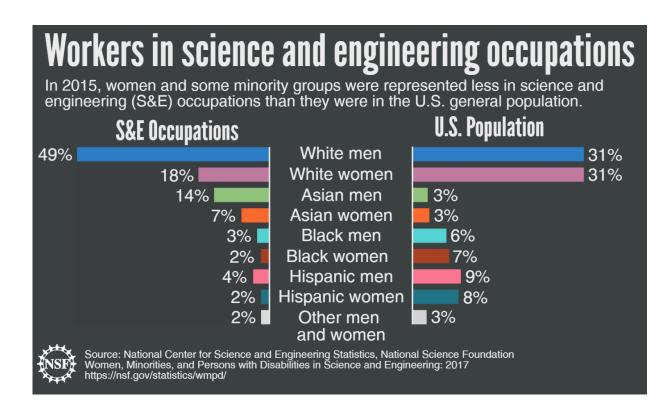


Women, Minorities and Persons with Disabilities in Science and Engineering report released

January 31 2017



In 2015, women and some minority groups were represented less in science and engineering (S&E) occupations than they were in the US general population. Credit: NSF

The National Center for Science and Engineering Statistics (NCSES) today announced the release of the 2017 *Women, Minorities, and Persons*



with Disabilities in Science and Engineering (WMPD) report, the federal government's most comprehensive look at the participation of these three demographic groups in science and engineering education and employment.

The <u>report</u> shows the degree to which women, people with disabilities and minorities from three racial and ethnic groups—black, Hispanic and American Indian or Alaska Native—are underrepresented in science and engineering (S&E). Women have reached parity with men in educational attainment but not in S&E employment. Underrepresented minorities account for disproportionately smaller percentages in both S&E education and employment

Congress mandated the biennial report in the Science and Engineering Equal Opportunities Act as part of the National Science Foundation's (NSF) mission to encourage and strengthen the participation of underrepresented groups in S&E.

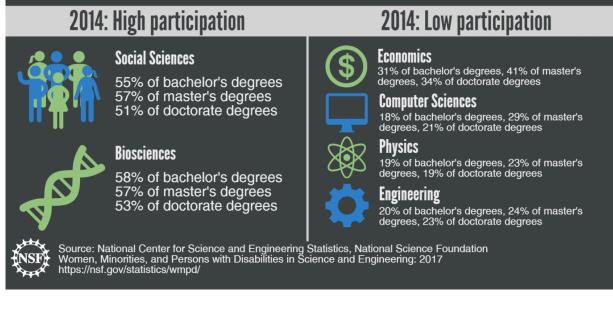
"An important part of fulfilling our mission to further the progress of science is producing current, accurate information about the U.S. STEM workforce," said NSF Director France Córdova. "This report is a valuable resource to the science and engineering policy community."

NSF maintains a portfolio of programs aimed at broadening participation in S&E, including ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers; LSAMP: the Louis Stokes Alliances for Minority Participation; and NSF INCLUDES, which focuses on building networks that can scale up proven approaches to broadening participation.



Women's participation in science and engineering varies by field

Women earn nearly half of S&E bachelor's degrees. While their proportion of degrees in nearly every field has increased over time, their participation in different fields continues to vary.

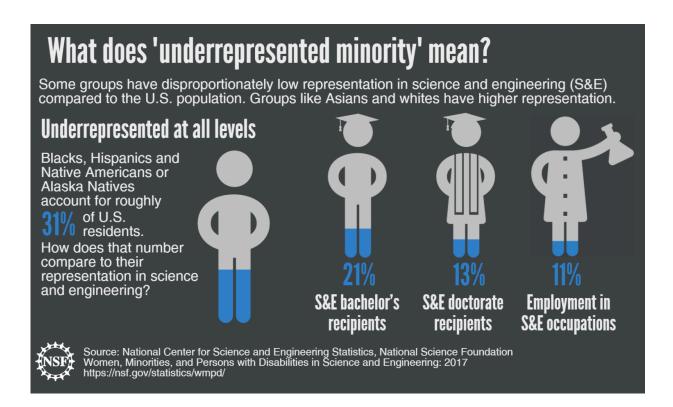


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The digest provides highlights and analysis in five topic areas: enrollment, field of degree, occupation, employment status and early career doctorate holders. That last topic area includes analysis of pilot study data from the <u>Early Career Doctorates Survey</u>, a new NCSES product. NCSES also maintains expansive <u>WMPD data tables</u>, updated periodically as new data become available, which present the latest S&E education and workforce data available from NCSES and other agencies. The tables provide the public access to detailed, field-by-field information that includes both percentages and the actual numbers of people involved in S&E.



