

'The Set': How are DE Students doing on Advanced Placement Exams?

Monthly Data Briefs from the Delaware Dept. of Education's Teacher and Leader Effectiveness Unit

This year about **4,500** Delaware students took over **8,000** Advanced Placement (AP) exams. These exams, administered by the College Board, provide an indicator of student success in Advanced Placement courses and can be used to confer college credit depending on students' performance. This brief examines general trends in the AP exams taken in May 2013, and compares students' performance on these exams to their performance on the 2012-13 School Day administration of the SAT.

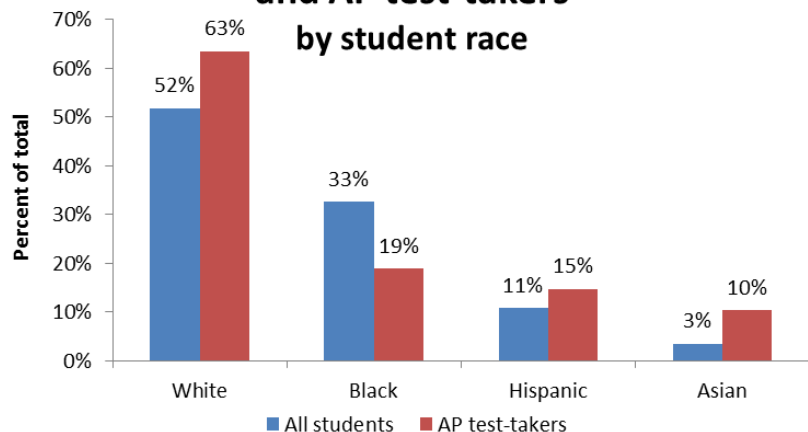
Profile of AP Tests and Test-Takers

- About 85% of students who took AP exams in 2013 were in the 11th or 12th grade. 12th graders formed 46% of the tested population, 11th graders were 39%, 13% were 10th graders and 9th graders comprised less than 2% of the tested population.*
- While the number of exams taken by Delaware students ranged from 1 to 10, the mean number of exams taken per student in 2013 was 1.3.
- Of the over 8,000 exams, approximately 49% were passed with a score of 3 or higher on a 5 point scale (the general benchmark for receiving college credit). Overall, 11th grade test-takers had the highest passing rate, passing 51% of exams taken. Delaware's 12th graders had a 48% passing rate.
- Overall, 55% of AP test-takers this year passed at least one of their exams, up slightly from 54% of students last year.
- Of the 32 different exams taken by DE students, English Language Comprehension, Psychology, and English Literary Comprehension were the three most popular exams; each of which was taken by over 750 students. Passing rates for the top 10 exams ranged from 39% (Chemistry) to 61% (Psychology).

Figure 1: Most Popular AP Exams and DE Student Pass Rates

AP Exam Name	# of Test-Takers	Pass Rate
English Language Comprehension	1,131	45%
Psychology	918	61%
English Literature Comprehension	754	48%
US History	743	40%
Statistics	668	44%
Biology	632	59%
US Government and Politics	595	44%
Calculus AB	582	43%
Chemistry	335	39%
European History	282	50%

Figure 2: Share of Delaware students and AP test-takers by student race



Racial Distribution of AP test-takers

- Figure 2 examines the proportions of students of different races taking the AP test (red bars) in 2012-13 compared to the racial demographics of the entire high school student population (blue bars) in 2012-13.
- This comparison reveals that there are higher proportions of both white and Asian students among the AP test-takers (63% and 10% respectively) than in the overall student population (49% and 4% respectively).
- Even though black and Hispanic students make up 32% and 14% of the population in DE schools respectively, they only form 19% and 7% of AP test-takers.
- This is similar to national trends. Black and Hispanic students make up 15% and 22% of the US high school population respectively** yet only 7% and 16% of the AP test-taker population.

Note: *Students taking the AP exam prior to the high school years were excluded from the sample due to a small sample size (n<20).

**Census data from the United States Census Bureau, Current Population Survey of October 2012.

Race and AP passing rates

- Figure 3 reflects two different measures of student success on the AP exam: the percent of test-takers from each racial group that passed at least one AP exam (*left cluster*) and the average passing rate (number of exams passed divided by number of exams taken, for test-takers in each racial group) (*right cluster*).
- 68% and 57%, respectively, of Asian and white test-takers passed at least one exam and 67% and 52% of exams taken by Asian and white students were passed.
- In contrast, AP passing rates for black and Hispanic test-takers were much lower. Only 30% of black test-takers and 47% of Hispanic test-takers passed at least one AP exam.
- The average passing rate was 26% for black test-takers and 38% for Hispanic test-takers.
- If we compare test-takers of similar income status Asian students still pass at least one AP exam at the highest rate (47%). 45% of Hispanic and 39% of white low-income test-takers passed at least one AP exam. Only 18% of black low-income test-takers passed at least one exam.

