

Executive Summary

Survey of Earned Doctorates

Texas A&M University (1958 through 2007)



Texas A&M University
A Unique American Institution

Office of Institutional Studies and Planning
October 2009

Overview

The Survey of Earned Doctorates (SED) is a federal agency survey conducted by the National Opinion Research Center (NORC) for the National Science Foundation and five other federal agencies (National Institutes of Health, U.S. Department of Education, National Endowment for the Humanities, U.S. Department of Agriculture, and the National Aeronautics and Space Administration). The SED is a census of all individuals receiving a research doctorate from a U.S. institution in the academic year (July 1 through June 30 of the next year).

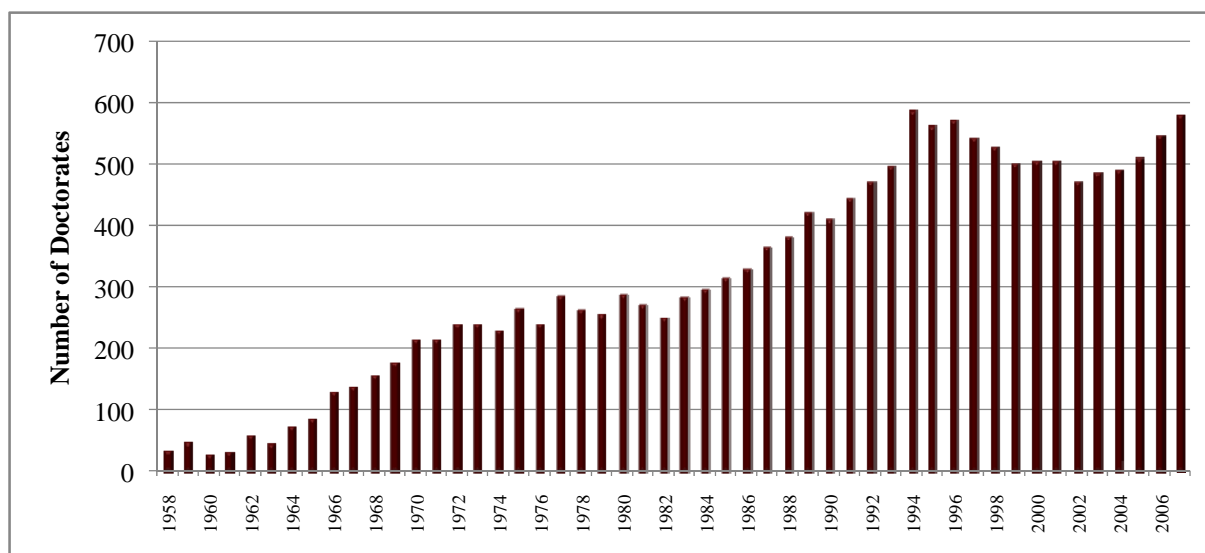
The SED gathers information annually from 45,000 new U.S. research doctorate graduates about their educational histories, funding sources, and post-doctoral plans. Each year the SED data are added to a larger historical record of doctorate-degree graduates, the Doctorate Record File (DRF).

This report presents data on recipients of research doctorates awarded by Texas A&M University from 1958 to 2007 (Professional doctorates, such as D.V.M., are not included). The historical data are displayed by recipients' demographic backgrounds, broad field of study, academic paths, and postgraduate plans.

OISP purchased the SED dataset, which contains unit record information for Texas A&M University doctorate graduates. According to NORC, individual institution is granted access to data from its own institution only. Please also note that this executive summary is based on SED dataset, a different data source than Integrated Post-Secondary Education Data System (IPEDS). Therefore, attempts to matching numbers between this report and other OISP degree reports would be inappropriate.

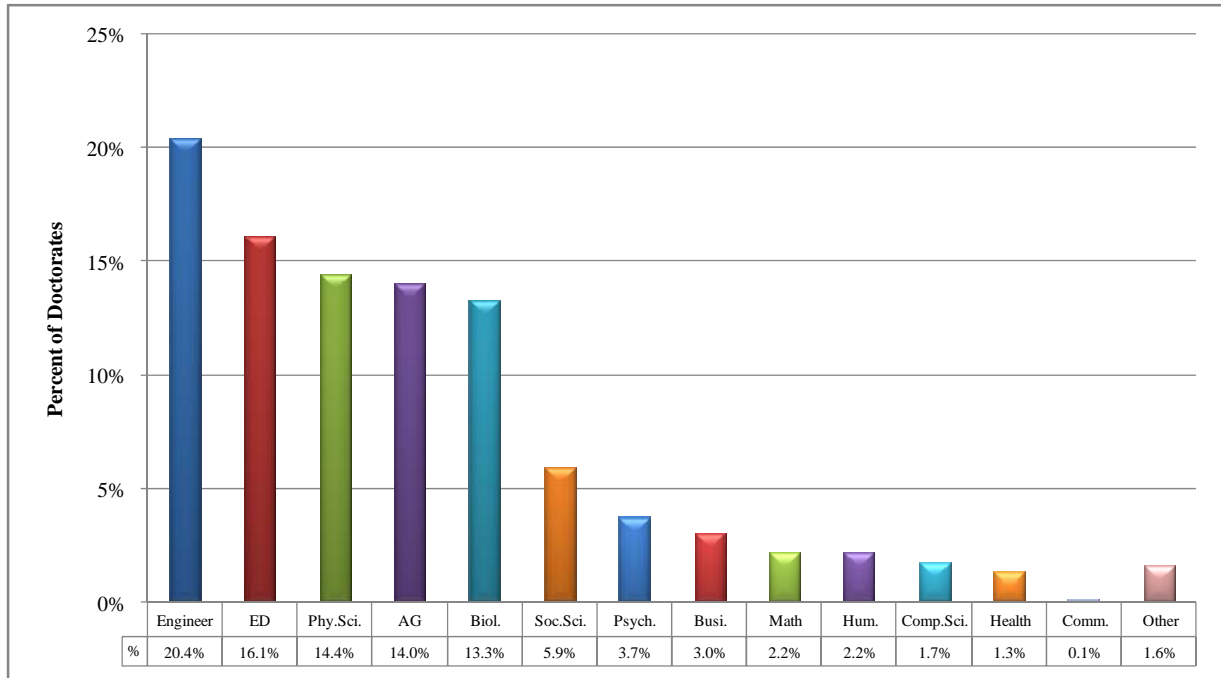
- 1) Texas A&M, awarded a total of 16,103 research doctorates from 1958-2007, 32.3% of the doctorates were granted during 1998-2007 (Figure 1).

