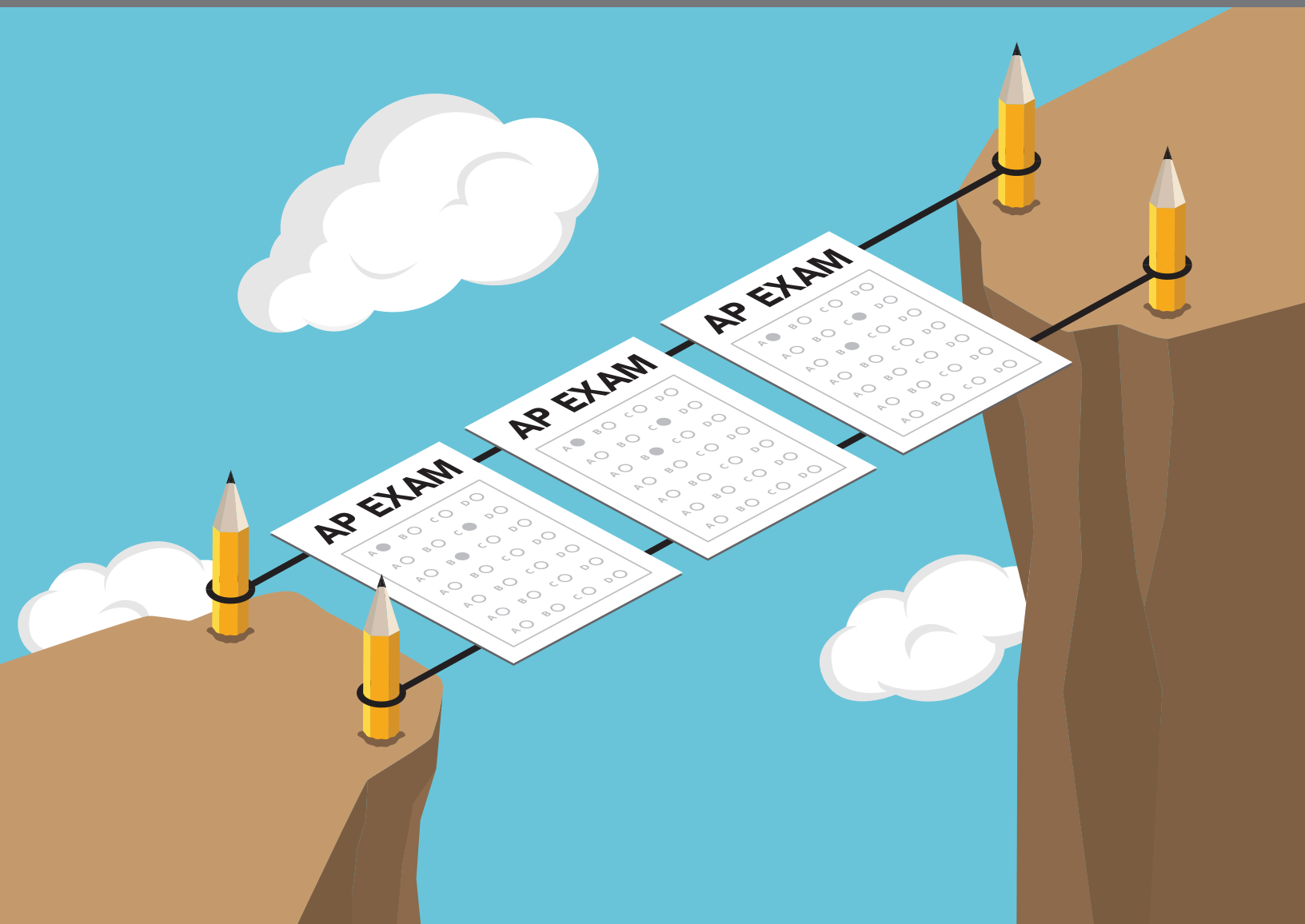


---

# THE ROLE OF ADVANCED PLACEMENT IN BRIDGING EXCELLENCE GAPS

---



Chester E. Finn, Jr. & Andrew E. Scanlan

This report presents select findings from the authors' book,  
*Learning in the Fast Lane: The Past, Present, and Future of Advanced Placement*,  
published by Princeton University Press in 2019.<sup>1</sup>

February 2020

*Support for this project was provided in part by the Jack Kent Cooke Foundation. Research projects funded by the Cooke Foundation examine issues that affect high-achieving students with financial need. The views expressed in this report are those of the authors, and do not necessarily reflect the opinions of Foundation staff members or Board of Directors.*

## INTRODUCTION

The U.S. education system has long been plagued by **excellence gaps**: discrepancies among the percentages of students with greater or lesser advantage who reach the highest levels of academic performance. Achievement levels often correlate with students' family income, parental education, geographic location, and racial or ethnic identity. Family income, for instance, is heavily associated with academic success. Results from the National Assessment of Educational Progress (NAEP), which tests students in grades 4, 8, and 12 in reading, math, and science, reveal that students eligible for the National School Lunch Program (i.e., with a family income less than 185 percent of the poverty level) are less likely than their peers to attain the advanced level of achievement in these core subjects.

Even more concerning, a recent analysis of NAEP data by the Jack Kent Cooke Foundation found that the excellence gap has been growing: in grade 8 math, for example, a gap of 3 points at the advanced level between lower-income and other students in 1996 had more than quadrupled to 13 points by 2017.<sup>2</sup> This income-based excellence gap continues into college and beyond. Academically advanced students who score in the top 25 percent in grade 10 math and reading from families in the bottom socioeconomic quartile are less likely to enroll in college or complete a college degree than those whose families are in the top quartile.<sup>3</sup> Those students who do complete college, moreover, are less likely to earn a graduate degree.<sup>4</sup>

Disparities in academic performance are largely traceable to unequal access to quality schooling and other educational opportunities and resources, and such disparities are not limited to income. There is also, for example, a racial and ethnic excellence gap, a geographical excellence gap (particularly when comparing rural students to their suburban and urban peers), and (in STEM subjects) a gender excellence gap.

Narrowing such gaps is a major priority in educational reform efforts, and there is one large and well-established

program with great potential to assist with that quest that has not drawn the attention or plaudits that it deserves. Over the past 60 years, the Advanced Placement (AP) program has quietly worked its way into the offerings of most U.S. public and private high schools, the policies of many states and districts, the admissions and placement decisions of hundreds of universities, the educational aspirations of countless families, and the academic programs of innumerable college students. The AP program enjoys an excellent reputation, has distinguished itself for its high standards of rigor and quality, and is broadly popular among both parents and educators, including many who bristle at other items on today's education-reform agendas. Remarkably, even in these highly politicized times, the Advanced Placement program has become a de facto national high school curriculum joined to a battery of exacting tests that are widely deemed worth "teaching to."

Along the way, the AP program has gradually evolved into a significant player in the longest-running and most compelling reform impulse of all: to widen educational opportunity and foster upward mobility for disadvantaged youngsters, thus also shouldering part of the large challenge of eradicating the country's persistent and problematic excellence gaps.

In this research brief, we examine AP's role in helping disadvantaged students achieve the highest levels of academic success. To do so, we draw upon data from many sources, including the College Board; Applied Education Research, Inc.; the National Center for Education Statistics; the Civil Rights Data Collection; the U.S. Census Bureau; an extensive review of the available literature; and interviews and site visits that we conducted.

We begin with a brief history of AP and then examine the program's effect upon three excellence gaps in particular: geography, income, and race. We report on trends in AP access, participation, and outcomes before concluding that, while nontrivial challenges remain, the AP program has emerged as a valuable tool in narrowing the many excellence gaps that continue to beset American education.

## Brief History

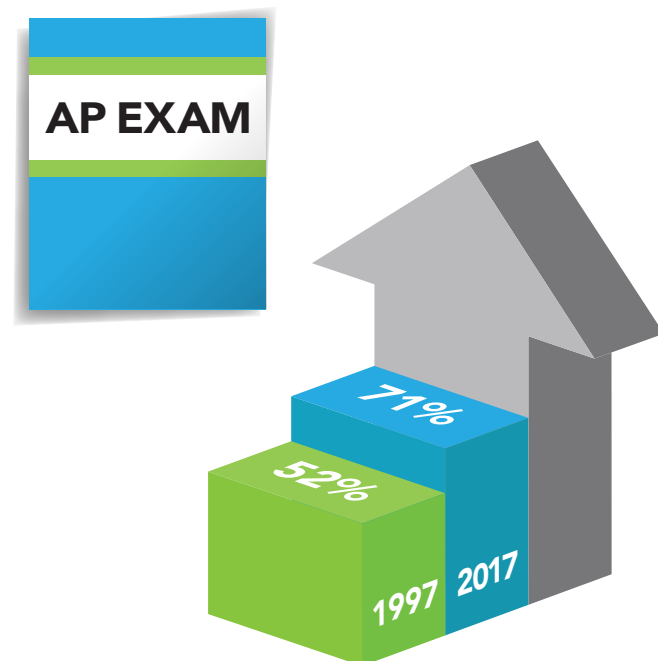
The Advanced Placement (AP) program is privately operated, mostly privately financed, and almost entirely voluntary — for high schools, teachers, and students alike. Dating to the mid-1950s, it has been managed almost since day one by the nonprofit, nonpartisan College Board. Students enrolled in an AP course receive college-level instruction while in high school and may opt to take the AP examination for that subject. Tests are scored on a five-point scale: 5 = extremely well qualified (to succeed in the next level of college coursework), 4 = well qualified, 3 = qualified, 2 = possibly qualified, 1 = no recommendation.

