

Native Americans Among Degree Recipients in Physics and Geoscience

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The number of bachelor's degrees awarded in the US continues to increase. About 1.58 million people earned bachelor's degrees in academic year 2007-08 (See Table 1). Of them, fewer than 10,800 were Native Americans. However, this small number did represent a significant increase (40%) from the 7,700 Native Americans who earned bachelor's degrees a decade earlier.

Women continued to increase their participation in postsecondary education and earned 57% of all bachelor's degrees in 2008. Women comprised nearly 61% of all bachelor's degree recipients who were Native Americans.

REPORTS ON MINORITIES IN PHYSICS & GEOSCIENCE

The African American Presence in Physics and Geoscience (Sept 2008)

African Americans and Hispanics Among Physics and Astronomy Faculty (Feb 2010)

Native Americans Among Degree Recipients in Physics and Geoscience (Aug 2010)

Hispanic Americans Among Degree Recipients in Physics and Geoscience (forthcoming)

While the number of Native Americans who earn a bachelor's degree is small, it has increased by about 40% over the last decade.

Table 1

Native Americans among bachelor's degree recipient in 2008 and 1998.

	Number of Bachelor's All Fields		Change '98 to '08
	2008	1998	%
All Degree Recipients			
Total	1,579,955	1,198,938	32
Women	906,376	674,036	34
Men	673,579	524,902	28
Native Americans			
Total	10,768	7,693	40
Women	6,546	4,629	41
Men	4,222	3,064	38

<http://www.aip.org/statistics>

Table 2

**Native Americans among bachelor's degree recipients
in selected fields in 2008.**

Degree Field	Native Americans	All Students	Native Americans per 1,000 bachelor's
Business & Mgmt	2,102	344,892	6.1
Education	996	124,846	8.0
Psychology	637	92,966	6.9
Biological Sciences	508	82,387	6.2
Engineering	456	86,048	5.3
Computer Science	221	38,916	5.7
Chemistry	80	11,829	6.8
Mathematics	73	15,840	4.6
Geosciences	28	4,313	2.6
Physics	22	4,875	2.0
Bachelor's across all fields	10,768	1,579,955	6.8

AIP Statistical Research Center compiled data collected by the NCES.

<http://www.aip.org/statistics>

For every 1,000 Native American who earned a bachelor's degree in 2008, only two did so in physics.

Table 2 provides the number of Native Americans who earned bachelor's degrees in selected fields in academic year 2007-08 and compares those to the total number of degrees awarded in those fields. Of the selected fields included in Table 2, Native Americans are more likely than other students to major in education and less likely to major in physics and mathematics than any of the other fields listed in the table.

Over the last dozen years, about 49,000 bachelor's degrees were awarded in physics and in geosciences. Native Americans earned 246 physics and 342 geoscience bachelor's during that time period.

Compared to geoscience, we find that far fewer Native Americans earned bachelor's degrees in physics a dozen years ago. However, the number has increased slowly and during the last three years approximately the same number of Native Americans earned bachelor's degrees in both physics and geosciences.

Table 3

Native Americans earning bachelor's degrees in physics and geoscience, 1996 through 2008.

	Three-Year Totals	
	Physics	Geoscience
2006 through 2008	78	80
2003 through 2005	70	80
2000 through 2002	52	104
1996 through 1998	46	78
Total 1996 through 2008	246	342