Figure 1. Doctorates Awarded by Texas A&M University (1958-2007)



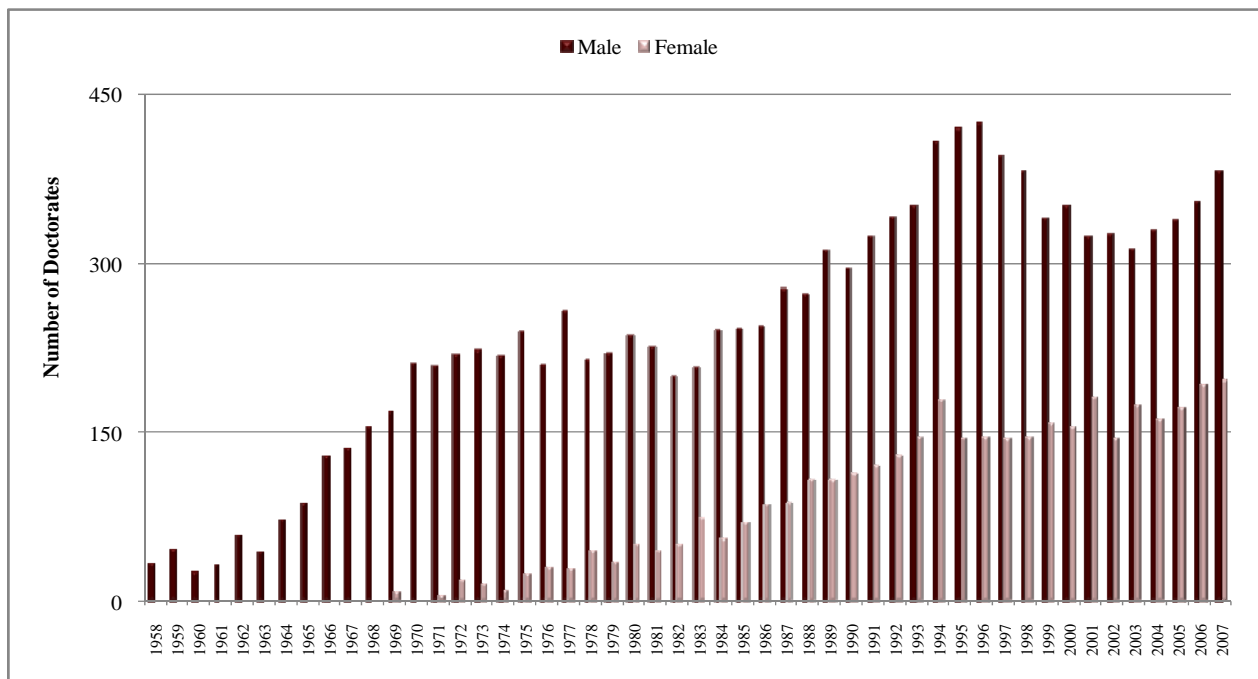
- 2) In half a century, 50.9% of the doctorates were conferred in the fields of Engineering, Education, and Physical Sciences (Figure 2).

Figure 2. Doctorates Awarded by Broad Fields of Study (1958-2007)



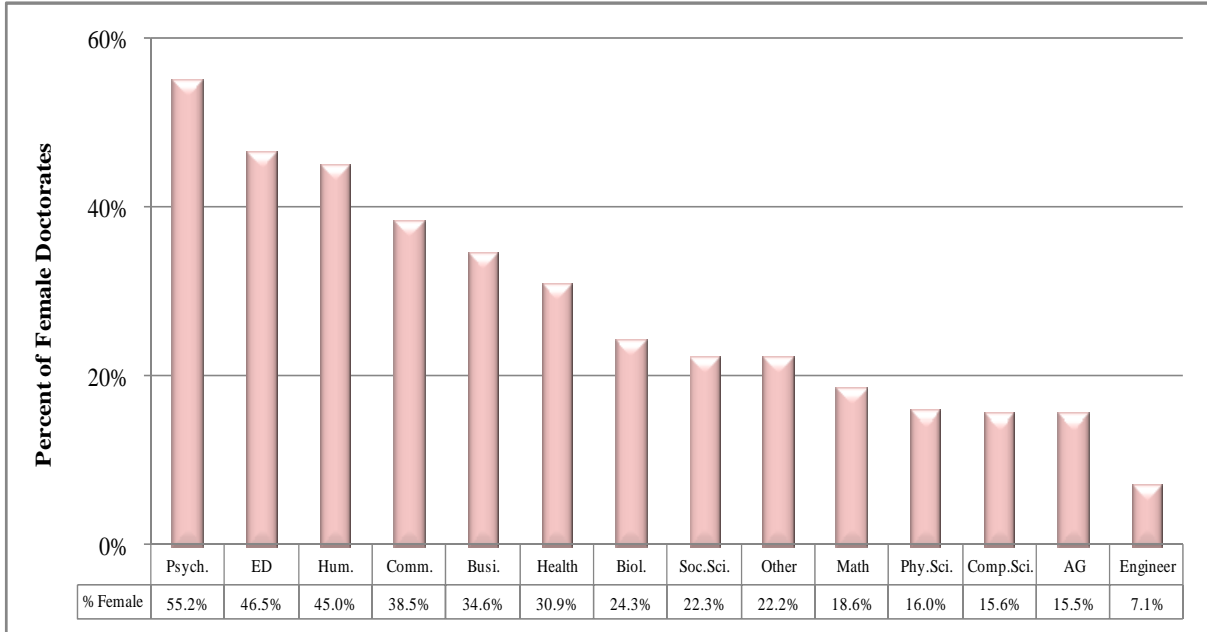
- 3) Texas A&M awarded its first doctorate to a woman in 1967. In 41 years, women received 24.7% of all doctorates granted. In 2007, 197 doctoral degrees were conferred to women, totaling a 34.0% of the total doctorates granted (Figure 3).