For its first two decades, the AP program mostly served a small number of top students in elite private and public high schools. As a result, most of its beneficiaries were young people from well-off backgrounds already on their way to college. Beginning in the late 1970s, however, a profound directional shift began with the emergence of a second major AP mission: helping capable disadvantaged students

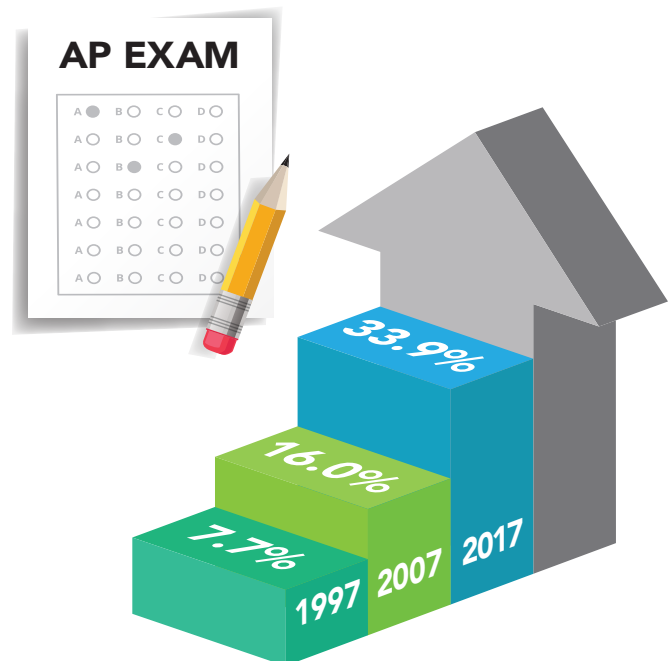
master college-level academic curriculum during high school; boosting their confidence that they may in fact be “college material,” even if family members and neighbors had never attended; and — as with their more privileged age-mates — attaining exam scores to elevate their admissions prospects and kick-start their progress toward postsecondary degrees.<sup>5</sup>

Today, a host of policies, auxiliary programs, and booster organizations have widened access to AP coursework, and recent decades are notable for the program’s remarkable growth across multiple dimensions (Figures 1 and 2). In 2018, some 2.8 million students enrolled in nearly 23,000 high schools around the world took more than five million AP exams. Just over three million of those exams yielded scores of 3 or higher on AP’s five-point scale, which means many postsecondary institutions will accept these scores for degree credit or, at least, waive students out of introductory college classes in those subjects. Nationwide, 58.5 percent of all AP exams taken in 2018 received scores of 3 or higher, a slight increase from 2017 but down from 64.5 percent in 1997.

**Figure 1:** Percentage estimate of all U.S. public high schools that offer AP exams:



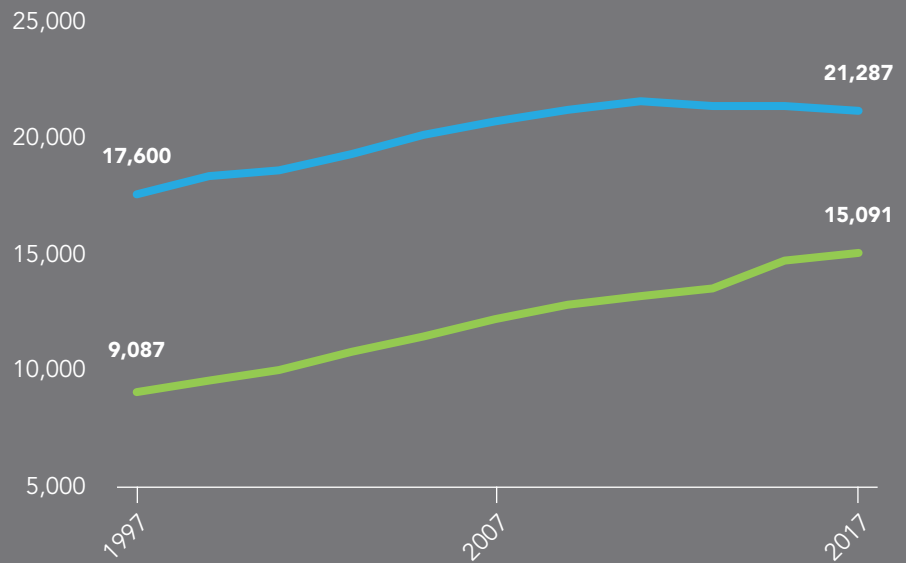
**Figure 2:** Percentage estimate of all U.S. public high school students that took AP exams:



**Figure 1 (Detail):**  
**U.S. Public High Schools Administering AP Exams, 1997–2017**

Total public high schools in U.S.

Public high schools offering AP exams



Sources: College Board and National Center for Education Statistics

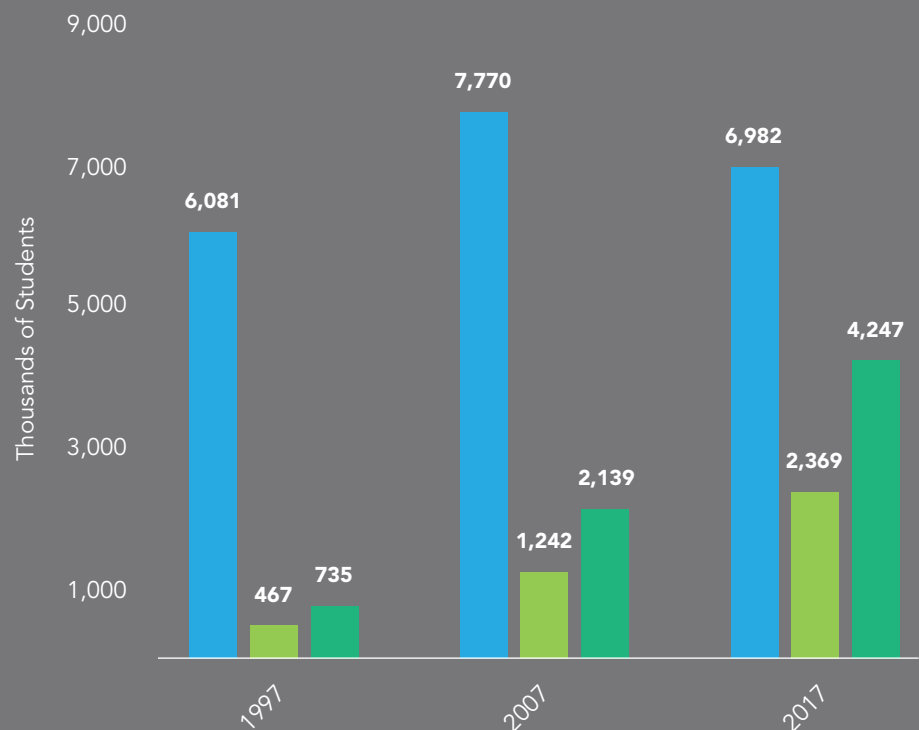
Note: “AP schools” are defined by the College Board as schools offering AP exams to at least some students, whether on campus or elsewhere. Schools with off-campus testing were first included in 2015, so some of the recent increase in school numbers may be due to this definitional change.

**Figure 2 (Detail):**  
**Grade 11 and 12 Public School Enrollments, Public School AP Students, and AP Exams Taken in U.S. Public Schools**

Grade 11 and 12 public enrollment

Public AP students

Public AP exams



Sources: Applied Educational Research, Inc., College Board, U.S. Census Bureau, and National Center for Education Statistics

Notes: Grade 11 and 12 enrollment data come from Applied Educational Research, Inc. and are cited by the College Board. While these data show a decline between 2007 and 2017, other sources yield slightly different results. The U.S. Census Bureau shows that total public high school enrollment fell from 15.6 million in 2006–7 to 15.3 million in 2016–17, while the National Center for Education Statistics reports 15.08 million in 2006–7, rising slightly to 15.11 million in 2016–17.

## GAPS IN AP ACCESS, PARTICIPATION, AND OUTCOMES

To what extent has the explosion in overall AP participation yielded a narrowing of excellence gaps? Below, we examine disparities in AP participation by geography, income, and race. We examine these gaps according to several criteria: (1) determining whether students have *access* to AP at their school; (2) among students who do have access, determining the rates of *participation* in AP; and (3) among students who do participate, what percent achieve a successful *outcome* by scoring (on a scale of 1 to 5) at least a 3, which is the typical score necessary in order to receive college credit.

### Excellence Gap #1: Geography

Unequal access to AP comes in many forms. Where students live, for example, has a disproportionate effect upon their access to the program. As Figure 3 reveals, state participation rates in 2017 (in terms of numbers of AP exams taken) among students in grades 11 and 12 differed greatly. Wealthy, densely populated coastal states such as Maryland, Florida, and California had high rates of Advanced Placement participation, while more sparsely populated states like Wyoming and North Dakota had far lower rates. On the whole, students living in the ten states with the lowest participation rates were about three times less likely to take AP exams than students in the top ten states.