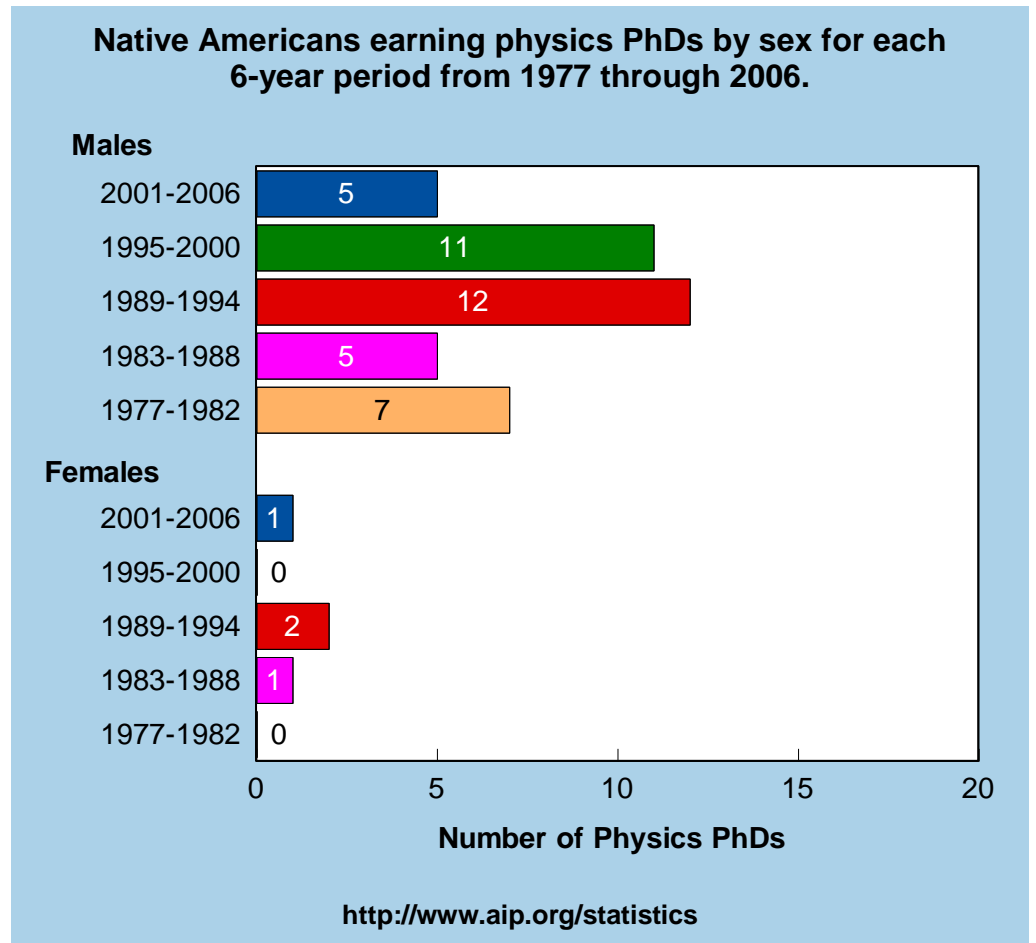
This table does not include academic year 1999 for which minority data are unavailable.

AIP Statistical Research Center compiled data collected by the NCES.

<http://www.aip.org/statistics>

Native Americans have earned 40% more bachelor's degrees in geoscience during the last dozen years combined than they did in physics.

Figure 1



Of all physics PhDs awarded over the last 3 decades, only 44 were earned by Native Americans. And only 4 of them were women.