Figure 3. Doctorates Awarded by Gender (1967-2007)



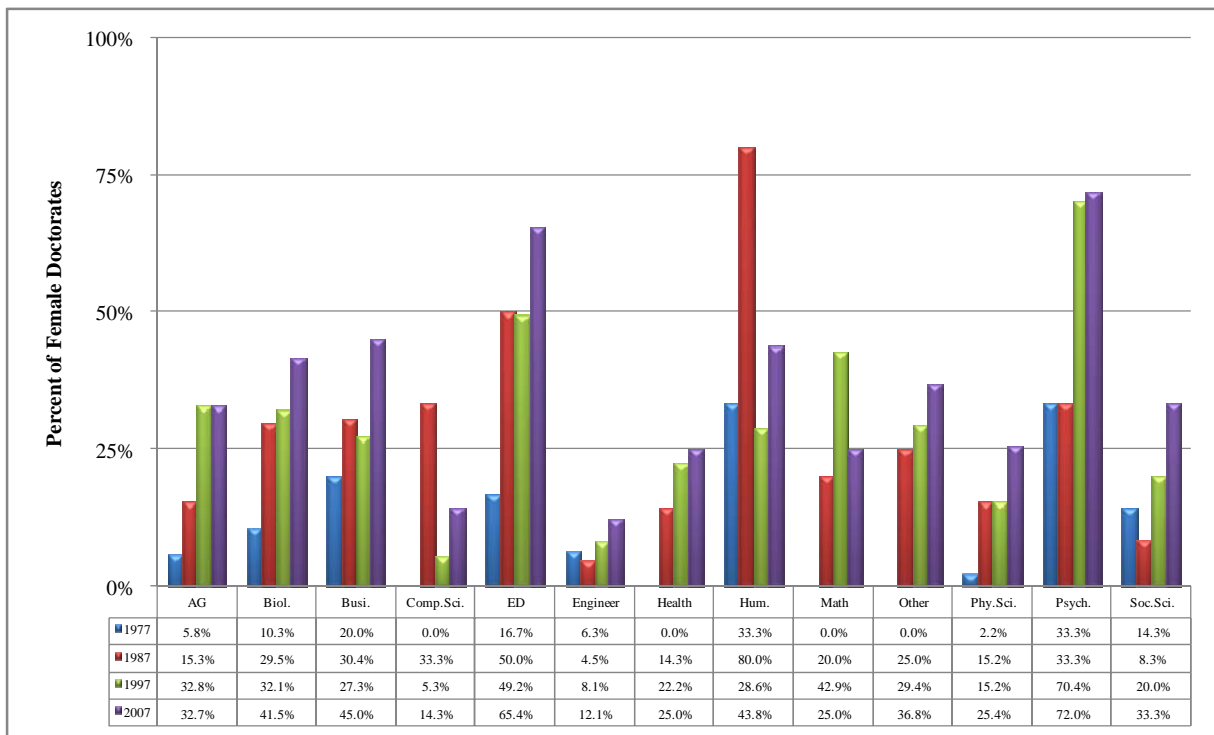
- 4) In 41 years, women earned 55.2% of the doctorates awarded in Psychology, 46.5% in Education, and 45.0% in Humanities. In Engineering and Agriculture, female obtained 7.1% and 15% of the doctorates in each field. (Figure 4).

Figure 4. Doctorates Awarded to Female Students (1973-2007)



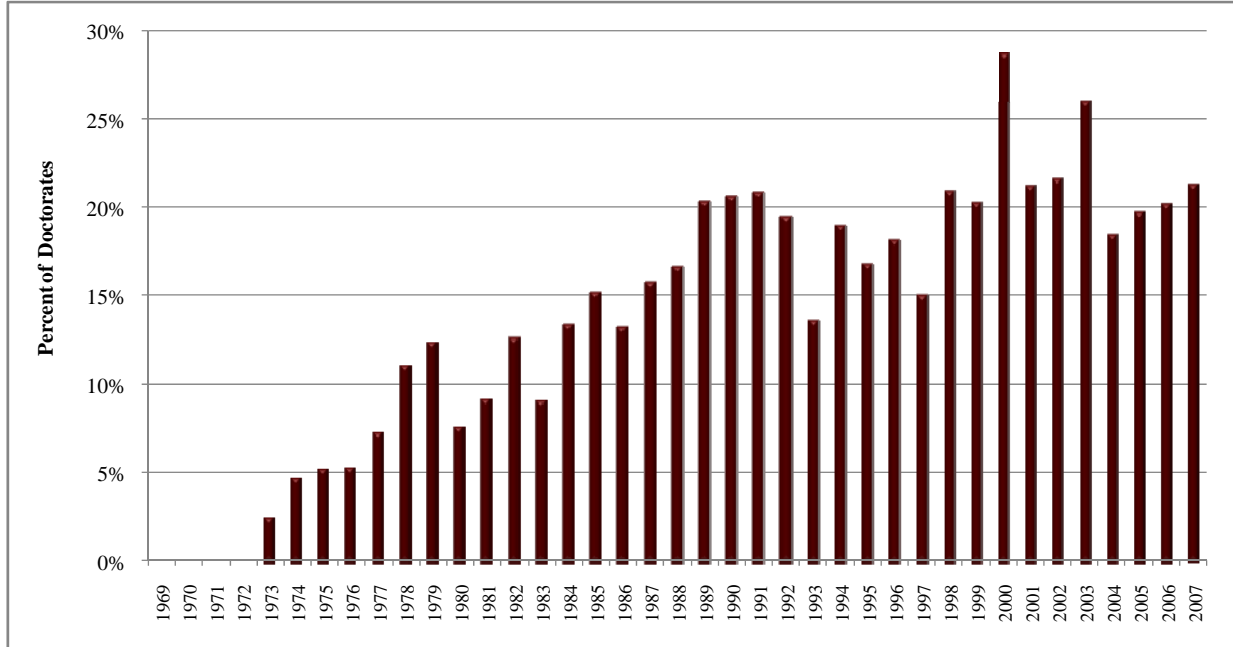
- 5) Percent of female doctorates increased significantly in most fields of study, (Figure 5).

