## 'The Set': How are race and gender related with college enrollment among DE students? August 2013

Monthly Data Briefs from the Delaware Dept. of Education's Teacher and Leader Effectiveness Unit
Of the $\mathbf{8 , 6 0 0}$ students who graduated from Delaware (DE) public schools in Spring 2012, 4,510 students enrolled in college. Among students enrolled in higher education, $\mathbf{5 7 . 4 \%}$ are female and $\mathbf{4 0 . 5} \%$ are minorities. This data brief uses enrollment records from the National Student Clearing house and 6 years of student data to explore to what extent progression from $9^{\text {th }}$ grade to graduation and into college varies by students' race and gender.

## DE Students' Progression into College by Students' Gender

- Figure 1 shows differences between the rates at which males and females progress through the college-going pathway: i.e., the rates at which they graduate on-time, enroll seamlessly in college, and persist to a second year in college.
- There is a consistent gap of about 10 percentage points between males and females throughout the entirety of the pathway, with females performing consistently higher than their male classmates.
- $79 \%$ of female students graduate high school on time, compared to $70 \%$ of male students. While $43 \%$ of female ninth graders attend college seamlessly,* fewer than a third of male ninth graders do so.
- While $48.7 \%$ of all DE students are female, in 2012 57.4\% of Delaware graduates enrolled in higher education were female. This is consistent with national trends of college enrollment by gender.

Figure 2: Student Progression from 9th Grade into College


Sample: 2006-07 first-time ninth graders. Results shown only for comprehensive, vocational, magnet, and charter schools.
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Post-secondary enrollment outcomes from NSC matched records. All other data from state administrative records.

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By Students' Gender


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DE Students' Progression into College by Students' Gender and Race

- Figure 2 analyzes how students progress through the college-going pathway separately by race** and gender. Females of every race progress through the pathway at rates consistently higher than their male counterparts, with white females progressing at the highest rates of all. Half of all white female first-time ninth graders enroll in college seamlessly upon graduation.
- While Hispanic females graduate high school at rates comparable to black females and white males (around 70\%), their rate of seamless college enrollment is much lower ( $23 \%$ ). The latter rate is comparable to Hispanic and black males, whose on-time graduation rates are 10 percentage points lower.
- Less than a quarter of black male, Hispanic male and Hispanic female ninthgraders enroll in college seamlessly.
- Black females progress through the pathway at rates almost identical to those of white males.

Figure 3: College Enrollment Rates, by Race and Gender Seamless Enrollers Only


Sample: 2010-11 high school graduates with 8th grade math test scores. Results shown for comprehensive, vocational, magnet, and
charter schools. Post-secondary enrolment outcomes from NSC matched records. Al other ratat from administrative eceords. he charts shows results for 296 female Hispanic students, 247 male Hispanic students, 1111 female black students,

## DE Students' College Enrollment by Students' Race and Gender

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- Figure 3 examines the rate of seamless college enrollment among graduates of three racial groups (black, Hispanic and white), as well as across genders within each race.
- Consistent with Figures 1 and 2, female graduates attend college at higher rates than their male peers, even within each racial group. This is consistent with national trends, which show that the majority of college students are of women ( $57 \%$ ). ${ }^{\dagger}$
- The degree of these gender gaps within each racial group is notable. The gender gap in college enrollment is highest among white students. White females' enrollment rates are 13 percentage points higher than those of their male counterparts. The gender gaps among black and Hispanic students are slightly smaller ( 11 and 7 percentage points, respectively).
- The gender gap in college enrollment historically developed as the proportion of males in college began declining relative to females since the 1970s. $\ddagger$ However the large gender gap among white students is notable in Delaware because nationally the gender gap among 1824 year-olds enrolled in college is more pronounced among Hispanic and black students ( 10 and 12 percentage points respectively) when compared to the gender gap among white students (which is 8 percentage points). ${ }^{7}$


## College Enrollment by Race, Controlling for Family Income and Prior Achievement

- Figure 4 explores the extent to which racial gaps in college enrollment persist when we account for differences in family income*** and prior achievement.
- The darkest blue (left) bar in each racial group (black and Hispanic) represents the raw gap between the college enrollment rate of that group and the rate of white students (e.g. white graduates are 7 and 18 percentage points more likely to attend college seamlessly than black and Hispanic students, respectively).
- The two paler-blue bars show gaps in college enrollment between minority and white students, after accounting for differences in income status (middle bar) or for differences in both income status and performance on the $8^{\text {th }}$ grade math test (right bar).
- Among students of similar income status, whites are 6 percentage points more likely to attend college than Hispanic students, and 2 points less likely than black students. Among students of similar income status who scored similarly on their $8^{\text {th }}$ grade math tests, whites enrolled in college at the same rates as their Hispanic peers, and at rates 12 percentage points lower than those of black students.
- As the gaps represented by the darkest blue bar dissipate when we hold income and prior academic achievement constant, it is clear that socio-economic status and prior achievement are more reliable predictors of college enrollment than a student's race/ethnicity.

Figure 4: Differences in Rates of Seamless College Enrollment Between Minority Students and White Students


Note: *** Students' eligibility for free and reduced price lunch is used as a proxy for whether or not a student comes from a low-income family.
Sources: $\dagger$ From The 2012 Statistical Abstract by the U.S. Census Bureau
$\ddagger$ From "Advancing in Higher Education: A Portrait of Latina/o College Freshman at Four-Year Institutions, 1975-2006" by Sylvia Hurtado, et al.
$\not ¥$ From "Minorities in Higher Education; 2011 Supplement" by the American Council on Education.
Post-secondary enrollment information comes from National Student Clearinghouse matched records. All other data are from state administrative records. Data are from school years 2006 - 07 through $2010-11$.
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