

WSOS December 18, 2014 Board Meeting Follow-up

Prepared by CSF Research, Evaluation, Planning & Accountability Department

1. What is the breakdown of race/ethnicity by gender?

- Overall, the largest proportions of WSOS Cohort 3 scholars are represented by White females (26.8%), followed by White males (16.9%), Asian females (14.5%), Hispanic/Latino females (13.0%), Asian males (9.1%) and Hispanic/Latino males (7.6%).

WSOS Cohort 3 Scholars Race or Ethnicity by Gender (n=739)

Race or Ethnicity	Female	Male	Grand Total
American Indian or Alaska Native	1.4%	0.5%	1.9%
Asian	14.5%	9.1%	23.5%
Black or African American	5.0%	3.1%	8.1%
Hispanic/Latino of any race(s)	13.0%	7.6%	20.6%
Native Hawaiian or Other Pacific Islander	0.4%	0.1%	0.5%
Two or more races	0.3%	0.3%	0.5%
White	26.8%	16.9%	43.7%
Not Reported	0.7%	0.4%	1.1%
Grand Total	62.0%	38.0%	100.0%

2. What is the breakdown of employed grads by those who had research opportunities and those who did not?

- Approximately half of WSOS graduates have participated in a research assistantship or related experience; however, a higher proportion of graduates employed in their field of study participated in a research assistantship compared to those employed outside of their field of study or who were still looking for employment: 55 percent versus 45 percent, respectively. (Due to a small sample size for the latter two groups, this difference in means is not statistically significant.)
- Though not a statistically significant difference, these findings suggest that students with research assistantships are more likely to be employed in their field of study.

Research assistantship or related experience?	Secured Employment in Field of Study	Secured Employment Outside of Field of Study	Looking for Employment	Total
Yes	55%	43%	43%	51%
No	45%	57%	57%	49%
Grand Total	100% (n=62)	100% (n=14)	100% (n=14)	100% (n=90)

3. Are we tracking wages over time?

CSF's Research, Evaluation, Planning and Accountability Department will add wage questions to subsequent annual WSOS employment surveys, the next of which will be implemented in February/March 2015.

4. Benchmarking Attrition in STEM:

According to analyses of the U.S. Department of Education's National Center for Education Statistics' longitudinal study of beginning postsecondary students:

- 86 percent of first-time college students who begin at a four-year institution remain enrolled by the end of their first academic year and 62 percent remain enrolled or earn a bachelor's degree by the end of their sixth academic year (Berkner, Cataldi & Knepper, 2002).
- However, only 52 percent of STEM majors remain in STEM by the end of their sixth academic year, compared to 55 percent of non-STEM majors who remain in their broader major category (NCES, 2012). In other words, STEM majors are more likely to exit STEM than non-STEM majors are not exit their non-STEM major.
- While year to year attrition rates in STEM are not available, we provide an estimate below by lowering the typical enrollment or graduation rate by a constant 10 percent across all years. This estimate reflects the 10 percent difference between overall retention or graduation rates at the end of six years (62 percent) and the STEM retention or graduation rate (52 percent). However, given the impact of gateway courses on STEM retention in the first and second year of college, STEM retention estimates are likely overestimated here for the first and second years.
- Even with these conservative estimates for the first and second years, we approximate that WSOS C2 scholars are outperforming their peers nationally by 11 to 15 percent (based on class standing).

End of Academic Year	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year ¹	6 th Year ¹
All Students Enrolled or Graduated (started at four-year)	86%	73%	67%	63%	61%	62%
STEM Retention Estimates (started at four-year)	76%	63%	57%	53%	51%	52%
WSOS C2 Enrolled or Graduated (started at two-year or four-year)	87%	78%	72%	N/A	N/A	N/A

¹Please note that the one percent increase between years five and six represents the handful of students who stopped out in a previous year, re-enrolled and still graduated within six years.

5. Benchmarking Employment Trends:

- According to the National Center for Education Statistics' Baccalaureate and Beyond Longitudinal Study, among 2007-08 bachelor degree recipients, one year after graduation 9 percent of graduates were unemployed; 22 percent were enrolled in graduate or post-baccalaureate education; and 73 percent of those employed report that their jobs were related to their undergraduate major (NCES, 2014: <http://nces.ed.gov/pubs2014/2014001rev.pdf>).
- In comparison, less than a year after graduation, 17 percent of WSOS Cohort 1 graduates were unemployed; 21 percent were enrolled in graduate or post-baccalaureate education; and 85 percent of employed WSOS Cohort 1 graduates report that their position is within their field of study.
- These early findings suggest that WSOS graduates are comparable to their peers nationwide with regards to graduate school enrollment and are outperforming their peers in terms of securing employment within their field of study.

Bachelor's Degree Graduates	Unemployment Rate	Graduate School Enrollment Rate	Employed within Field of Study (of Employed)
Nationwide (1 year after graduation)	9%	22%	73%
WSOS C1 Graduates (less than 1 year after graduation)	17%	21%	85%