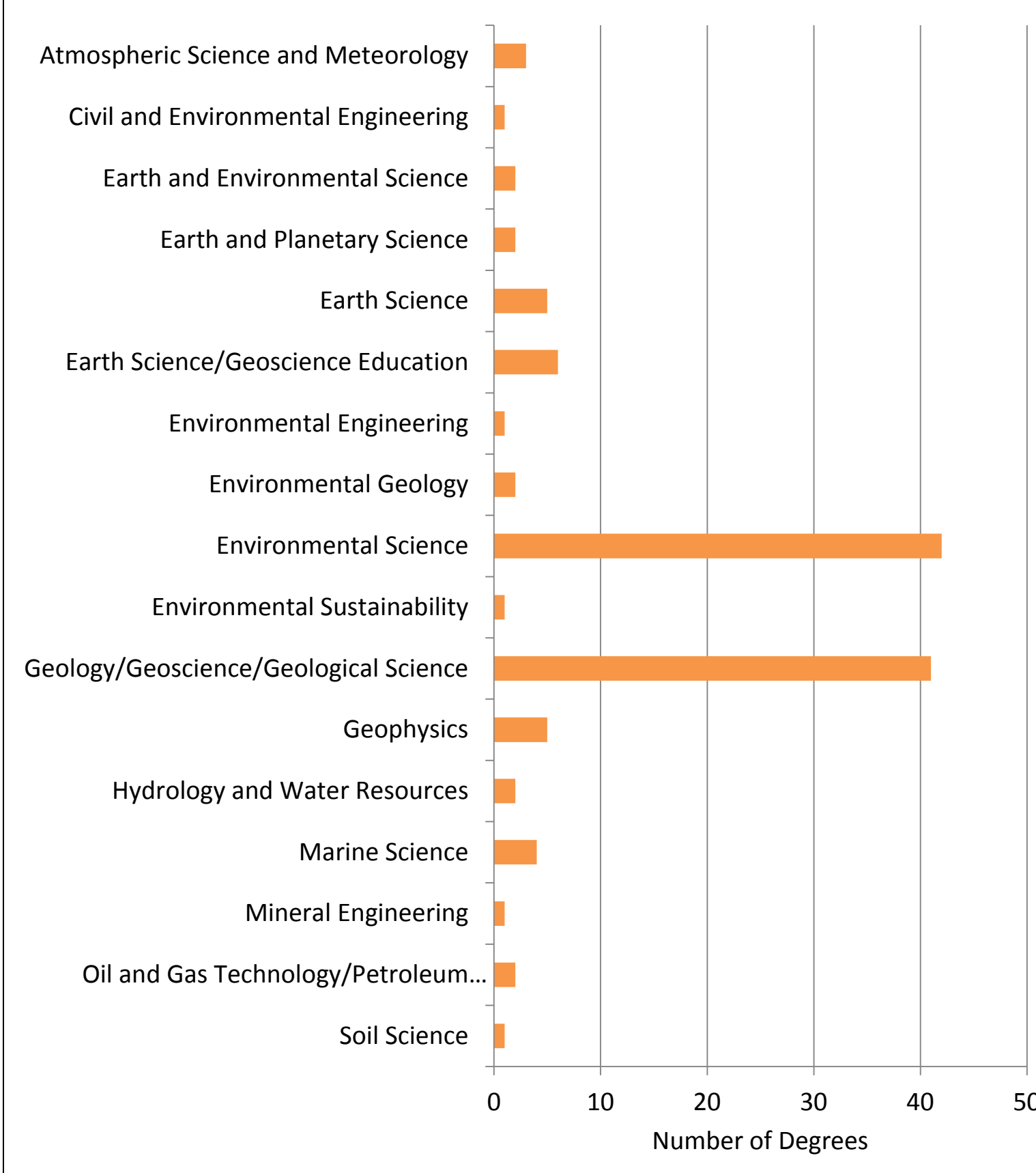


NOTE: Geo* and Env* is a shorthand way of talking about Academic Units whose names are more traditionally associated with degrees which include significant amounts of geoscience content.

Finding 4: Approximately one-third of HSIs and Tribal Colleges and one-fifth of HBCUs offer at least one degree that includes elements of geoscience. The most common degree programs were Geology and Environmental Science, but 21 other types of programs were also categorized.