Figure 5. Female Doctorates Awarded by Broad Field of Study, for Selected Years (1977-2007)



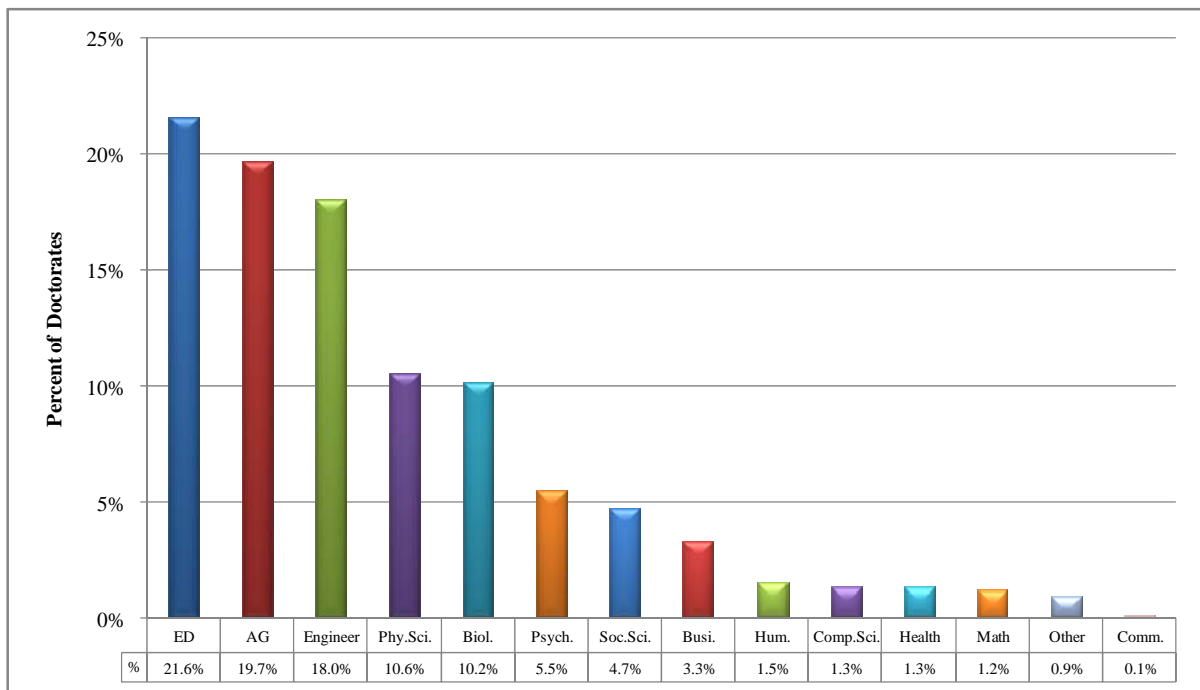
6) In 1969, Texas A&M awarded its first doctorate to a student with American Indian origin. Black and Hispanic students received their first doctorates in 1973. In 2007, 21.4% of the doctoral degrees were awarded to students of Black, Hispanic, and American Indian origins (Figure 6).

Figure 6. Doctorates Awarded to Students of Black, Hispanic, and American Indian Origins (1969-2007)



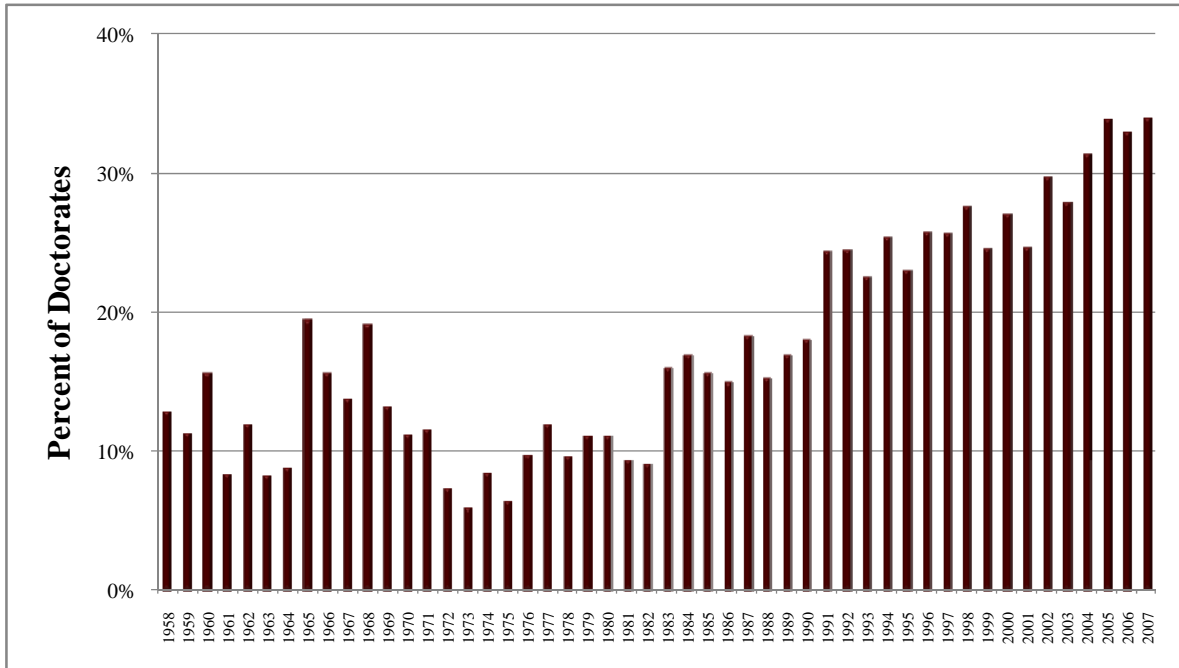
7) Of all the doctorates students of Black, Hispanic, and American Indian origins received during the past 38 years, 21.6% were in Education, 19.7% in Agriculture, and 18.0% in Engineering (Figure 7).

