Disparities in Advanced Placement Course Enrollment and Test Taking: National and State-Level Perspectives

An Essay for the Learning Curve by Paula Kim-Christian and Logan McDermott

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High school students’ enrollment in Advanced Placement (AP) classes does not necessarily translate into their participation in AP examinations at the end of the school year. Across the United States, English language learners and students with disabilities enrolled in at least one AP course are less likely to take an AP test than their peers (figure 1). Among those enrolled in AP courses, Black and Hispanic students are less likely than their white and Asian peers to take the AP exam at the end of the year (figure 2). These national trends remain largely consistent across individual states, the District of Columbia, and Puerto Rico, but disparities in course enrollment and test taking are substantially larger in some states.

AP exams are standardized tests that allow high school students to demonstrate mastery of college-level content and skills. Students who receive a passing score, usually a three or above on a five-point scale, may be able to receive college credit or placement in most US colleges and universities. As such, passing AP scores may allow some students to skip introductory courses, gain greater flexibility in their choice of first-year college coursework, fulfill college graduation requirements early, and earn a degree more quickly. The College Board, the nonprofit entity that administers the AP program, notes that students who earn college credit, advanced placement, or both from their postsecondary institution are more likely to graduate from college on time and avoid paying fifth-year tuition.¹

Despite recent efforts to expand AP course offerings in more schools and enroll more students in AP courses, serious inequities in AP exam taking persist. Using data from the 2017–18 cycle of the US Department of Education Civil Rights Data Collection (CRDC), we find that roughly one in four public high school students enrolled in at least one AP course did not take any AP exams during the school year.²


² The CRDC does not capture students outside of public schools, which prevents us from understanding how outcomes vary among students who attend private schools. Nor do CRDC data provide insight into students who took AP exams without being enrolled formally in AP courses (e.g., homeschool students, students who attend schools without an AP program). Moreover, the CRDC shares the count and percentage of students enrolled in at least one AP course who took at least one AP exam but does not specify the number of AP exams taken. As such, we cannot distinguish between students who took one AP exam from those who took multiple AP exams. It is likely that students who take one AP exam compose a different academic profile than those who take multiple AP exams, but the available data collapse all test-taking students into one group.

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Furthermore, we find the following:

- Nearly 40 percent of English language learners enrolled in at least one AP course did not take any AP exams.
- Nearly 45 percent of students with disabilities enrolled in at least one AP course did not take any AP exams.
- Thirty percent of Black and Hispanic students enrolled in at least one AP course did not take any AP exams.
- On the other hand, approximately 25 percent of white students and 15 percent of Asian students enrolled in at least one AP course did not take any AP exams.

Racial gaps in AP test taking vary by state, but we find larger gaps between AP enrollment and test taking among Black and Hispanic students in almost every state relative to their white and Asian peers.

**FIGURE 1**

**Share of Students Enrolled in AP Courses Who Took at Least One AP Exam**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students with disabilities (N = 50,989)</td>
<td>54.7%</td>
</tr>
<tr>
<td>English language learners (N = 65,239)</td>
<td>60.7%</td>
</tr>
<tr>
<td>All students (N = 3,030,991)</td>
<td>74.5%</td>
</tr>
</tbody>
</table>

**Source:** 2017–18 data from the Civil Rights Data Collection.

**Note:** AP = Advanced Placement. N reflects the number of public school students enrolled in at least one AP course in all 50 states, the District of Columbia, and Puerto Rico during the 2017–18 school year.

**FIGURE 2**

**Share of Students Enrolled in AP Courses Who Took at Least One AP Exam, by Race or Ethnicity**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All students (N = 3,030,991)</td>
<td>74.5%</td>
</tr>
<tr>
<td>Asian (N = 339,883)</td>
<td>83.5%</td>
</tr>
<tr>
<td>White (N = 1,587,221)</td>
<td>75.6%</td>
</tr>
<tr>
<td>Two or more races (N = 93,646)</td>
<td>72.0%</td>
</tr>
<tr>
<td>Hispanic (N = 706,092)</td>
<td>70.9%</td>
</tr>
<tr>
<td>Black (N = 281,146)</td>
<td>68.4%</td>
</tr>
<tr>
<td>NHPI (N = 8,717)</td>
<td>63.9%</td>
</tr>
<tr>
<td>AIAN (N = 14,286)</td>
<td>59.9%</td>
</tr>
</tbody>
</table>

**Source:** 2017–18 data from the Civil Rights Data Collection.
Note: AIAN = American Indian and Alaska Native; AP = Advanced Placement; NHPI = Native Hawaiian and Pacific Islander. N reflects the number of public school students enrolled in at least one AP course in all 50 states, the District of Columbia, and Puerto Rico during the 2017–18 school year.