What can be missed in cross-sectional snapshots such as these, however, is changes in participation over time. In Texas, for example, half of high school graduates in 2013 had taken at least one AP exam during their high school careers, more than double the rate (23 percent) just a decade earlier. Similarly, in New York State, 26 percent of graduates left high school in 2013 having taken at least one AP exam, up from 16 percent in 2003. These findings imply that state or local policies and practices can have a large effect upon AP participation rates (see “Snapshot: Fort Worth, Texas” on Page 7).

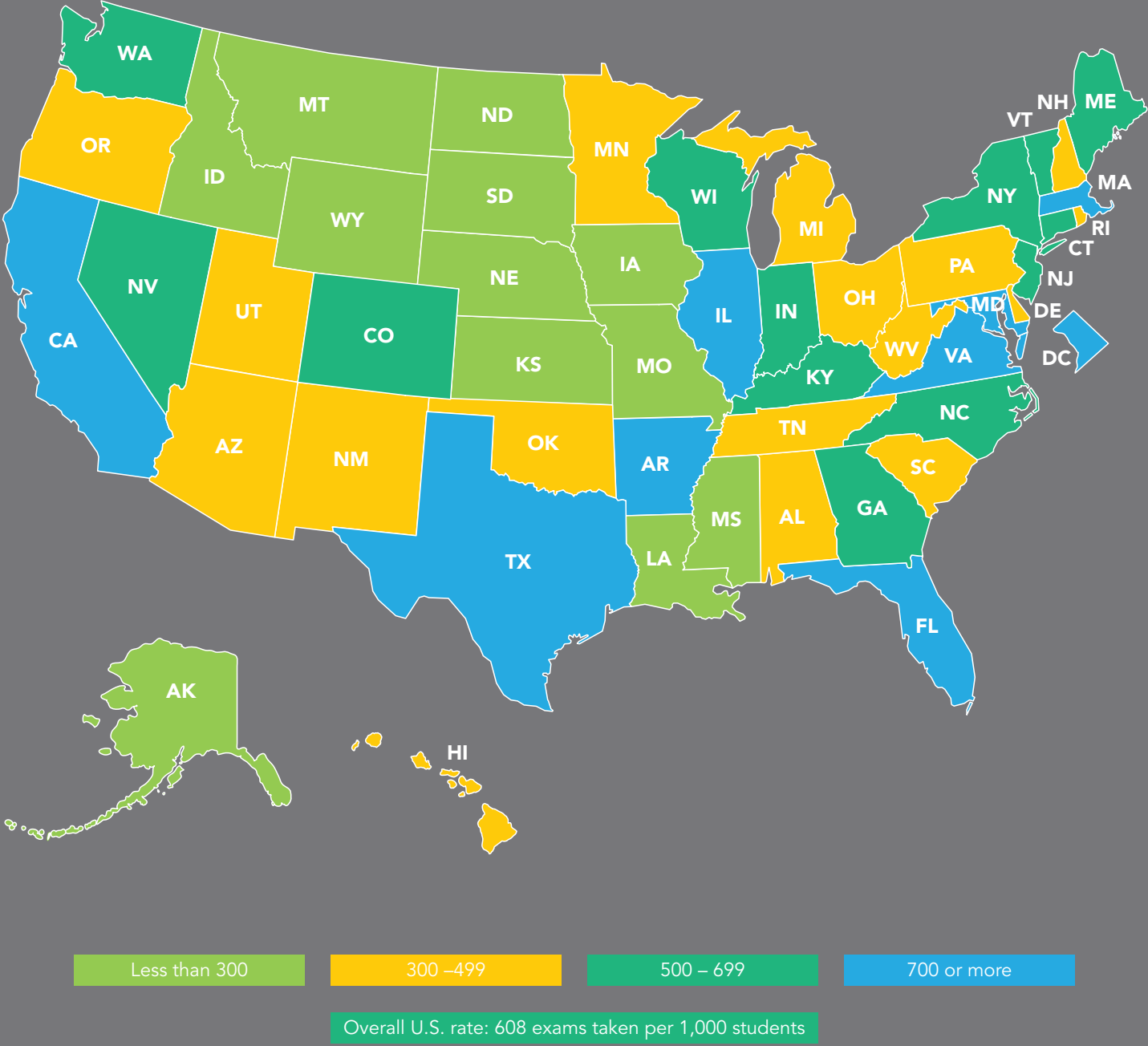
Differences within states abound, too, with AP access a particular problem for rural students (many of whom are also economically disadvantaged).<sup>6</sup> According to one study, just 23 percent of rural seniors in 2015 had taken an AP exam during high school, versus 36 and 37 percent, respectively, among urban and suburban seniors. As participation has risen across the country, the gaps between rural and urban/suburban schools have narrowed somewhat, but they remain significant due to challenges stemming from school size, infrastructure, human capital, economics, and pupil transportation.<sup>7</sup>

### Inequalities within Districts and Schools

Inequalities in AP course offerings also exist among and within school districts, with the urban/rural divide again featuring prominently.<sup>8</sup> A 2018 report from the U.S. Government Accountability Office (looking at 2015–16 data) found that 64.2 percent of rural or small-town schools offered some AP courses, compared with 70.4 percent for urban schools, and 83.1 percent for suburban schools.<sup>9</sup> The disparity grows when geography is examined in conjunction with income: among high-poverty schools, 47.5 percent of those in rural communities or small towns offered some AP courses, versus 63.9 percent for urban schools and 66.4 percent for suburban schools.

Yet that does not tell the full story regarding the challenges of accessing AP courses in rural areas. One 2015 analysis, for instance, reported that nearly *half* of rural districts had *no* secondary school students enrolled in AP courses, compared with only 20.1 percent of urban districts and 5.4 percent of suburban districts that had no AP participation. What’s more, this study found that remote rural districts are nearly ten times less likely to offer access to AP courses than larger rural districts on the fringes of urbanized areas — demonstrating that access is strongly correlated with the *degree* of rurality.<sup>10</sup> Attempting to bring AP courses into remote areas, several states are turning to online technology (see “Snapshot: the Mississippi Public School Consortium for Educational Access,” Page 8).

**Figure 3:** Advanced Placement Exams Taken per 1,000 Grade 11 and 12 Students in the United States in 2017, by State (and District of Columbia)



Sources: College Board and Applied Educational Research, Inc.

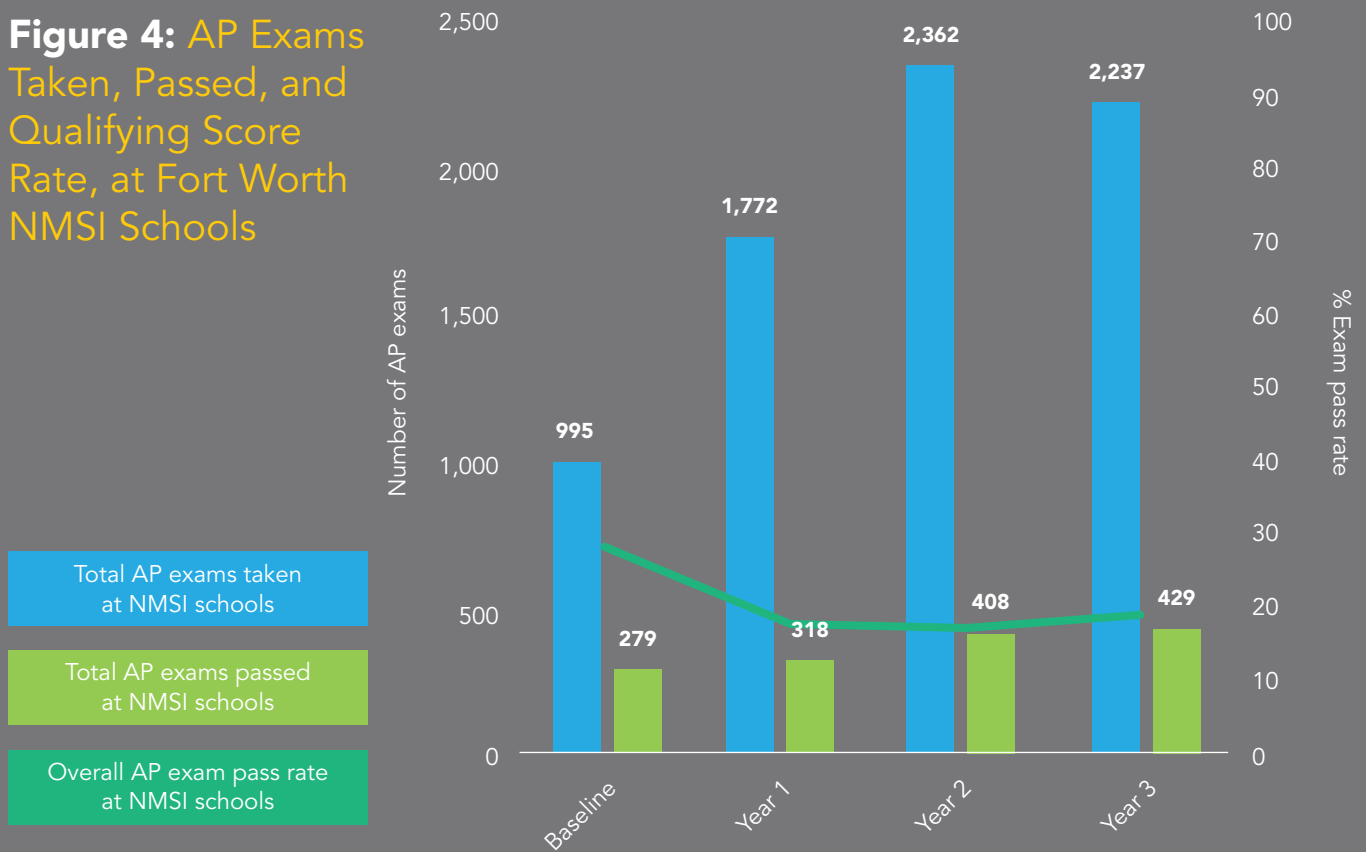
Note: Includes public school students only.