Figure 7. Doctorates Awarded Students of Black, Hispanic, and American Indian Origins by Broad Fields of Study (1969-2007)



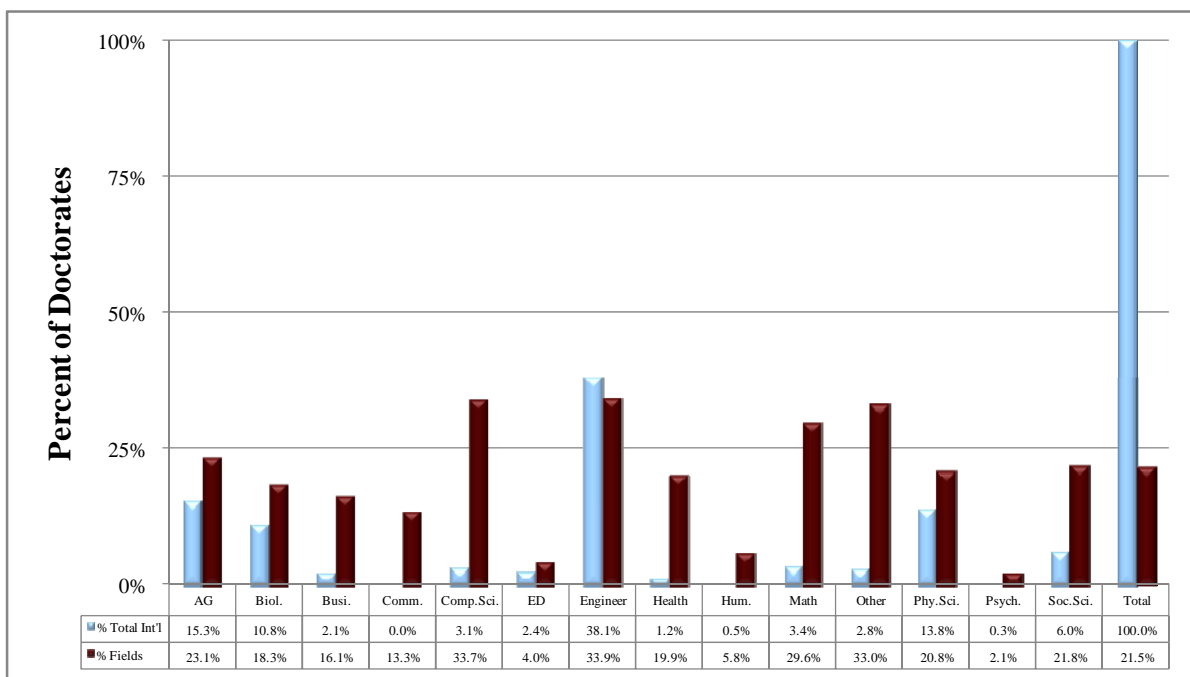
8) During the past 50 years, international students obtained 21.5% of Texas A&M's doctorates conferred. The number increased from 12.8% in 1958 to 33.9% in 2007 (Figure 8).

Figure 8. Percent of Doctorates Awarded to International Students (1958-2007)



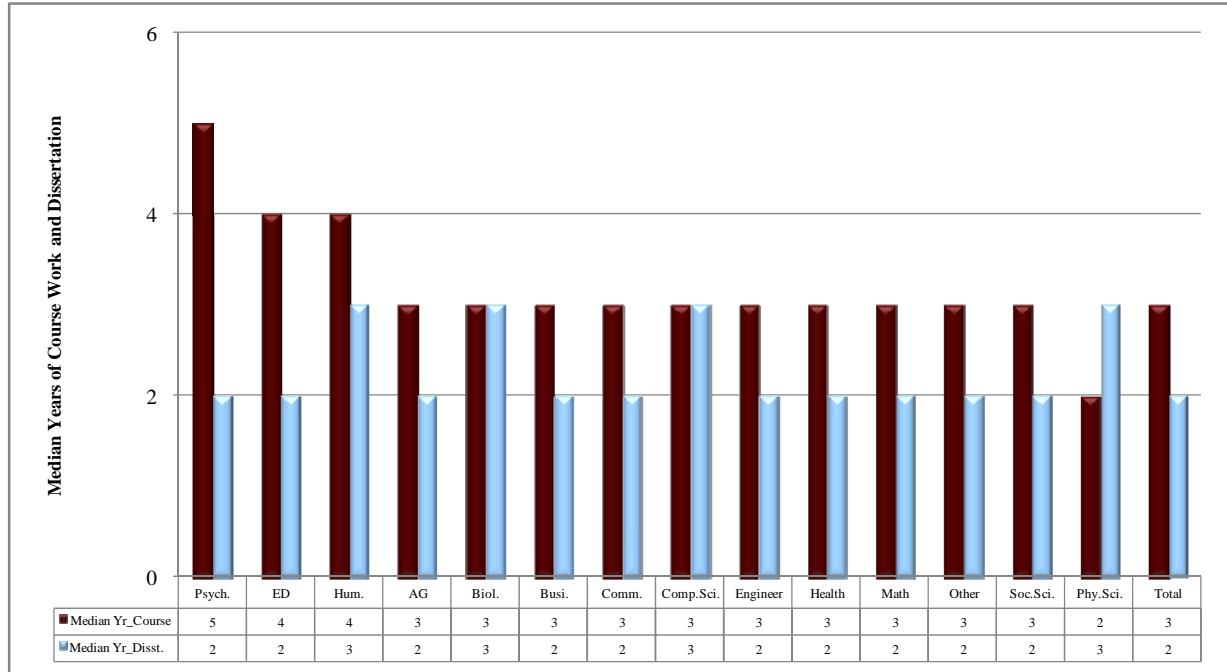
9) Of all the doctorates international students received during the past 50 years, 38.1% were in Engineering, 15.3% in Agriculture, and 13.8% in Physical Sciences. In other words, international students obtained 33.9% of the total doctorates in Engineering, 33.7% in Computer Science, and 29.6% in Mathematics (Figure 9).