"WMPD is more than just a single report or presentation," said NCSES Director John Gawalt. "It is a vast and unique information resource, carefully curated and maintained, that allows anyone (from the general public to highly trained researchers) ready access to data that facilitate and support their own exploration and analyses."



Some groups have disproportionately low representation in science and engineering (S&E) compared to the US population. Groups like Asians and whites have higher representation. Credit: NSF

Key findings from the new digest include:

• The types of schools where students enroll vary among racial and ethnic groups. Hispanics, American Indians or Alaska Natives



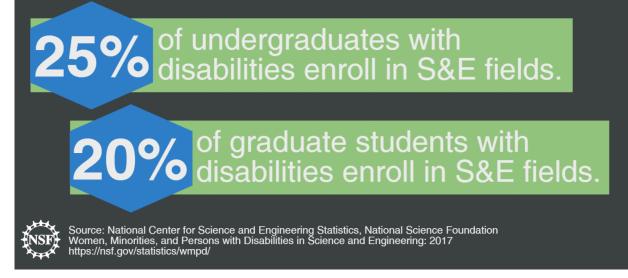
and Native Hawaiians or Other Pacific Islanders are more likely to enroll in community colleges. Blacks and Native Hawaiian or Other Pacific Islanders are more likely to enroll in private, for profit schools.

- Since the late 1990s, women have earned about half of S&E bachelor's degrees. But their representation varies widely by field, ranging from 70 percent in psychology to 18 percent in computer sciences.
- At every level—bachelor's, master's and doctorate—underrepresented minority women earn a higher proportion of degrees than their male counterparts. White women, in contrast earn a smaller proportion of degrees than their male counterparts.
- Despite two decades of progress, a wide gap in <u>educational</u> <u>attainment</u> remains between underrepresented minorities and whites and Asians, two groups that have higher representation in S&E education than they do in the U.S. population.
- White men constitute about one-third of the overall U.S. population; they comprise half of the S&E workforce. Blacks, Hispanics and people with disabilities are underrepresented in the S&E workforce.
- Women's participation in the workforce varies greatly by field of occupation.
- In 2015, scientists and engineers had a lower unemployment rate compared to the general U.S. population (3.3 percent versus 5.8 percent), although the rate varied among groups. For example, it was 2.8 percent among white women in S&E but 6.0 percent for underrepresented minority women.



Snapshot: Students with disabilities

Students with disabilities are about as likely as those without to enroll in science and engineering (S&E) fields and slightly more likely to attend 2-year schools.



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For more information, including access to the digest and data tables, see the updated <u>WMPD website</u>.



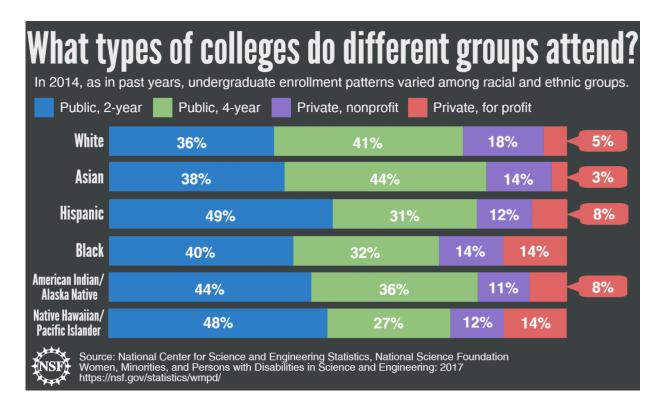


Over a decade, Hispanic women's share of bachelor's degrees rose in several fields.

| | - | Degree field | Share in 2004 | Share in 2009 | Share in 2014 |
|--|---|--------------------------|---------------|---------------|---------------|
| Fields with highest shares – of degrees | | Psychology | 6.9% | 8.0% | 11.6% |
| | | Social Sciences | 4.9% | 5.8% | 8.2% |
| | Ő | Biological Sciences | 4.2% | 4.3% | 6.0% |
| | π | Mathematics & Statistics | 2.3% | 2.6 % | 3.5% |
| Fields where shares remained – relatively flat | | Engineering | 1.7% | 1.8% | 2.1% |
| | | Computer Sciences | 1.8% | 1.5% | 1.8% |
| Source: National Center for Science and Engineering Statistics, National Science Foundation Women, Minorities, and Persons with Disabilities in Science and Engineering: 2017 https://nsf.gov/statistics/wmpd/ | | | | | |

Over a decade, Hispanic women's share of bachelor's degrees rose in several fields. Credit: NSF





In 2014, as in past years, undergraduate enrollment patterns varied among racial and ethnic groups. Credit: NSF

Provided by National Science Foundation

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