Figure 3: AP exam passing rate by student race

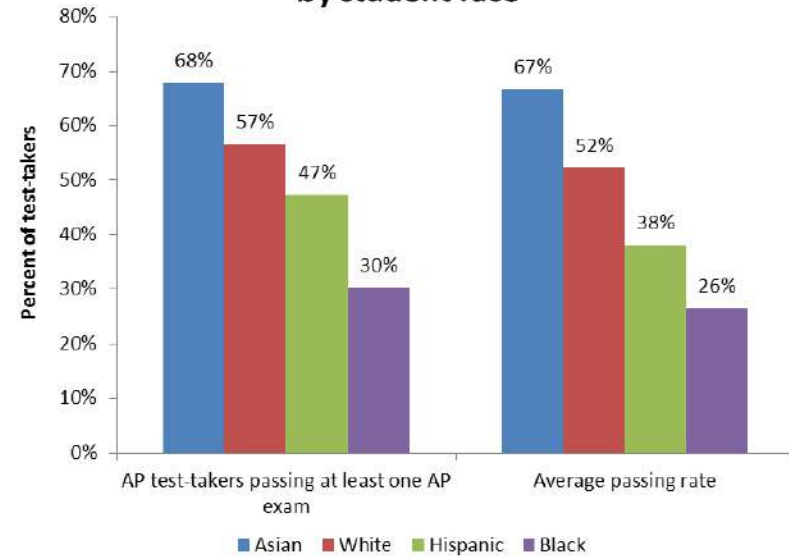
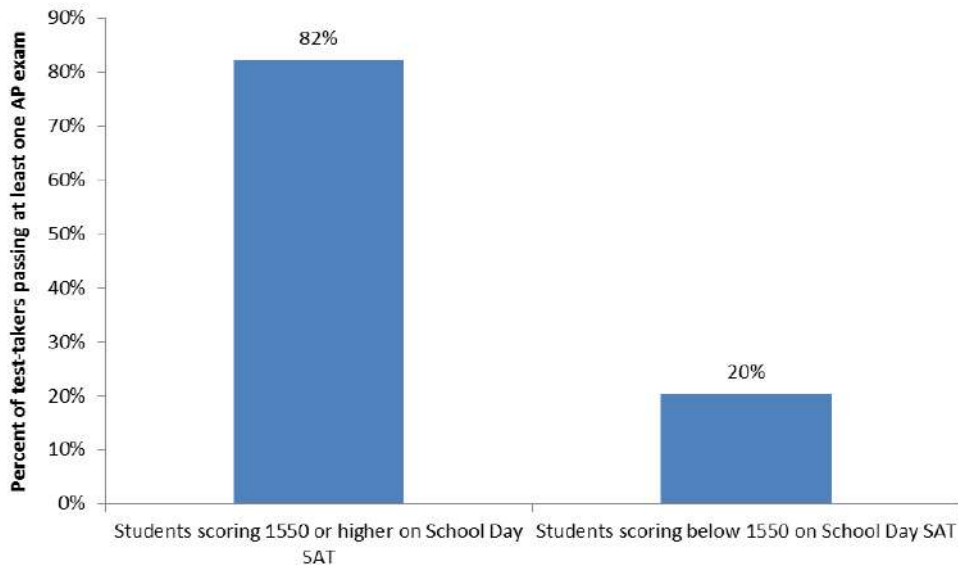


Figure 4: Share of students passing at least one AP exam by SAT performance



SAT Scores among AP Test-Takers

- Figure 4 analyzes the relationship between 11th grade students' scores on the School Day SAT in 2012-2013 and their performance on subsequent AP exams that year.
- Students who met or exceeded the College Ready Benchmark of 1550 on the SAT set by the College Board also performed well on the AP test, with over 80% of those students earning a score of 3 or higher.
- Of students who did not meet the 1550 benchmark, only 20% earned a 3 or higher on at least one AP exam. It is important to note that students who met the 1550 benchmark generally took more AP exams than students who did not meet the benchmark.
- While only 20% of DE students reach the 1550 benchmark on the SAT, over 60% of AP tests taken, and over 80% of AP exams passed by 11th graders in 2013 were taken by students meeting the 1550 Benchmark.
- Overall, of students who took an AP exam 54% did meet the "college-ready" benchmark of 1550 and 46% did not.