Figure 9. Percent of Doctorates Awarded to International Students by Broad Fields of Study (1958-2007)



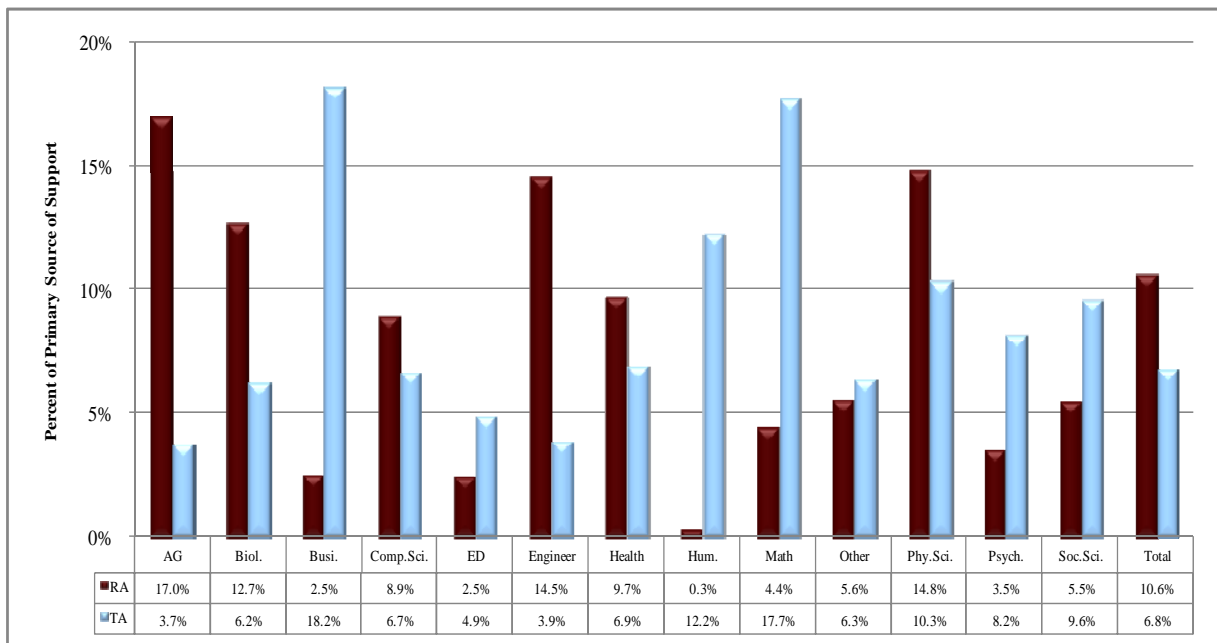
10) SED started to collect data on years of course work and dissertation in 2001. For Texas A&M doctorates, the overall median years of course work was three, and median years of dissertation was two (Figure 10).

Figure 10. Median Years of Course Work and Dissertation by Broad Field of Study (2001-2007)



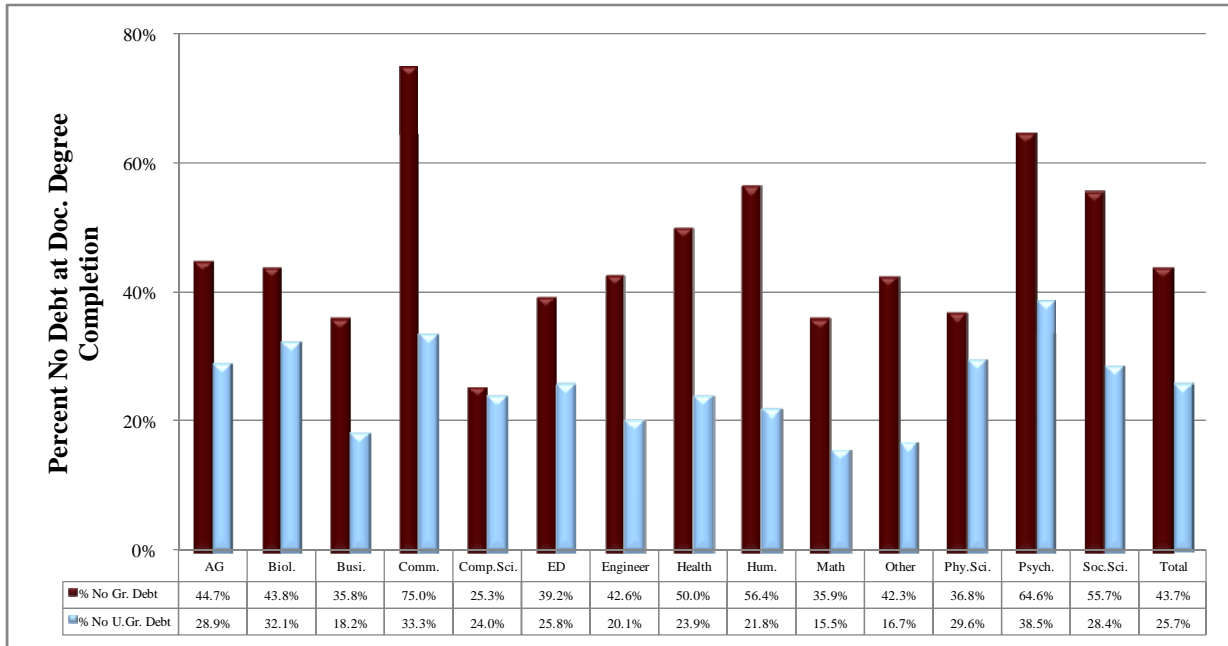
11) When asked about the primary source of financial support during graduate school, 10.6% of the doctoral recipients reported research assistantship (RA), and 6.8% indicated teaching assistantship (TA) as their major financial source to complete the degree programs. Business majors ranked on the top in funding TAs (18.2%); and Agriculture ranked the first in funding RAs (17.0%) (Figure 11).