AP course offerings also diverge within multi-high school districts. In Washington, DC, for example, Woodrow Wilson High School in the city's prosperous northwest region offered 41 separate sections of 27 different AP subjects in 2018–19. Meanwhile, at Anacostia High School in the city's underserved southeast region, just seven sections in seven subjects were taught during that same year.<sup>11</sup>

Even when a school offers AP courses, additional inequalities may arise. Access to such courses remains “gated” in a number of places, meaning that favorable teacher

recommendations or top GPAs are required even to enter the class.<sup>12</sup> Teachers may seek to limit participation in their classes to students they are eager to instruct or those whom they expect to ace the exams. A Fordham Institute survey of more than a thousand AP teachers in 2009 found 63 percent of teachers felt that more, not less, screening was needed for students seeking to enter AP classes.<sup>13</sup> To the extent that this desire to limit participation further excludes rural students, young people from low-income families, and racial and ethnic minorities from AP classes, it contributes to the persistence of excellence gaps.

**Figure 4: AP Exams Taken, Passed, and Qualifying Score Rate, at Fort Worth NMSI Schools**



Source: National Math and Science Institute



## Snapshot: Fort Worth, Texas

As noted above, rates of AP participation in Texas have soared in recent years, from 23 percent in 2003 to 50 percent in 2013. As such, it is instructive to examine a Texas-based initiative to further expand AP's reach into one of its most challenging school districts.

The fifth biggest city in Texas, Fort Worth shares many familiar urban challenges, but also has several distinctive ones. Tarrant County, which surrounds Fort Worth, contains 20 different school districts, many of which have boundaries that snake in and out of the city limits. Meanwhile, the Fort Worth Independent School District (FWISD), which is the largest school district and spans most of the urban core, is an exceptionally challenging environment in which to launch an ambitious education reform. Fewer than 10 percent of its graduating seniors reached 1100 on the SAT or 24 on the ACT in 2016. (The statewide figure, by contrast, was 22.5 percent.)<sup>14</sup> That number sank to a bleak 2.3 percent for black students and 5.2 percent for Latinos — two groups which comprise 85 percent of the district's students. A full three-fourths of its students, moreover, come from low-income families. It's safe to say that the Fort Worth Independent School District is far removed from the elite environs of Advanced Placement's earliest adopters — yet today, it's typical of many locales where AP expansion is on the agenda.

Governmental and political turmoil have long beset the Fort Worth school system, with fraught race relations, patronage, favoritism, and neighborhood envy contributing to its difficulties. Its recent leadership history has also been turbulent, with seven superintendents since 2004.<sup>15</sup> Previously, this 85,000-pupil district had thriving AP courses in multiple subjects in just one school. Elsewhere, Advanced Placement offerings were sparse and generally "gated," only open to students approved by teachers.

That began to change in 2013, when the National Math and Science Initiative (NMSI) and several local philanthropies, spearheaded by the Sid W. Richardson Foundation, teamed up with then-superintendent Walter Dansby to try to bring Advanced Placement into five more of the 18 FWISD high schools.<sup>16</sup> NMSI and the district chose schools with heavy minority populations. The intervention was to last three years and set ambitious goals: increasing the number of students, particularly those belonging to disadvantaged groups, who enrolled in STEM and English AP courses, as well as boosting the number who earned qualifying scores on the exams that followed. A further ambition — also standard operating procedure for NMSI — was to leave behind a durable AP culture in participating schools.

Each participating school worked with NMSI to encourage open enrollment in AP classes, seeking to relax the culture of exclusivity and persuade reluctant students to sign up. The project furnished financial rewards to schools, teachers, and students who succeeded on AP exams and instituted new systems of support and training for teachers. It supplied tutoring and extra study sessions for students, committed to sharing data with schools, administered program and performance reviews, and assisted school leaders in myriad other ways. Concurrent policy changes by the district surely had a positive impact as well, as the district ordered all FWISD high schools to offer AP courses, to require students taking the courses to sit for the exams, and to cover their fees.

Ultimately, despite considerable implementation challenges, such as attrition of key staffers in the central office and teacher turnover, AP participation grew impressively in the NMSI-supported schools during the initiative's time in Fort Worth: the number of pupils taking at least one AP exam in NMSI-supported subjects soared from 937 individuals during the year before implementation to 1,451 by year three. The number of exams taken in these subjects rose from 995 to 2,362 at its peak (see Figure 4).<sup>17</sup> In addition, in the two schools for which there is a fourth year of data, exam numbers rose further after NMSI's exit. Students also took more exams per participant, rising from an average of 1.1 exams (in math, English, or science) in the baseline year to 1.5 per student by year three.

Whereas the gains in *access* and *participation* were significant — even in non-NMSI schools in the district — gains in qualifying scores were less impressive. Across the five NMSI schools, these increased from 279 in the base year to 429 in year three. But the overall pass rate barely budged, staying just under 20 percent across the life of the intervention. As a result, legitimate questions can be raised about the effectiveness of the initiative — especially since we estimate the cost of each additional qualifying score earned by students in Fort Worth's five NMSI high schools during the three-year initiative to be about \$9,500.<sup>18</sup> But to the extent that access and participation must exist before excellence gaps in scores can be addressed, the Fort Worth Independent School District is undoubtedly closer to achieving this goal than it was before the initiative commenced.

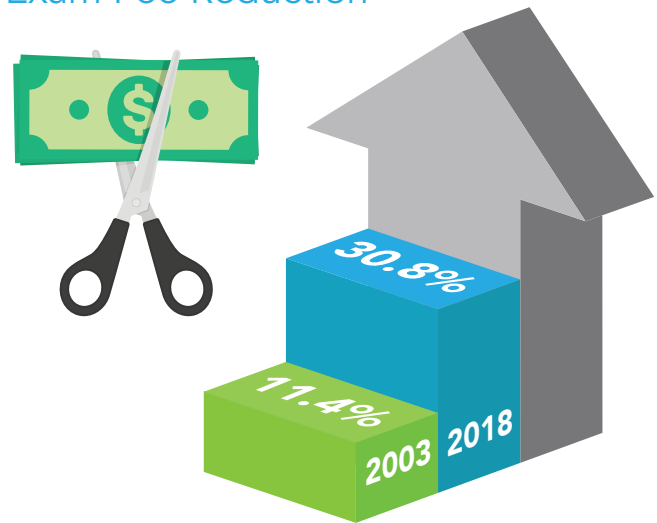


## Excellence Gap #2: Income

Using the incidence of exam fee reductions given by the College Board as a proxy for exam-taking by low-income students,<sup>19</sup> recent years have witnessed a startling increase in such students participating in AP. In the public high school graduating class of 2018, 30.8 percent of the students taking AP exams qualified for these fee reductions, up from 11.4 percent in 2003 (Figure 5). In all, over 380,000 graduates in 2018 who qualified for fee reductions took at least one AP exam, up from over 58,000 in 2003.<sup>20</sup> This represents tremendous progress over a short period of time. Yet several income-linked gaps remain.

Federal data indicate that about half of all U.S. public school students attend schools designated as high- or mid-high poverty.<sup>21</sup> With only one-third of AP test-takers qualifying for fee reductions, this suggests that low-income students remain significantly underrepresented in AP exam rooms and presumably also in AP classrooms. Indeed, researchers who

**Figure 5: Percentage of All AP Exam Takers Who Received an Exam Fee Reduction**



## Building Capacity: The Mississippi Public School Consortium for Educational Access<sup>24</sup>

Mississippi has among the largest income-based excellence gaps in AP participation and outcomes. But an initiative is underway to shrink this gap even in the most remote and impoverished districts. The Mississippi Public School Consortium for Educational Access is a group of districts that have joined together to provide advanced STEM classes to promising high school students in rural and high-poverty communities across the state. In 2017, the Consortium launched its AP access initiative, supported by a Cooke Foundation grant. This project presents classes in a blended format. The lead instructor is an expert teacher who presents material largely through asynchronous video. Mississippi-based, AP-certified supervisory teachers, meanwhile, create the curriculum, maintain an online course platform, and support in-class instructors with detailed lesson plans and pedagogical guidance. In-class teachers implement lesson plans and provide additional instruction. Students also receive substantial additional instruction

at residential programs across the state. STEM majors from Yale, Stanford, MIT, the University of Virginia, and other universities provide regular tutoring, both in person during the residential programs and by videoconference throughout the school year. Students are also provided with textbooks and workbooks, plus substantial online resources. To date, 170 talented students at 14 schools have participated in the AP access initiative. The number is expected to grow to over 200 students by 2020, and other schools and subjects are being added. The success of this initiative offers a model for other rural areas and shows that talented students — no matter how geographically isolated or disadvantaged — can be provided with high-quality coursework.