Doctorates

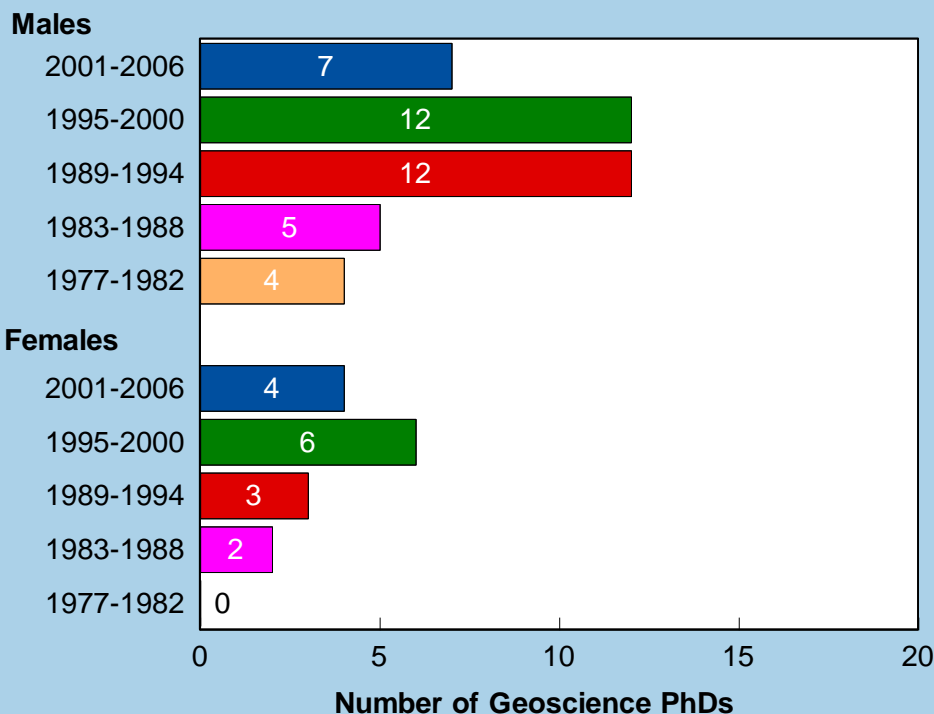
In academic year 2005-06, 45,596 PhDs were awarded across all fields. Of them, only 118 were earned by Native Americans. About 30% of Native Americans who earned PhDs did so in education, which accounts for fewer than 15% of all PhDs awarded.

Native Americans earned about 2.6 out of every 1,000 PhDs awarded in the US in 2006. As low as this rate is, it is even lower in physics. Over the last 30 academic years combined only 44 Native Americans earned physics PhDs. During those three decades, a total of more than 35,400 physics PhDs were awarded. In short, Native Americans earned about 1.25 out of every 1,000 physics PhDs that were awarded.

Geoscience is a smaller PhD field than physics. Over the last three decades, slightly more than 22,000 geoscience PhDs were awarded. Of them, 55 were earned by Native Americans or about 2.5 out of every 1,000 geoscience PhDs. In other words, Native Americans earned PhDs in geoscience at about the same rate that they earned PhDs across all fields. Despite the small numbers, Native Americans were actually twice as likely to earn PhDs in geoscience as they were in physics.

Figure 2

Native Americans earning geoscience PhDs by sex for each 6-year period from 1977 through 2006.



<http://www.aip.org/statistics>

During the last 30 years combined, only 55 geoscience PhDs were earned by Native Americans of whom 40 were men and 15 were women.

Additional Reading

For additional information on the education trends within the American Indian community, we recommend that readers go to the National Indian Education Study which is available from the National Center for Education Statistics at: <http://nces.ed.gov/nationsreportcard/nies/>

Methodology

The bachelor's data in this **focus on** were all compiled from the Integrated Postsecondary Education Data System (IPEDS). IPEDS is the core postsecondary education data system for the National Center for Education Statistics (NCES) of the U.S. Department of Education. IPEDS is a comprehensive system built around a series of interrelated surveys that collect data on students, faculty members, finances, libraries, etc. These surveys are conducted at the institutional level, that is, one person or office reports data for the entire institution. In the case of the bachelor's data used for this report, someone at the institution provided all of the data by sex, ethnicity and subject of degree. IPEDS is available as an on-line resource. To learn more, see <http://nces.ed.gov/ipeds>

The PhD data in this focus on were all compiled from WebCASPAR, the integrated science and engineering resources data system maintained by the National Science Foundation. WebCASPAR emphasizes PhDs in science and engineering. However, it does include data on non-science and on other degree levels. The data on PhD recipients in WebCASPAR are collected from individuals who report on their own gender and race as well as categorizing the field of their degree. WebCASPAR is an on-line resource. To learn more about this important data resource, see <https://webcaspar.nsf.gov/>

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