Figure 11. Percent of Primary Source of Support by Broad Fields of Study (1977-2007)



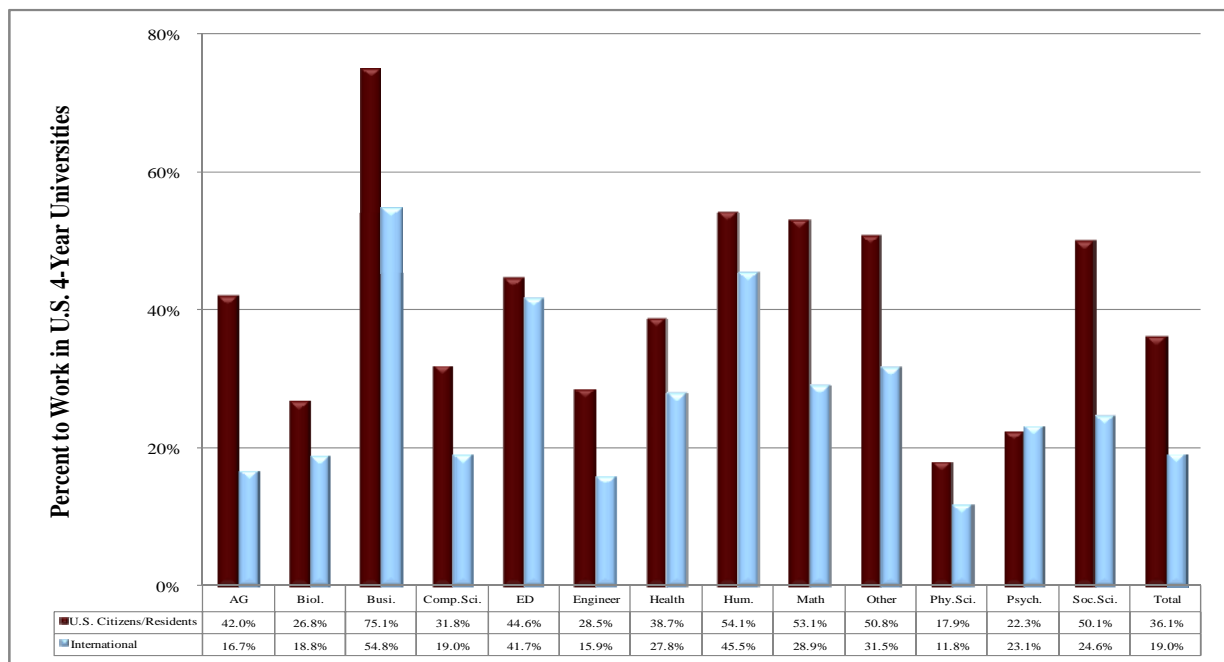
12) SED began to record data on debt at graduation (student loan) in 2001. Nearly 44% of all Texas A&M doctoral recipients graduated with no debt for the graduate level. Communications majors ranked at the top regarding percent of debt-free doctorates at the graduate level (75.0%) (Figure 12).

Figure 12. Percent of No Debt at Doctoral Degree Completion by Broad Field of Study (2001-2007)



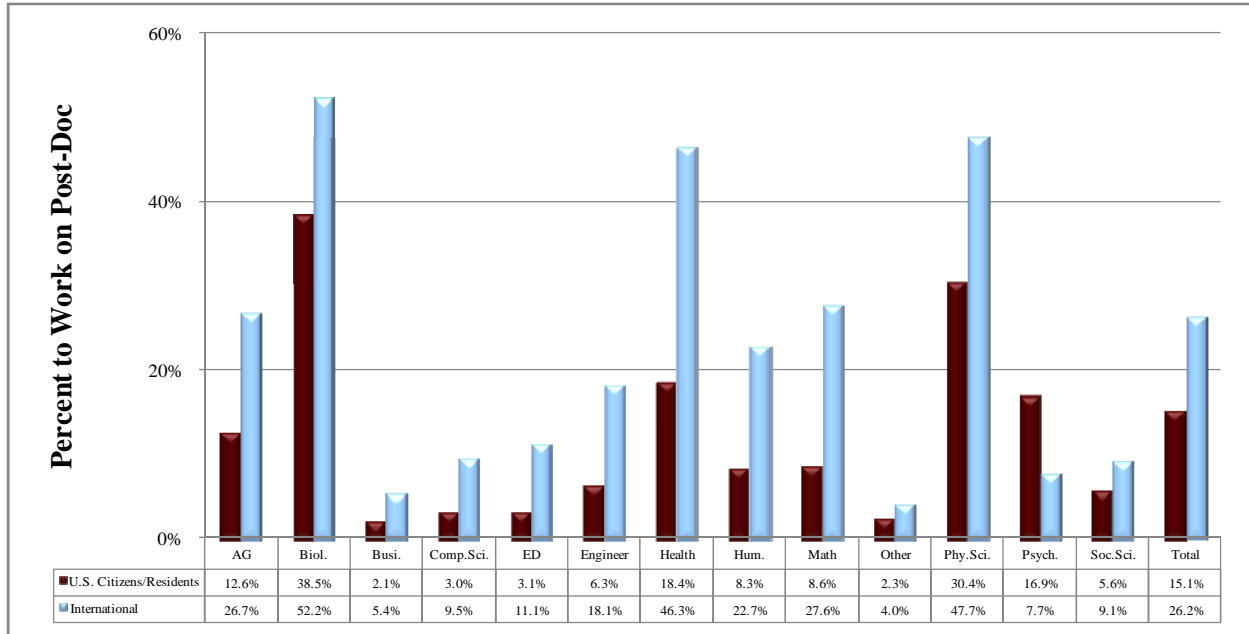
13) SED asked the earned doctorates about their immediate future employer type. Thirty-six percent of the Texas A&M graduates who were either U.S. citizen or U.S. permanent residents indicated that they were going to work at U.S. four-year universities, among other choices. This number for international students was 19.0% (Figure 13).