compared the enrollment rates of lower-income versus other students in AP coursework have estimated that equalization of these enrollment rates would result in more than 450,000 additional students from low-income families taking AP courses.<sup>22</sup>

We also find suggestive evidence that some states do much better than others at attracting low-income students into AP classrooms. In Texas, for example, half of all 2013 high school graduates who scored 3 or higher on an AP exam before graduating came from low-income households, almost identical to the portion of K–12 students in Texas who qualified for federally assisted lunches (although both measures are not directly comparable). In Mississippi, by contrast, just 33 percent of 2013 graduates who had taken an AP exam during high school were low-income, although 71 percent of the state’s K–12 population was eligible for subsidized lunches.<sup>23</sup>

Income-based gaps are also found within schools. One study showed that low-income students enroll in AP classes at less than a third of the rate of their middle- and high-income peers attending the same school.<sup>25</sup> Another reported that students whose parents graduated from college were nearly twice as likely to participate in AP as those whose parents did not complete high school — though it should be noted that this gap (measured in 2013) was down from three times as likely back in 1994.<sup>26</sup>

Finally, and perhaps most importantly, there remain significant income-based gaps in AP test performance. Consider Texas once again: its gains in AP *access* and *participation* between 2003 and 2013 were truly staggering, with the number of students from low-income backgrounds

who earned at least one qualifying score rising from 5,700 to 22,900. At the same time, however, the *rate* of low-income students earning a qualifying score actually fell, from 51 to 45 percent.

Similar trends are present in other states: higher absolute numbers of low-income students achieving qualifying scores alongside lower rates of achievement. In Florida, for example, 3,600 low-income graduates earned at least one qualifying score in 2003. While that figure rose to 12,800 by 2013, the pass rate fell from 57.5 to 45 percent. In California, the number of low-income graduates with at least one qualifying score rose from 12,900 in the graduating class of 2003 to 38,300 in 2013. But as in Texas and Florida, the pass rate fell, this time from 69 to 59 percent.<sup>27</sup>

Nationwide, according to the College Board, in 2013, 275,864 low-income graduates had taken at least one AP exam during high school, among whom 131,911 earned at least one qualifying score or more, meaning that 48 percent of all AP exam-taking low-income graduates earned at least one qualifying score. That is certainly respectable — but it must be placed alongside the pass rate of 65 percent for that year’s AP exam-taking graduates who were *not* from low-income backgrounds (Figure 6).<sup>28</sup>

Across the nation, just 21.7 percent of 2013 high school graduates who earned at least one qualifying score came from low-income backgrounds, even though low-income students represented about half of overall K–12 enrollment. Unsurprisingly, the states with the largest income-linked gaps are those with the highest poverty rates (Figure 7): Louisiana, for example, had 66.2 percent of its public school enrollment from low-income backgrounds, but just 15.4 percent of its

**Figure 6: Percent of AP Test-Takers Receiving a Score of 3 or Higher**



Source: *The 10th Annual AP Report to the Nation* (New York: College Board, 2014).

successful graduates (defined as those students earning at least one AP score of 3 or above) were from low-income families. Similar gaps exist in Mississippi, with 70.6 percent of its K–12 public school students coming from low-income families compared to 20.9 percent of its successful AP test-takers. In Alabama, these figures are 55.1 and 12.8 percent. Overall, just three states — Texas, California, and New Hampshire — had less than a 20-percentage point gap between their share of low-income enrollment and the share of low-income seniors who leave high school with one or more AP qualifying scores on their transcripts.<sup>29</sup>

Even with state policies in place to incentivize low-income schools to offer more AP courses, sometimes the progress shown by such schools is eclipsed by that of neighboring

middle- and high-income schools. This can result in gaps that continue to widen even as access improves for lower-income kids.<sup>30</sup> For example, multiyear studies from Texas (1994 to 2000), California (1997 to 2003), and Florida (2002 to 2005) found that while schools with many low-income students did increase their AP offerings, high-income schools were growing their own enrollments at faster rates.<sup>31</sup>

Income-based excellence gaps in performance notwithstanding, many students from disadvantaged communities do successfully enroll in AP courses and achieve a score of 3 or higher on the AP exam. We provide one early example of such success below (see “Snapshot: Jaime Escalante and Garfield High School”).

## Snapshot: Jaime Escalante and Garfield High School

A high-profile example of utilizing AP as a booster rocket for the academic performance of economically disadvantaged students occurred in the early 1980s at Garfield High School, in an impoverished section of east Los Angeles populated mostly by immigrant Hispanic families. The initiative was spearheaded by math teacher Jaime Escalante, who was immortalized in the 1988 film *Stand and Deliver*, and in Jay Mathews’s biography of the same year, *Escalante: The Best Teacher in America*.

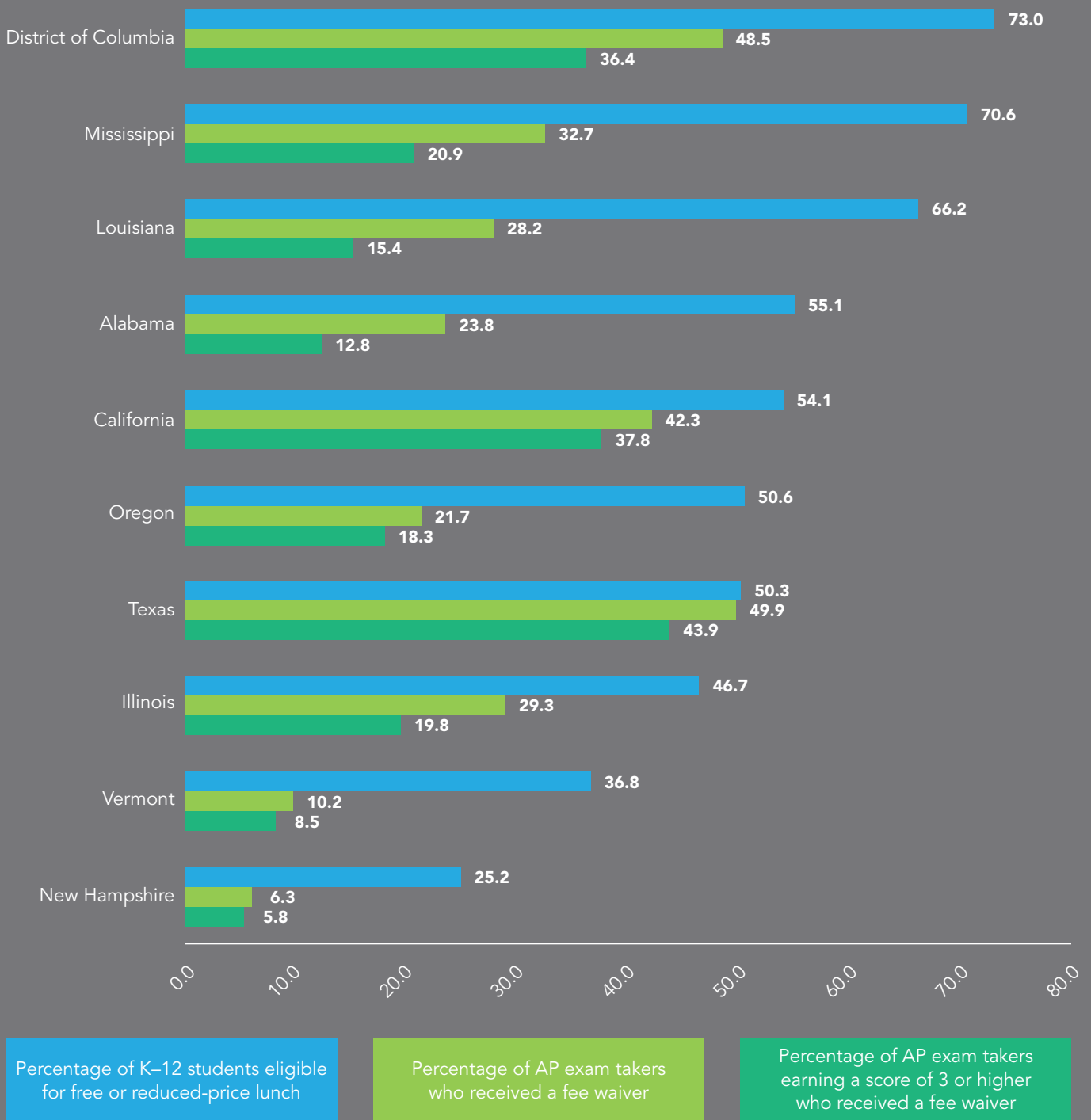
The Escalante story vividly depicted how AP could boost the educational prospects of impoverished kids from an inner-city high school. When Escalante arrived at Garfield in 1974, it was a troubled place, struggling with low achievement, gangs, fights, and hundreds of dropouts. Compounding the school’s problems was a culture of lax expectations: teachers declined to push their students very hard, fearing that they would grow discouraged and drop out. Escalante, however, sensed that his pupils could achieve far more if their sights were raised and they were encouraged to reach beyond their self-perceived (and school-fostered) limits. Escalante launched his first AP Calculus class in 1978, and by May 1981, all but one of his 15 test-takers achieved scores of 3 or better.