BS Degrees by Title



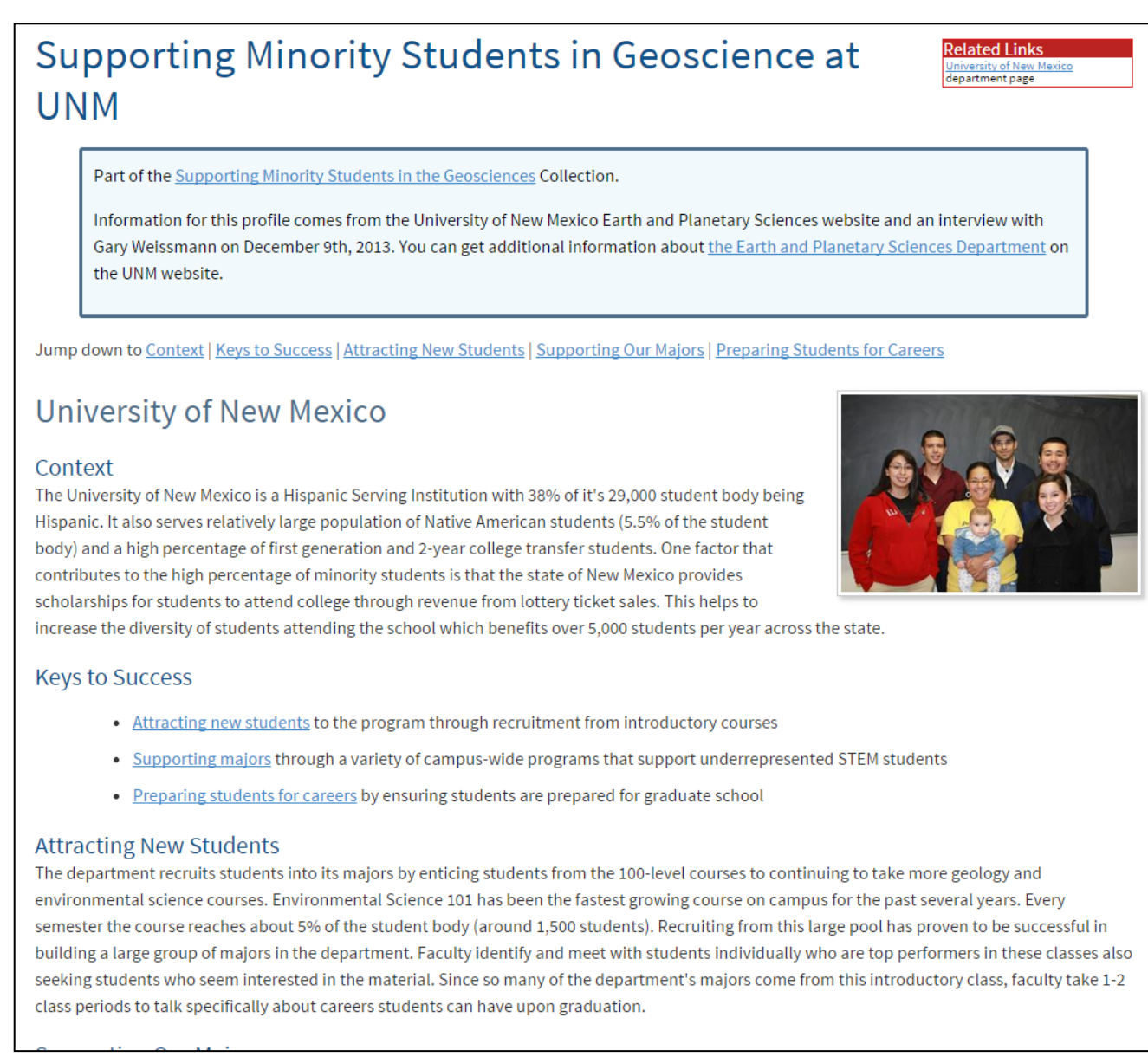
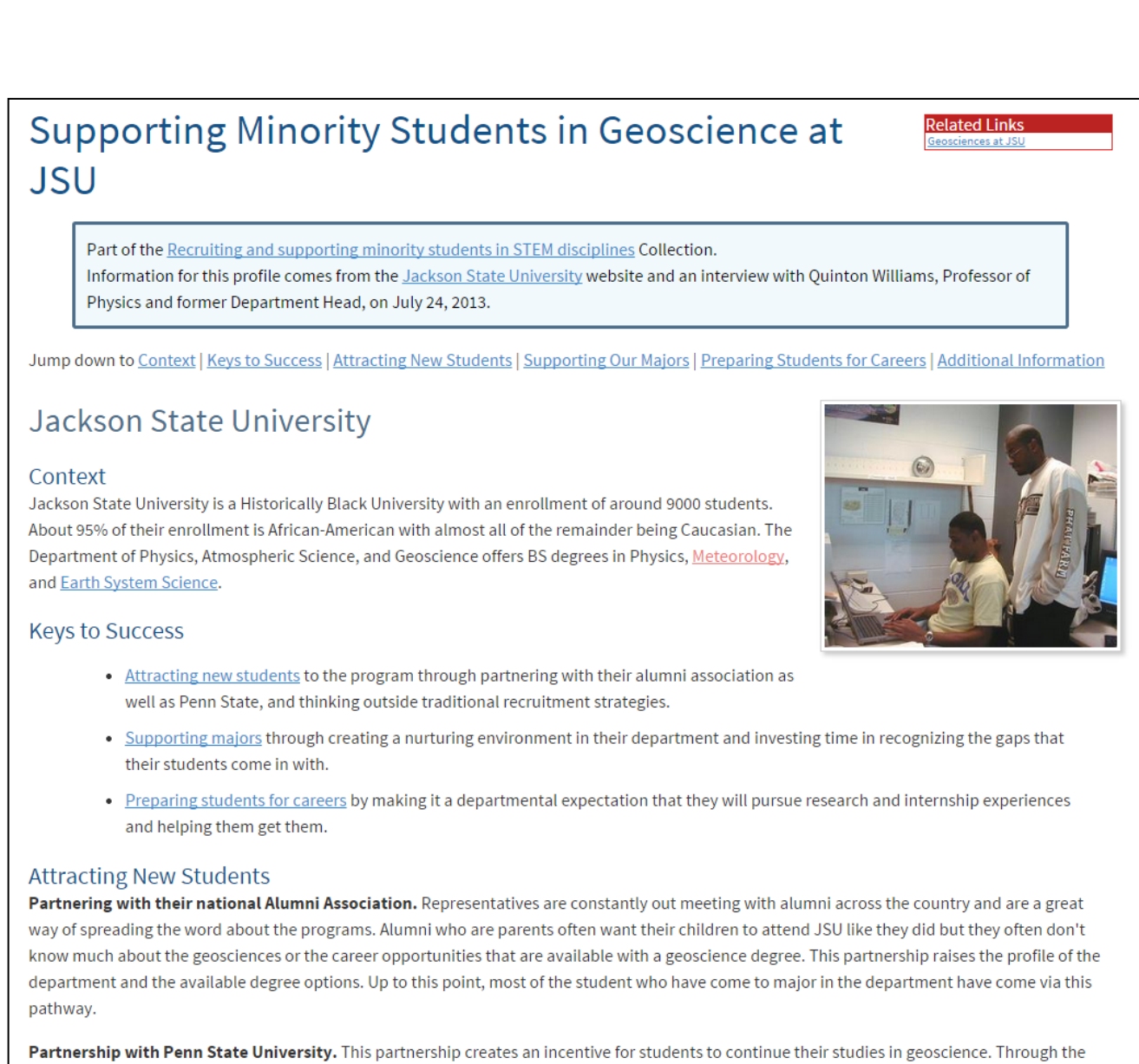
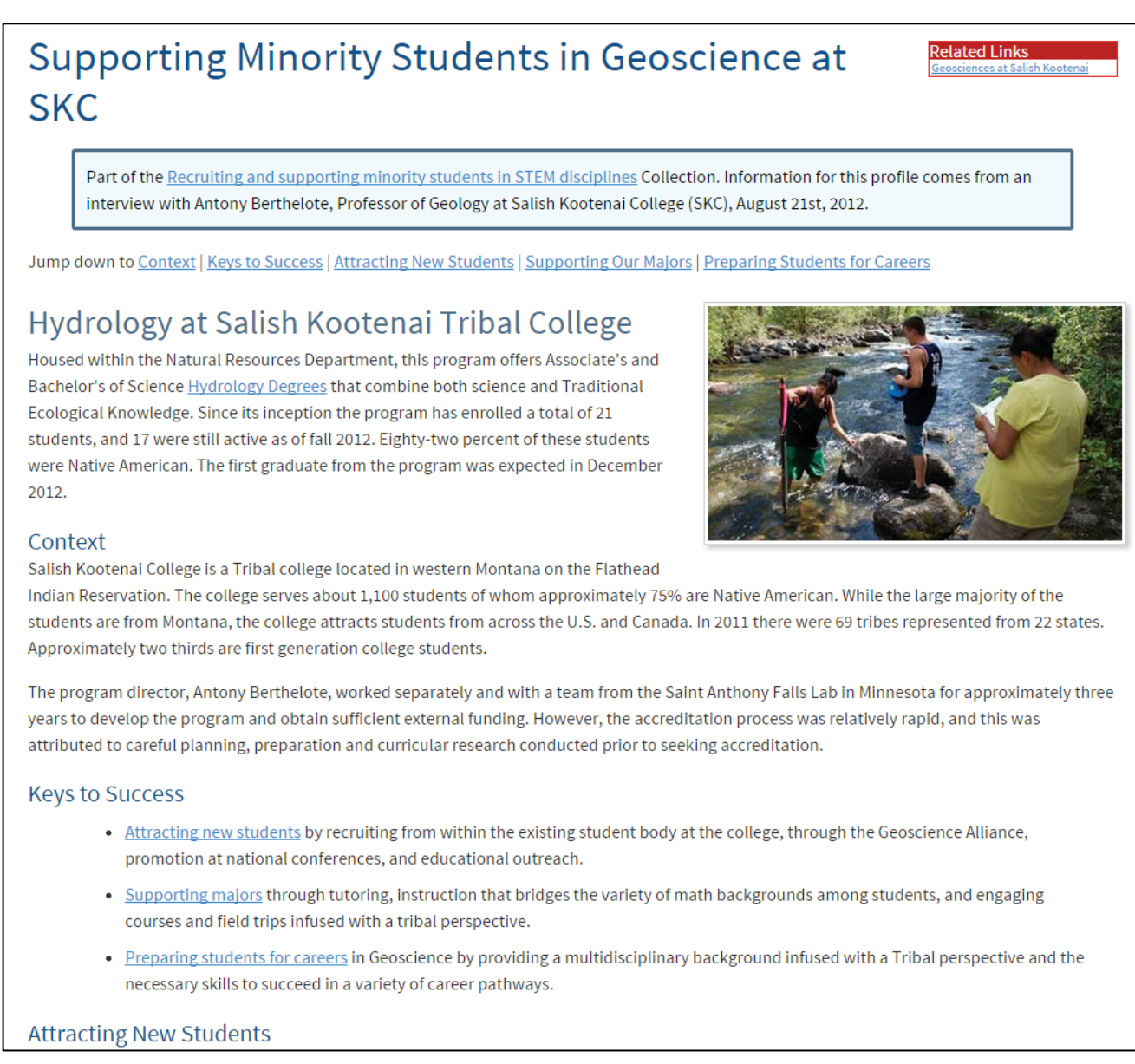
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<http://serc.carleton.edu/integrate/programs/diversity/>