Figure 13. Percent to Work at U.S. 4-Year Universities by Citizenship Status (1958-2007)



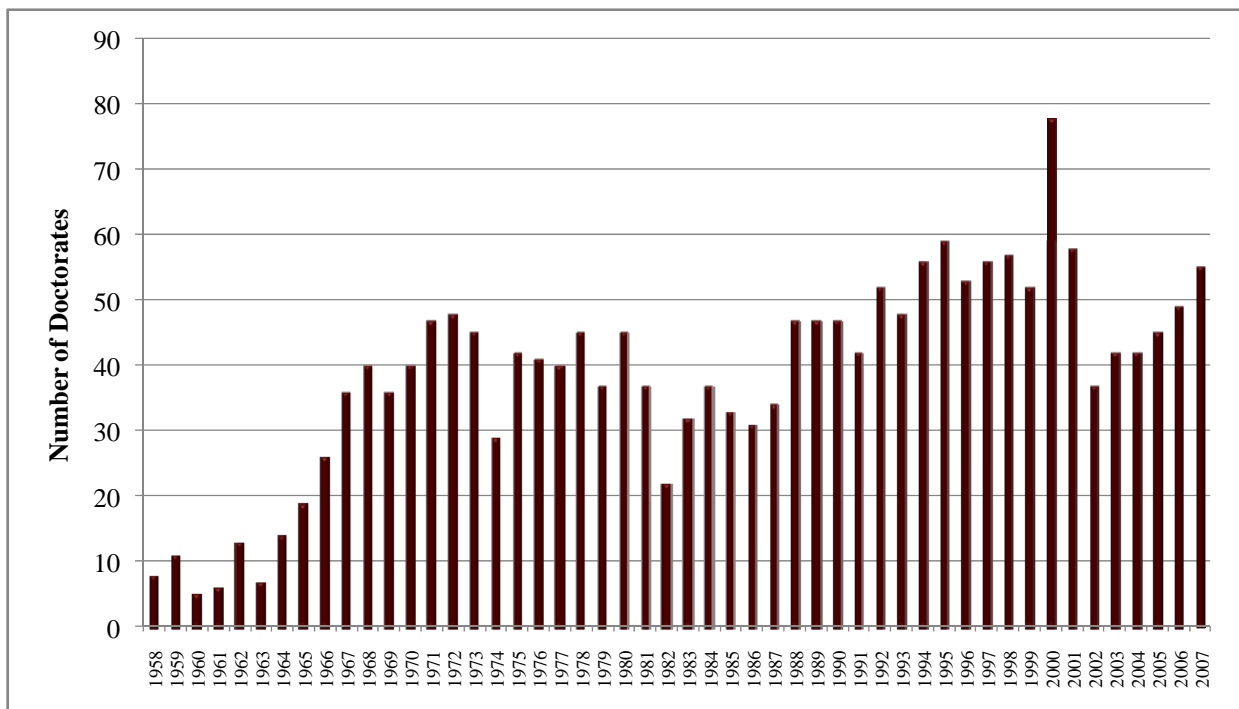
14) Who were continuing their post-doctoral studies immediately after obtaining a doctoral degree? Overall, 15.1% of the U.S. citizens/residents planned to work on a post-doctoral position; the number for international students were 26.2%) (Figure 14).

Figure 14. Percent to Continue Post-Doctoral Studies Immediately by Broad Field of Study (1958-2007)



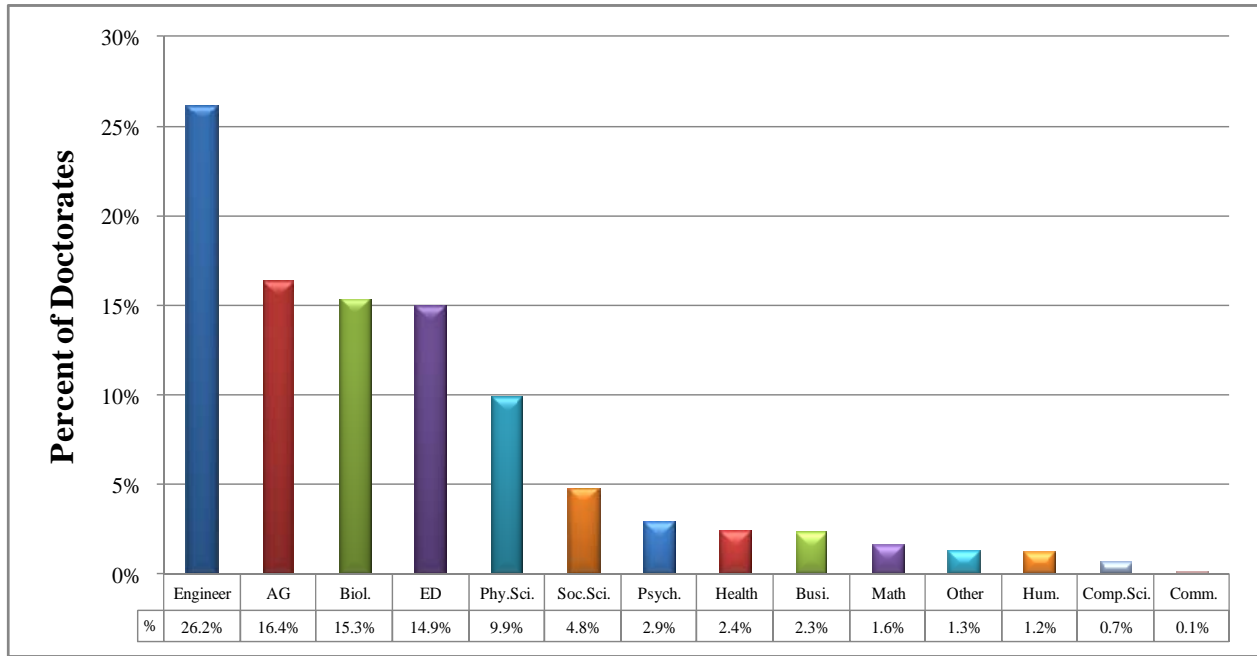
15) Of the 16,103 research doctorates Texas A&M awarded since 1958, 12.2% (N=1,970) indicated that they obtained their bachelor’s degrees from Texas A&M (Figure 13).

Figure 15. Number of Doctorates Whose Baccalaureate Institution was Texas A&M (1958-2007)



16) Of the 1,970 earned doctorates who also earned their bachelor's degrees from Texas A&M, 517 (26.2%) were in Engineering, 324 (16.4%) in Agriculture, and 301 (15.3%) in Biological Sciences (Figure 16).

Figure 16. Percent of Doctorates Who Had Obtained their Baccalaureate Degrees from Texas A&M by Broad Field of Study, (1958-2007)



17) Top baccalaureate institutions recorded by doctorates are Texas A&M, Seoul National University in Korea, University of Texas at Austin. Fourteen of the universities where the doctorates obtained their baccalaureate degrees are listed in Figure 17.

Figure 17. Top Universities where Doctorates Obtained their Baccalaureate Degrees, (1958-2007)

