

SPOTLIGHT ON OU

The Retention and Graduation Rates of 1992-98 Entering Science, Mathematics, Engineering and Technology Majors at Oakland University

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119 colleges and universities participated in the Science, Mathematics, Engineering and Technology (SMET) majors' retention survey in 2000: retention, graduation, and continuation rates were calculated over 6 years. Major findings of this survey reported:

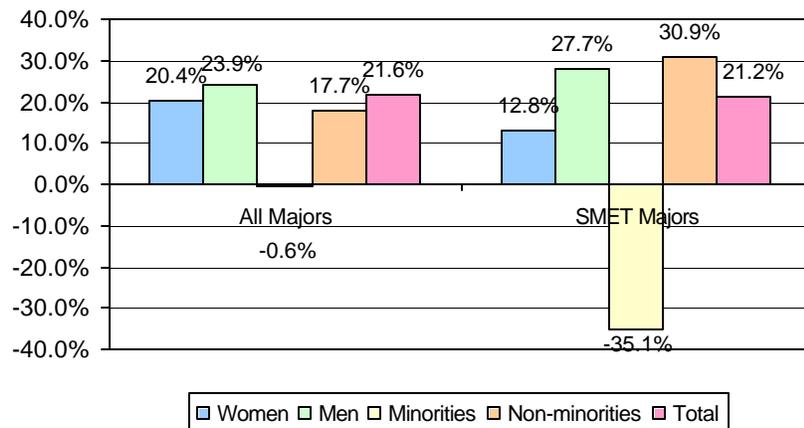
- “Proportionately more students chose SMET as a major in their freshman year; 26% of first-year students in 1998 compared to 24% in 1992.”
- “Almost half of the freshman SMET majors left the SMET disciplines before reaching their junior year.”
- “Approximately one in three graduates began their baccalaureate program as a SMET major but completed a degree from a non-SMET discipline.”
- “Women and minorities (Blacks, Hispanics, and American Indians) were underrepresented in the SMET disciplines and dropped out of the SMET programs at a higher rate.”

This paper compares Oakland University (OU) students in the SMET majors to the national norms.

1. According to the survey report, from 1992 to 1998, **“proportionately more students chose SMET as a major in their freshman year.”**

At OU, overall enrollment in the SMET majors increased slightly less than enrollment in the

**% Increases in First-time Freshman Enrollment 1992 to 1998
Oakland University**



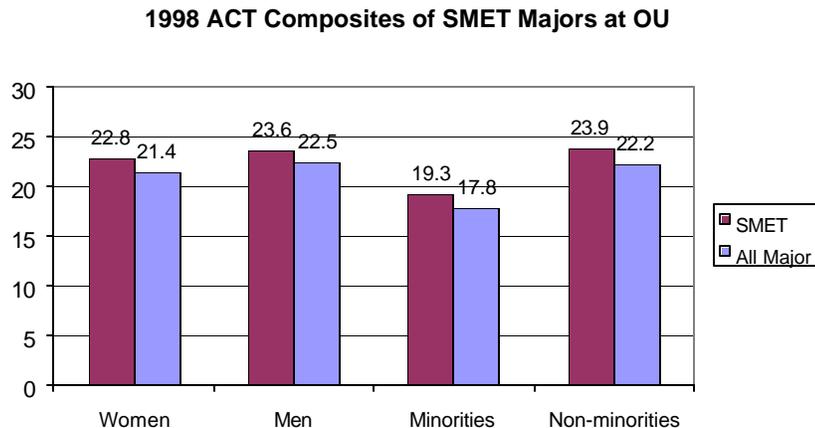
university's other majors (21.2% compared to 21.6%). However, the picture changes when the focus shifts to specific sub groups of students. The enrollments of non-minorities and men in the SMET majors increased significantly, while underrepresented minorities showed a 35.1% decrease enrollment in the SMET majors over 6 years. Women increased by less than 13%, compared to a 28% increase by men.

2. **“Women and minorities were underrepresented in the SMET disciplines”** was reported in survey summary report. Women are also underrepresented at OU: 66% of total 1998 first-time freshmen (FTIAC) but only 41% of the SMET majors were female. However, minorities may not be underrepresented in 1998, as they were 11% of all majors and 11% of the SMET majors.



3. The national norm shows, **“Compared with the general student population, SMET majors had higher admission test scores.”**

This is also true for OU, although OU SMET majors averages tend to be about 2 points lower than the national SMET majors average.

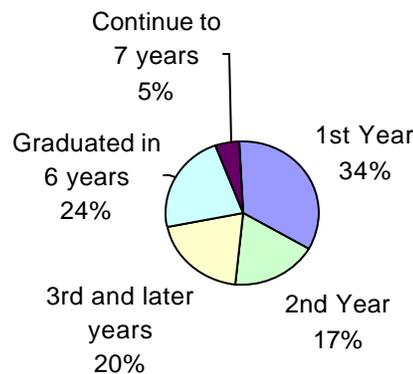


4. “Almost half of the freshman SMET majors left the SMET disciplines before reaching their junior year.”

Looking at the 1992 OU cohort, a little more than half (51%) of the SMET majors left the SMET disciplines before the start of their 3rd year. Over a period of six years, about 70% of the SMET majors either dropped out of college or transferred to a non-SMET discipline for their degrees. This number is 10% higher than national figure.

The numbers are more even dramatic for minorities. Of the 1992 cohort, none of the minority students in the SMET majors had graduated in 6 years and 92% of them dropped out or transferred to a non-SMET discipline.

**Transfer and Drop-out Rates of SMET majors
1992 cohort**

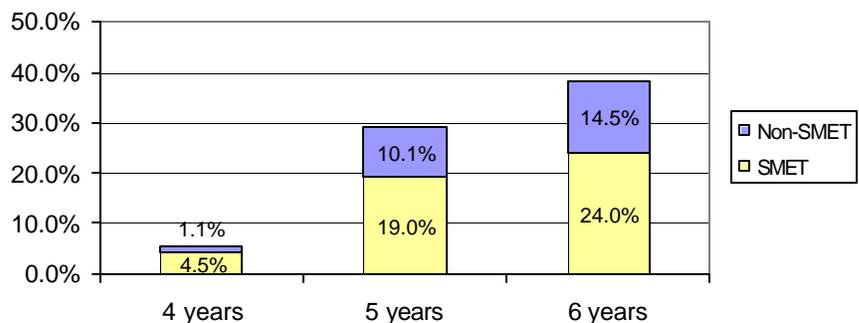


5. According to the survey report, “Approximately one in three graduates began their baccalaureate program as a SMET major but completed a degree from a non-SMET discipline.”

In the 1992 cohort at OU, 38.5% of FTIAC

students entering SMET majors graduated in 6 years: 24% graduated from SMET discipline and

**Graduation Rates of SMET Majors
1992 Cohort**



14.5% graduated from non-SMET majors. The percent of initial SMET majors who graduated in other disciplines is greater than the national norm (38% vs. 33%).

6. According to the survey report, **“The institution-wide graduation rates were consistently higher for women than men. However, a lower percentage of the women graduated from the SMET fields due to high transfer rates to non-SMET programs.”** This national trend is reflected at OU: the 6-year graduation rates for all FTIACs were 42% for women and 40% for men in 1992 cohort (typical of other years). However, the women’s graduation rate (22%) in the SMET majors is 4% lower than men’s graduation rate.