The following year, his students performed so well on the AP Calculus exam that Education Testing Service (ETS) monitors suspected cheating. After great controversy, almost all the students retook the test — and all who took it again passed. Escalante and his pupils became national celebrities, praised by Education Secretary William J. Bennett and Presidents Ronald Reagan and George H. W. Bush.<sup>32</sup>

Garfield’s AP program grew rapidly: by 1988, only six schools in the country prepared more students for the Calculus test and AP enthusiasm had spread to other subjects. Garfield pupils from 16 AP classes took 443 exams that year and earned 266 qualifying scores. This impressive example of AP success in a seriously disadvantaged school vividly demonstrated that high expectations and effective instructors could work wonders.<sup>33</sup> AP was by no means the sole source of such expectations, but Garfield showed that it could serve this purpose — and serve it successfully.



**Figure 7:** Income-based Excellence Gaps in Advanced Placement Exam Takers and Score Results, 2013, Selected States



Source: *The 10th Annual AP Report to the Nation* (New York: College Board, 2014).

## Excellence Gap #3: Race and Ethnicity

AP participation varies widely by race and ethnicity. In 2017, for example, white and Hispanic students were twice as likely as black students to take AP exams, while Asian students took such exams at three times the rate of white and Hispanic students.

There is some good news: when we compare exam-taking per thousand high school pupils, we see significant increases since 1997 for all groups (Figure 8). Hispanic students, for example, participated in 2017 at more than eight times their rate of 1997. They now come close to the rates of white students and the nation as a whole. Although sizable gaps remain between black students and their peers, African Americans took AP exams in 2017 at more than eight times their 1997 rate. What's more, AP participation (in terms of exams taken) by underserved minority students (i.e., black and Hispanic students), grew faster than the participation rates of white and Asian students over the same period.

In short, AP's cohorts have become more demographically and geographically diverse, an indication that it is increasingly being deployed to strengthen the schooling and postsecondary prospects of low-income and minority students who have long lacked access to high-level coursework. When we compare the demographic make-up of AP exam takers to that of the overall K–12 student body, we see some positive gains over the past 20 years (Figure 9). In 2017, representation of Hispanic/Latino students among AP exam takers nearly mirrored their presence in high school students nationally. Black students' representation has increased since 1997, but they are still grossly underrepresented among exam takers relative to their proportion of high school students nationally.

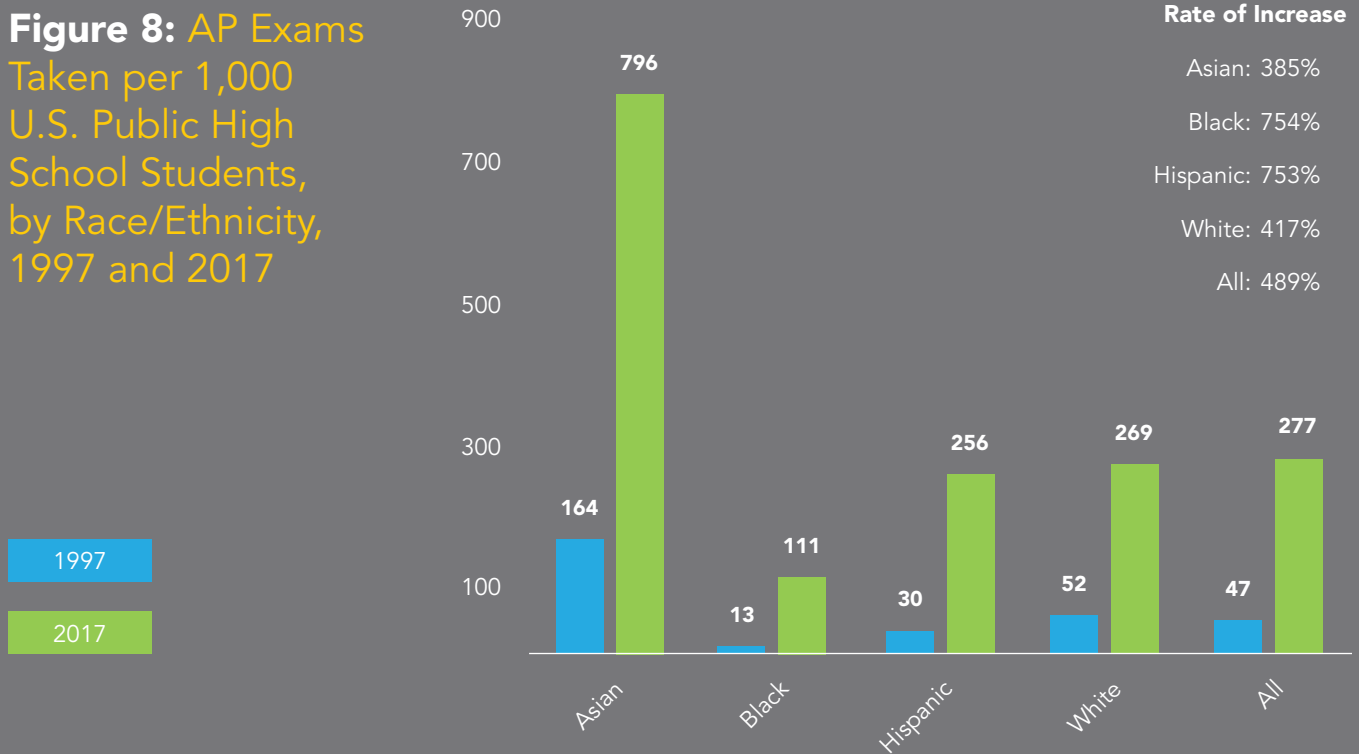
Unfortunately, even as gains have been made with respect to access and participation, the performance picture is more mixed. This is important, because the research appears emphatic: getting a qualifying score matters! Succeeding at AP (scoring 3 or above on an AP exam) is correlated with better postsecondary outcomes, particularly when students go on to major in a discipline related to their AP experiences (most notably in STEM subjects). There may also be benefits associated with scores of 1 or 2, possibly just from taking the course, but here the evidence is weaker.

Unfortunately, as AP participation among students from underrepresented groups has soared over the past three decades, their success on AP exams has not grown to the same extent. A key indicator is the percentage of students who earn at least one qualifying score before graduating. The share of U.S. public school graduates to hit that target rose from 15 percent (460,000 students) in 2008 to 23 percent (750,000 students) a decade later — a large and important change. In other words, nearly a quarter of all young Americans who complete high school are now emerging with at least one qualifying score on an AP exam. And that rising tide did not just benefit white and Asian youth. For black students, the rate doubled from four percent in 2008 to eight percent in 2018, while for Hispanic students it rose from 14 percent to an impressive 26 percent, thus surpassing both the national average and the percentage of successful white graduates that year. Combined, the number of black and Hispanic young people with at least one qualifying score under their belts rose from 80,000 in the graduating class of 2008 to nearly 210,000 in 2018, boosting their share of all such students from 17 to 28 percent over the same period.<sup>34</sup>

What's most troubling is that pass rates — i.e., scores of 3 or higher — have fallen faster among black and Hispanic youngsters than in the student population as a whole. We see that, as the number of AP exams taken by Hispanic students rose sixteenfold from 1997 to 2017, their success rate on those exams sank from 59 to 41 percent — and dropped all the way to 34 percent when results on AP Spanish exams are excluded. We see a similar pattern for black students: while participation rates have risen, pass rates have fallen. In contrast, pass rates for white students remained relatively even, and Asian student pass rates rose.

Of all exams taken in the United States by black students in 2017, 42 percent resulted in scores of 1, versus 31 percent for Hispanic students, 12 percent for white students, and 11 percent for Asian students (Figure 10). Among all exams taken, the proportion resulting in scores of 1 or 2 rose from 36 to 42 percent between 1997 and 2017, but by 2017, 58 percent of tests taken by Hispanic students and 70 percent of tests taken by black pupils fell within this range. A score of 2 may signal that a participating student got something from the AP course, even if the knowledge gained didn't qualify for college credit, but a score of 1 may show nothing more than having sat in the exam room. While it's possible that the student gained valuable study skills and may have begun to

**Figure 8: AP Exams Taken per 1,000 U.S. Public High School Students, by Race/Ethnicity, 1997 and 2017**



Sources: U.S. Census Bureau and the College Board

**Figure 9: Representation of Black and Hispanic Students Among Public High School Enrollments and AP Exam Takers, 1997 and 2017**

Ethnicity	1997		2017	
	Percent of Total Public High School Enrollment	Percent of AP Exam Takers	Percent of Total Public High School Enrollment	Percent of AP Exam Takers
<b>Black</b>	15.0%	4.1%	15.0%	6.7%
<b>Hispanic</b>	12.3%	7.7%	24.2%	22.8%