When interpreting these data, it is important note that enrollment in AP classes also varies by race and ethnicity. On average, white students compose 52 percent of students (n = 1,587,221) enrolled in AP classes and Hispanic students make up 23 percent of course enrollees (n = 706,092), while Asian students (n = 339,883) and Black students (n = 281,146) each make up approximately 10 percent across all 50 states, the District of Columbia, and Puerto Rico.

Taken together, white students represent half of AP course enrollment and took at least one AP exam at rates similar to the national average during the 2017–18 school year. Asian students compose a much smaller proportion of AP course enrollment but, relative to the national average, are more likely to take at least one AP exam. Students who identify as Native Hawaiian or Pacific Islander (n = 8,717) or American Indian or Alaska Native (n = 14,286) together constitute less than 1 percent of students enrolled in AP courses.

FIGURE 3
Share of Students Enrolled in AP Courses Who Took at Least One AP Exam, by Race or Ethnicity and by State

Source: 2017–18 data from the Civil Rights Data Collection.
Note: AP = Advanced Placement. The US includes the 50 states, the District of Columbia, and Puerto Rico.
Gaps in AP test taking by race and ethnicity vary widely across states (figure 3). In Delaware, Black students enrolled in AP courses are less likely to complete an AP exam than their white and Asian peers. Of the 2,876 Black students enrolled in an AP course, only 941, or 33 percent, completed an AP exam. This stands in stark contrast to the 59 percent of the 6,023 white students and 84 percent of the 908 Asian students who took an AP exam. Some of this gap can be explained by inconsistent growth across racial and ethnic groups in AP course participation, according to data from Delaware. Although the number of students taking AP exams increased in Delaware from 2016 to 2017, the number of Black students taking AP courses increased by 2 percent, while AP exam participation decreased by 2 percent.3

Similarly, in Maryland, where 78 percent of white students and 86 percent of Asian students enrolled in an AP course take an AP exam, only 60 percent of Black students take an AP test. Although overall rates of AP exam completion are higher in Maryland than in Delaware, a large racial gap in test completion is present for Black students in both states.

In Utah, Hispanic students enrolled in AP courses are less likely to complete an AP exam (45 percent of the enrolled students) than their white peers (67 percent).

On the other hand, some states have relatively equal rates of test taking across racial groups. In Tennessee, 80 percent of students who take an AP course complete at least one AP exam. These rates are 79 percent for white students, 79 percent for Black students, 83 percent for Asian students, and 80 percent for Hispanic students. Tennessee’s higher rates of AP exam completion stand out relative to other states with similar rates of AP course enrollment.

We did not look at differences within states or within schools, both of which can drive the broader patterns in the national and state-level data. For example, recent research from Florida demonstrates similar patterns of Black students being less likely to take AP exams than their peers. Further investigation of local context finds that students living in rural school districts in the Florida panhandle are particularly unlikely to take AP exams. The authors credit this gap to a lack of qualified teachers in these regions.4 Further analysis along these lines can provide deeper insight by looking at these localized differences to provide additional information on how test taking is distributed at the state and local levels.

Implications

There are several possible explanations for why there is such wide variation in course completion across racial and geographic groups. From a statistical standpoint, the size of student groups


influences average test-taking rates; states with small populations of racial and ethnic minorities reflect larger gaps between AP course enrollment and test taking when a few students do not take the AP exam. The same number of students who do not take the AP exam in a different state with a larger population of enrolled AP students translates into a smaller test-taking gap.

One possible explanation is that AP exams may be cost prohibitive for some students. As of 2016, AP tests cost students $92 per exam. Nationally, the College Board allows low-income students to pay a reduced rate of $53 per exam. But there is wide variation in state and school district policies regarding additional financial support to pay for exams that range from zero dollars to covering exam fees in full. And although places like Florida cover the costs of AP tests, gaps in who takes the exams persist.

Moreover, the resources available to start AP programs vary greatly from state to state. Ten states provide incentives for schools to create AP programs, including supplementary funding for instructional materials. Further possible recommendations to promote AP exam completion include supporting the recruitment and training of subject experts to teach AP courses, as well as the promotion of open-enrollment policies in AP courses to establish a culture of AP course completion.

These national- and state-level findings of AP test taking among public school students help educators and policymakers better understand which students are not receiving the full academic benefits of AP courses. In the future, states can look to encourage AP test completion for all groups, rather than focusing exclusively on AP course enrollment, to reduce course-credit burdens in postsecondary education.

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