



## Diversifying Graduate Student Enrollment: What We Know and What Weâre Learning

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An invitation to be a part of a search committee for a university senior administrator had a profound impact on my view of academia and whether there would ever be a place for me and people who look like me in senior administrative roles. The Search Committee pored over many hundred-page vitae detailing outstanding scholarly achievements, leadership roles and accomplishments within their areas of expertise. From those stellar records, the Committee selected a handful of candidates to interview, followed by an offer extension.

Despite the attempt to include a diverse pool of candidates, few from underserved groups made it to the Committee for review. Many were deemed as not meeting minimum requirements for the position. Of those qualified, Committee members identified weaknesses that caused hesitancy in adding them to the pool of possible interviewees. Similar weaknesses were found in candidates who

were not from underserved groups, but were overlooked based on what seemed to me, the perceived potential of the candidate. In the final selection, a few candidates from underserved groups received invitations for an interview, only to have those same weaknesses be cited as to why they were not included for further consideration.Â

This experience led me on a soul-searching journey of not just where I wanted to be in my academic career, but more importantly who I wanted to be and what my career legacy would be. These were tough questions that led me to apply for the AAAS Science & Technology Policy Fellowship (STPF).Â I wrote in my personal statement,

**âMy hope is that this fellowship will enable me to use the last stretch of my career to move the needle in achieving true graduate education reform and to also engage all of our faculty to embrace changes needed to see a more diverse, equitable and inclusive faculty and graduate student population!â**

The dearth of diverse candidates for a senior administration position led me on this journey. I was determined to know why after so many years we had made so little progress in achieving a more diverse graduate student population â who would ultimately be the people considered for these senior administration positions. Before we can have candidate pools that are more equitably representative, we need more diverse graduate student enrollment.Â

The Council of Graduate Schools (CGS) Enrollment and Degrees reports between 2020 and 2021, first-time graduate enrollment among underserved groups *decreased* by 4.5 percent among American Indian/Alaska Native students, 4.1 percent among Black/African American students, and 0.9 percent among Latinx students. Â Domestic first-time graduate enrollment also declined during this period by 4.0%[\[1\]](#).

I found that there is not enough out there to guide universities, admissions offices, or others like me who want to reverse this trend in the graduate student demographics at our academic institutions. While we have identified a few good strategies in recruiting students from underserved communities and understand why these strategies work, we also recognize that graduate recruitment is a complex endeavor and there are factors influencing recruiting a diverse graduate population we do not know.Â  
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Letâs look at what we know and admit what we know too little about in the area of graduate student recruitment.

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## Academic performance

The decision of underserved students to enroll in a graduate education program is based on several factors including: undergraduate academic factors; the student's major field of study; institutional characteristics and students' college experiences; faculty interaction experiences and research experiences [2]. Several studies have shown a positive correlation between undergraduate GPA and interest in pursuing a graduate degree. Like GPA, standardized test scores also indicate positive association with interests in attending a graduate program.

It goes without saying then that recruiting students with high academic performance is a good start, but this can be a barrier-to-entry for underserved groups. At issue with this recruitment strategy is that *GPA and standardized test performance rarely correlate to productivity*. For example, many underserved students may fall in the category of low-income working students who put in more working hours than their counterparts, resulting in a negative impact on their GPA. Consequently, recruiting successful and more diverse graduate students may require us to look more holistically at graduate student applications.

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## Earning potential

The earning potential associated with a graduate degree in the field also has an impact on students' interest in pursuing a graduate degree. Graduate degrees may lead to higher earnings in areas of business, engineering, science, and math. However, the National Center for Education Statistics (NCES) reported that in 2019-20 the percentage of master's degrees conferred in a STEM field was highest for nonresident alien students, with 49 percent of degrees [3]. This indicates that despite significant financial potential associated with a graduate degree in STEM fields, these potential earnings are not attractive enough to American students. Many underserved students are facing significant debt after their undergraduate degree and may not have the financial support to pursue a graduate degree, making immediately entering the workforce more attractive.

The National Science Foundation (NSF) found that Black, American Indian or Alaska Native doctoral recipients, in the natural sciences and engineering, are most likely to have graduate debt higher than the mean graduate debt. Asian and white doctoral recipients

were the least likely to have graduate debt, and the mean amount owed was lower than that of underserved groups.Â

The higher debt of underserved groups may be attributable to being less likely to receive academic funding and more likely to use their own resources to pay for their graduate degree[4].Â What is not known is how we begin to tackle the college debt faced by so many students.Â

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## Undergraduate Experience

Finally, the studentsâ undergraduate experience and faculty interaction has a significant impact on a decision to pursue a graduate degree.Â The impact of undergraduate research experiences for underserved groups on retention rates, academic confidence and graduate rates has been well documented.Â The literature shows even greater interest and enrollment in graduate programs, because of undergraduate students having these experiences. The number of students exposed to these undergraduate experiences is growing, but this experience still needs to be more widespread than what is found at most universities.Â What remains to be understood is how we can do this successfully without reducing essential course work or overtaxing our faculty.

The benefits of a diverse graduate student population are far-reaching.Â It can strengthen campus communities and ensure the use of all our human resources to solve societal problems.Â My goal as a AAAS STPF fellow is to make a contribution towards creating this diverse graduation population, making it possible for greater diversity at the senior administration level.

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Note: The views expressed in this piece are those of the author and do not necessarily reflect the views of the United States government.

Photo Credit: UCLA Graduate Education

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[1] Zhou, E. (2022), *Graduate Enrollment and Degrees:Â 2011 to 2021*.Â Washington, DC: Council of Graduate Schools

[2] Zhang, E., Harris Zackary (2019), Aspirations and Decisions to Enroll in Graduate Programs: A Literature Review of Contributing Factors, <https://arc.accesslex.org/grantee/46/>.

[3] National Center for Education Statistics (2022).Â Graduate Degree Fields.Â *Condition of Education*.Â U.S. Department of Education, Institute of Education Sciences.Â Retrieved (January 31, 2023) <https://nces.ed.gov/programs/coe/indicator/ctb>

[4] National Center for Science and Engineering Statistics (NCSES). 2019. Survey of Earned Doctorates. Publication 20-301. Alexandria, VA: National Science Foundation.

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**List of links present in page**

- [#\\_edn1](#)
- [#\\_edn2](#)
- [#\\_edn3](#)
- [#\\_edn4](#)
- [#\\_ednref1](#)
- [#\\_ednref2](#)
- <https://arc.accesslex.org/grantee/46/>
- [#\\_ednref3](#)
- <https://nces.ed.gov/programs/coe/indicator/ctb>
- [#\\_ednref4](#)