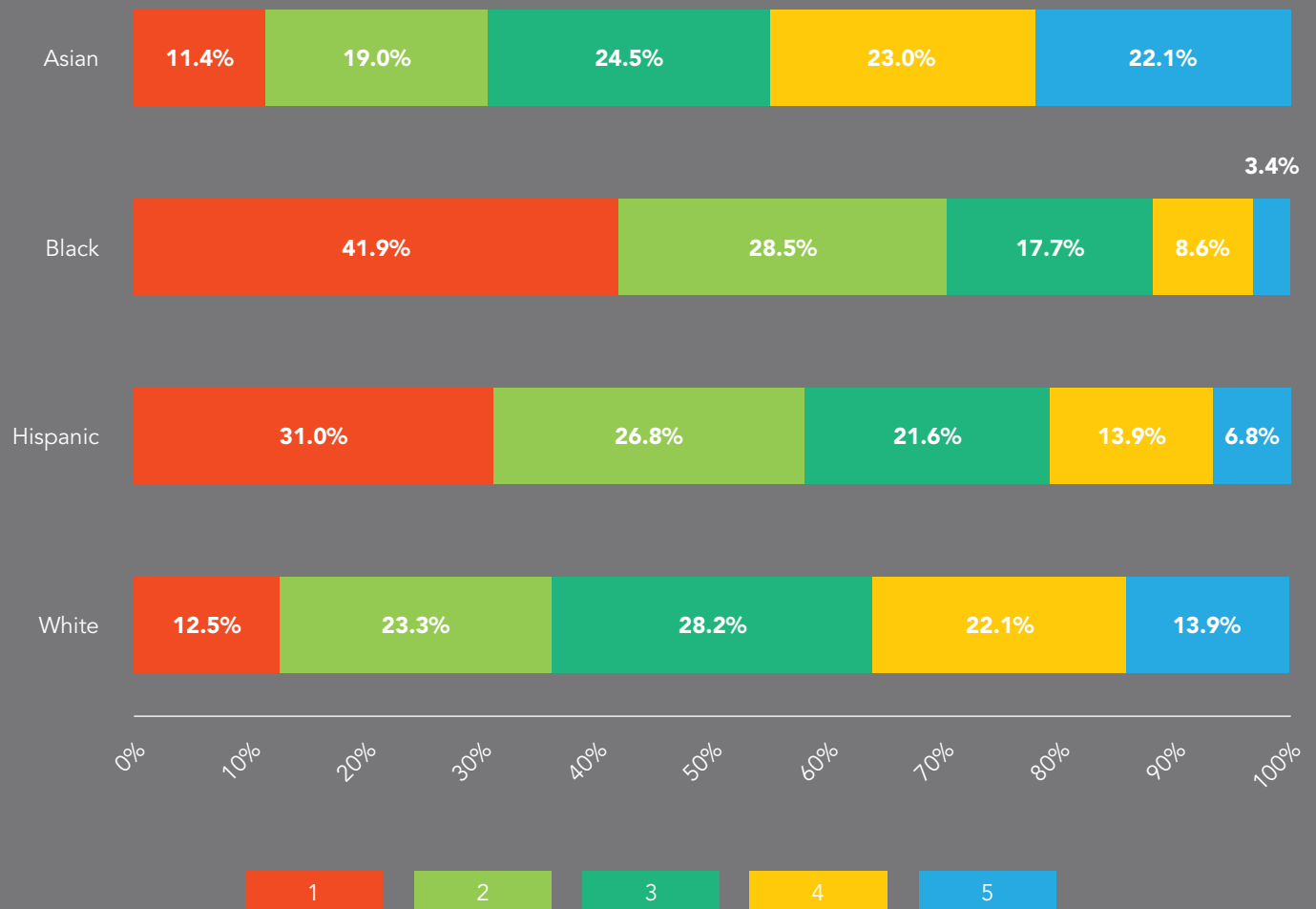
Sources: U.S. Census Bureau and the College Board

see him or herself as “college material,” it’s also possible that such a disappointing outcome might discourage them from further challenging courses.

At the other end of the scale, by contrast, scores of 4 and 5 exceed what the College Board deems “qualifying,” and make an ever-larger difference in determining whether one’s

AP score will actually yield college credit, particularly at elite private institutions that tend to have higher standards for accepting Advanced Placement credits. At this lofty level, however, we again find wide gaps: 45 percent of exams taken by Asian students in 2017 yielded 4s or 5s, compared to 36 percent for white students, 21 percent for Hispanic students, and only 12 percent for black students.

**Figure 10: AP Exam Score Distribution, by Race/Ethnicity Subgroup, 2017**



Source: Authors’ analysis of public College Board data found at College Board, “AP Data Overview,” accessed February 13, 2018. <https://research.collegeboard.org/programs/ap/data>.



## Snapshot: New York City

New York State is home to America's third largest population of AP exam-takers — 174,000 in 2018 — trailing only Texas and California. Three in ten of the state's AP students take those tests in New York City. In fact, the city's Department of Education (DOE) hosted more AP students in 2018 than all but a dozen states. Some of New York City's four-hundred-plus high schools have taken part in the program for decades, and do so in a big way, while others furnish their students with few or no AP options. As recently as 2015–16, more than a hundred NYC high schools offered no AP courses at all — and many of those schools, unsurprisingly, are located in impoverished neighborhoods full of African American, Hispanic, and immigrant youths.<sup>35</sup>

Over the years, municipal leaders (including the Jack Kent Cooke Foundation's late Executive Director and former NYC schools chancellor, Harold Levy) have sought in various ways to rectify this obvious inequality, even as they undertook numerous other school reforms.<sup>36</sup> One such initiative came in September 2013, toward the end of Mayor Michael Bloomberg's last term, when the city's DOE joined forces with the College Board and the National Math and Science Initiative (NMSI) to launch an "AP Expansion" program intended to last three years. Two years later, Mayor Bill de Blasio declared — as part of his own ambitious education initiatives — that Advanced Placement would be introduced into every high school that did not already have it (or enough of it). This venture, dubbed "AP for All," commenced in 2016, in partnership with the College Board and NMSI, as well as the nonprofit educational provider and JKCF grantee, Equal Opportunity Schools (EOS).

Numbering 53 schools at first, and growing to 77 by the end of its third year, Bloomberg's AP Expansion initiative led to nearly 2,500 students gaining access to AP courses for the first time.<sup>37</sup> As it had done in Fort Worth, NMSI provided several forms of teacher support, including four-day summer institutes, one-day curriculum workshops, mentors, and online curricular resources. There were also multiple forms of student support, including Saturday review sessions, online homework and test prep materials, and subsidized exam fees. At the building level, NMSI offered data analysis, academic and program experts, and administrative help.<sup>38</sup>

In 2013, before the expansion began, not a single student took an AP exam in 13 of the 53 participating high schools. In the other 40 schools, 973 students sat for a total of 1,148 exams in the six subjects spanned by this project. By May 2016 — the third and final year of the initiative — two and

a half times as many pupils (2,396) in these schools took nearly three times as many exams (3,249) in those subjects. Numbers continued to rise thereafter, to 2,698 students and 3,698 exams in 2017.<sup>39</sup>

Crucially, exam performance also rose: from just 196 students with qualifying scores in NMSI-supported subjects in the baseline year to 461 in 2016 and 556 in 2017.

De Blasio's bold "AP for All" initiative is seeking to expand AP in all 400 high schools in the city. Beginning with 63 high schools, the NYC DOE worked with NMSI and EOS to build AP programs by training teachers, providing curricular materials, advising school leaders, and supplying additional instruction to students who enrolled in the widened course offerings.

By May 2017 — as the first year ended — the initiative was already yielding results. The previous year, 1,155 students took 1,406 AP exams at AP for All schools. In 2017, those numbers had more than doubled to 2,499 students taking 3,126 exams. The number of young New Yorkers earning qualifying scores improved a bit, too: whereas 173 students earned 205 qualifying scores in 2016, 277 successful pupils earned 316 qualifying scores in the following year.<sup>40</sup>

As in Fort Worth, however, such initiatives are expensive. We estimate that the total price tag for the AP Expansion initiative was about \$10 million between 2013 and 2016: roughly \$47,000 annually per participating school. We also estimate that the city's price tag per additional qualifying score earned above baseline came to approximately \$11,000. AP for All, meanwhile, is slated to cost \$51 million a year by 2022 when fully phased in.



## FACTORS CONTRIBUTING TO GAPS IN PARTICIPATION AND OUTCOMES

**A**lthough causal connections are hard to prove, successful completion of AP classes and qualifying scores on the ensuing exams are undeniably associated with success in college and beyond.<sup>41</sup> Bringing this potentially life-changing benefit to more underserved youth, therefore, is a laudable undertaking. Yet many factors influence the degree to which AP courses can be used to close excellence gaps, including:

- **Prior academic preparation.** The AP program and College Board have minimal influence on what happens to students before grade 9. Disadvantaged students may not have received sufficient academic preparation to adequately prepare them for AP coursework once they reach high school.
- **School culture.** Many high schools have deeply ingrained routines, attitudes, and cultures. Several studies have illuminated the dynamics impeding access for minority students in particular.<sup>42</sup> There may, for example, be few AP teachers of color to encourage the participation of pupils of color. If teachers, counselors, and administrators are unaccustomed to attracting students from underrepresented populations into AP classrooms and then doing their utmost to help them succeed, the AP program itself has limited power to alter the situation. Amplifying the challenge are educator-preparation programs that pay scant attention to “gifted” students, much less to the special challenges of gifted-but-disadvantaged youngsters.<sup>43</sup>
- **Resources.** Dollars are sometimes needed to expand programming. From 1998 through 2016, the federal government operated several modest-sized programs of discretionary grants to states and districts to subsidize access to AP courses for disadvantaged students and to help with their exam fees. This contributed to the significant growth in numbers of low-income students participating in AP. Changes arrived in 2017, as the *Every Student Succeeds Act* (ESSA) consolidated AP dollars along with many other categorical programs into a block grant, leaving in

state and local hands the future deployment of funds to support AP access. This was seen as a potential threat to equitable access to AP courses. However, with much encouragement from the College Board and other advocacy organizations, by 2019, 27 states and DC had moved to subsidize AP exam participation by low-income students.