Program Profiles

To better understand the nature of these programs, InTeGrate conducted interviews with schools in each group, focusing on their strategies for attracting, supporting, and preparing minority students for careers in the geosciences. These interviews were used to create profiles of the institutions for the InTeGrate website. In addition, participants at a 2014 InTeGrate workshop also completed program profiles for their institutions. The final collection encompasses 16 profiles from MSIs and 17 from schools that are not MSIs.



Preliminary analysis of the profiles yields a number of common themes as well as differences in how MSIs and non-MSIs attract, support, and prepare minority students.

Attracting Minority Students:

- Both kinds of institutions do **Outreach to High School** teachers and students but MSI report doing so at almost twice the rate.
- MSIs report a larger emphasis on **Career Options** available in the geosciences than non-MSIs.
- Both types of institution use **Introductory Courses** to attract new majors.

Supporting Majors:

- Funding and Academic Support** are reported more often by MSIs but are strong for both categories.
- Sense of community and Mentoring and Advising** are reported more often by non-MSIs but are strong for both categories.

Preparing Students for Careers/Higher Degrees:

Research Opportunities are use by both kinds of institution, but MSIs report more extensive use than non-MSIs. In addition:

- MSIs report an emphasis on **Internships and Real-world Experiences**, and **Courses Teaching Specific Skills**.
- Non-MSIs report an emphasis on **Networking and Recruitment Events**, and **Comprehensive Curricula**.