As a growing number of students across the country push campuses to become more racially inclusive, one of their key demands is that administrators do more to diversify the faculty. But such calls for change face multiple hurdles, not the least of which is the paltry production by American universities of black Ph.D. recipients. Despite efforts to increase the number of doctorates awarded to African-Americans over the last decade, the latest federal data show that progress has been nonexistent.

The Survey of Earned Doctorates: a Snapshot

54,070 — number of new doctoral degrees awarded by American universities in 2014, an increase of 2.5 percent from the previous year

61.4 percent — proportion of recent doctoral recipients who have a definite commitment for a job or postdoc position

46.1 percent — portion of doctorates earned in 2014 that were awarded to women

4.9 percent — share of new doctoral degrees awarded to black students

$15,591 — mean amount of graduate-school debt

Note: Some figures are based on a limited number of respondents.

Sources: National Science Foundation and other federal agencies

A total of 2,649 black students earned doctorates last year, representing less than 5 percent of the 54,070 doctorates awarded. That percentage is practically unchanged from the year before and slightly less than it was in 2004, according to the latest annual Survey of Earned Doctorates. A report and data tables from the survey were published on Thursday by the National Science Foundation.
For comparison, slight progress was made for another underrepresented minority group — Hispanics and Latinos — during the past 10 years. They made up 5.8 percent of doctorate recipients in 2014, up from 4.8 percent a decade earlier.

The latest numbers confirm that more needs to be done, said Ansley Abraham, director of the Southern Regional Education Board’s State Doctoral Scholars Program, which aims to diversify faculties by providing financial and other support to Ph.D. students.

"We need more fish in the pool" within Ph.D. programs, he said. The latest data "tells me that the changes we’re trying to make are deep-seated in our system of higher education."

The challenge becomes most apparent, Mr. Abraham said, when breaking down minority doctoral recipients by subfields. The data show only one black doctoral recipient in many subfields, including biophysics, nuclear physics, nuclear engineering, architecture, and entomology. Each of those subfields produced at least 100 doctorates.

"If your department needs a particle physicist," Mr. Abraham said, referring to a subfield that bestowed 245 doctorates in 2014, but only two to black students, "your pool of applicants is very limited."

The percentage of doctoral degrees awarded to African-Americans, in fact, varies greatly among disciplines. For example, 1.7 percent of engineering doctorates in 2014 were earned by black doctoral recipients who are American citizens or permanent residents. That group accounted for 3 percent of Ph.D.s in the humanities and almost 11 percent of doctorates in education.

Bernard J. Milano, president of the PhD Project, a group that aims to diversity business faculties, said efforts to hire more black academics won’t succeed until the existing small sliver of minority doctorate holders is expanded. Until then, colleges will essentially be poaching minority faculty members from each other.

But increasing the number of doctoral students poses challenges, as administrators have little control over who gets admitted into a doctoral program. Those decisions primarily are made by tenured faculty members. Change, Mr. Milano said, must come from within individual departments and disciplines.

To help business schools diversify, Mr. Milano’s group attends conferences that attract underrepresented minority students, like the National Society of Hispanic MBAs and the National Society of Black Engineers. At those conferences, Mr. Milano floats the benefits of being a professor to prospective Ph.D. students: You get to teach
and shape minds, and the pay is decent. The group also pays for prospective students interested in pursuing a business Ph.D. to attend its annual conference, where they can meet with business professors and Ph.D. students.

Efforts to diversify doctoral programs must be discipline specific, Mr. Milano said, "and you have to find the students and market the value of getting a Ph.D."

The federal data, Mr. Milano said, show that academe hasn’t really been serious about increasing diversity in Ph.D. programs.

Yet some experts are optimistic, if cautiously so.

Gains in the percentage of black doctorate recipients in some disciplines are masked by the overall numbers, said Kimberly A. Griffin, an associate professor in the department of counseling, higher education, and special education at the University of Maryland at College Park.

A small but growing portion of degrees have gone to African-Americans in the life sciences over the last decade, she said, thanks in part to federal agencies, like the National Institutes of Health, that have made investments in the field to further recruitment, mentorship, and outreach to minority students.

"The growth we’ve seen is linked to that heavy level of investment," Ms. Griffin said. "We should continue it, and think about whether similar investments can be made in fields where growth has been slower."

Correction (12/4/2015, 11 a.m.): This article originally misnamed an organization of engineers. It is the National Society of Black Engineers, not the National Association of Black Engineers. The article has been updated to reflect the correction.

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