- **External support.** Inspirational anecdotes (such as the Jaime Escalante and Garfield High School story) aside, even when all the stars within a school align, help from outside the district is sometimes needed. Often, this help is provided by organizations like the Dallas-based National Math and Science Initiative (NMSI) or the Seattle-based Equal Opportunity Schools (EOS), which both offer programmatic support to districts and schools along with a host of field-tested strategies for placing more diverse kids into advanced courses.
- **Personal challenges.** Many disadvantaged students, including the brightest among them, face hurdles outside school, too. Although low-income and minority communities contain many families with reserves of social capital, that’s far from universal in the populations AP is now striving to engage. Family obligations and jobs consume additional time and energy, often in ways that more privileged populations are barely aware of. Disruptions at home and in neighborhoods can make it hard to concentrate on brain-wracking schoolwork. Parents lacking college experience may not be able to help with homework, and they may be less inclined to push their kids to take part in Saturday study sessions and other forms of enrichment in which more affluent parents seek to enroll their children. Even the most committed high school teachers, advisors, and external organizations can only do so much if students face too many impediments outside the school building.

Successfully implementing an Advanced Placement expansion effort, in short, demands vision, courage, and expert leadership, as well as resources and policy change.

## IN PURSUIT OF MORE EQUAL OUTCOMES

While it may not be possible without randomized experiments to be certain whether AP *causes* greater success than participating young people would otherwise realize, many studies have documented correlational success and a spread of possible benefits that go well beyond earning a passing score on the exam.<sup>44</sup> The College Board highlights four categories of benefits that may follow from AP success: improved college admissions, credit on arrival, skipping introductory classes, and gaining skills that help students do well in college. Those are also the reasons we heard during our site visits — in different combinations and with differing emphases — from high school students explaining why they take AP courses today.

They're not wrong. Participating in an AP course offers acceleration and enrichment for strong high-school students, may serve as an antidote to "senioritis," instills serious study skills and, more generally, exposes secondary-school pupils to the kinds of analysis, research, and deeper understanding that are standard practice in the classrooms of good colleges. Solid grades on one's transcript from AP classes, and high scores on AP exams, may indeed assist with admission, especially if one is applying from a little-known (or low-income or rural) high school. Degree credit based on robust AP scores is available on the overwhelming majority of college and university campuses, although the scores required to benefit from it differ, as does the type of credit to be had. The same goes for placing out of 101-level courses in various subjects.<sup>45</sup>

As participation in the AP program expands, more young people from a wider range of high schools may receive more favorable consideration by selective colleges. This diversifies the pool of visibly "eligible" college students. It may also reduce undermatching (when high-ability students fail to apply to rigorous colleges) by expanding the list of imaginable colleges in the students' eyes as well. And if AP success occurs among populations that did not previously have much of it, and this results in more such students going to college and attaining greater postsecondary success, this is undeniably a good thing.

The past decade has seen a tremendous expansion of enrollment among groups historically underrepresented in AP courses. However, as shown in this report, participation does not always translate into passing scores. Today, far too many historically underserved girls and boys who enter Advanced Placement classrooms wind up getting exam scores of 1 — and, as a result, far too many of the country's 1 scores are associated with low-income and minority students. Although increased access is bound to bring a decline in passing rates for a time, and the AP scoring system means that 1s and 2s will never vanish, it would be a huge mistake to settle for such disappointing results over the long haul. That does not mean standards must slacken, traditional AP students should have their experience diluted, or access should be curbed. Rather, it calls for redoubled efforts both before — long before, perhaps as early as pre-kindergarten — and during the AP cycle to build the skills that translate into qualifying scores for disadvantaged young people. It also calls for redoubled efforts to ensure that the adults in their schools are well prepared to escort them on this arduous journey.

Otherwise we face a dilemma: is it better to have a high *rate* of success among participating minority students or to boost the *number* of participants taking classes, even if the latter means that many more of those who enter this deepening pool cannot swim across it? Although we are persuaded that AP participation itself does some good for many of the young people who do not make it to the qualifying score threshold on exam day, guiding more students from diverse backgrounds to that threshold is the foremost challenge ahead — and it's one that policy makers and education leaders should join the College Board in addressing.

We contend that opening the AP door to more students is a good thing to do, not only for the benefit of those immediately affected but also because its implications should reverberate through what precedes and follows it as students progress on their educational journeys. *Not* expanding access, even if the price is a period of declining pass rates, would wall off an important path to upward mobility, and perpetuate societal inequalities by conferring additional advantages on the already advantaged.

## ENDNOTES

- <sup>1</sup> This report was adapted from our book: Chester E. Finn Jr. and Andrew E. Scanlan, *Learning in the Fast Lane: The Past, Present, and Future of Advanced Placement* (Princeton, NJ: Princeton University Press, 2019).
- <sup>2</sup> Jack Kent Cooke Foundation, *The Excellence Gap is Widening* (Lansdowne, VA: Jack Kent Cooke Foundation, 2019).
- <sup>3</sup> Marnie Bromberg and Christina Theokas, *Falling Out of the Lead: Following High Achievers Through High School and Beyond* (Washington, DC: The Education Trust, 2014).
- <sup>4</sup> Josh Wyner, John M. Bridgeland, and John J. Dilulio, Jr., *Achievement Trap: How America is Failing Millions of High-Achieving Students from Lower-Income Families* (Lansdowne, VA: Jack Kent Cooke Foundation, 2018).
- <sup>5</sup> The first major declaration (that we know) of AP's capacity to play this additional role came in 1975 when College Board president Sidney P. Marland Jr., himself a former U.S. commissioner of education and school superintendent in cities from Winnetka to Pittsburgh, wrote that Advanced Placement could be "a very effective instrument for serving gifted but socially disadvantaged students," and he noted that "pride in the program often helps urban school leaders change negative stereotypes held by some parents and segments of the public." In many ways this was also a reaction to some of the wider social and cultural changes at the time (and detailed in chapter 2 of our book, *Learning in the Fast Lane* (2019)), but significantly more students of color and those from low-income backgrounds began to enter the program from this point onwards. Today, the College Board places this additional role front and center of its program, evidenced by their equity statement (shared with us in 2018): "All students who are willing to accept the challenge of a rigorous academic curriculum should be considered for admission to AP courses. The Board encourages the elimination of barriers that restrict access to AP courses for students from ethnic, racial, and socioeconomic groups that have been traditionally under-represented in the AP Program. Schools should make every effort to ensure that their AP classes reflect the diversity of their student population."
- <sup>6</sup> Douglas J. Gagnon and Marybeth J. Mattingly, "Advanced Placement and Rural Schools: Access, Success, and Exploring Alternatives," *Journal of Advanced Academics* 27, no. 4 (2016): 266–84; Christina Theokas and Reid Saaris, *Finding America's Missing AP and IB Students* (Washington, DC: The Education Trust, 2013). [https://edtrust.org/wp-content/uploads/2013/10/Missing\\_Students.pdf](https://edtrust.org/wp-content/uploads/2013/10/Missing_Students.pdf); Nat Malkus, *The AP Peak: Public Schools Offering Advanced Placement, 2000–12* (Washington, DC: American Enterprise Institute, 2016). <http://www.aei.org/wp-content/uploads/2016/01/The-AP-Peak.pdf>.
- <sup>7</sup> Sharmila Mann et al., *Advanced Placement Access and Success: How Do Rural Schools Stack Up?* (Denver: Education Commission of the States, 2017), <https://www.ecs.org/wp-content/uploads/Advanced-Placement-Access-and-Success-How-do-rural-schools-stack-up.pdf>.
- <sup>8</sup> Dylan Conger, Mark C. Long, and Patrice Iatarola, "Explaining Race, Poverty, and Gender Disparities in Advanced Course-Taking," *Journal of Policy Analysis and Management* 28, no. 4 (2009): 555–76; Kristin Klopfenstein, "The Advanced Placement Expansion of the 1990s: How Did Traditionally Underserved Students Fare?" *Education Policy Analysis Archives* 12, no. 68 (2004): 1–13; Suneal Kolluri, "Advanced Placement: The Dual Challenge of Equal Access and Effectiveness," *Review of Educational Research* 88, no. 5 (2018): 671–711.
- <sup>9</sup> U.S. Government Accountability Office, *K–12 Education: Public High Schools with More Students in Poverty and Smaller Schools Provide Fewer Academic Offerings to Prepare for College*, GAO-19-8 (Washington, DC, 2018), 86, accessed August 5, 2019, <https://www.gao.gov/assets/700/694961.pdf>.
- <sup>10</sup> Douglas J. Gagnon and Marybeth J. Mattingly, "Limited Access to AP Courses for Students in Smaller and More Isolated Rural School Districts" *Carsey Research National Issue Brief*, no. 80 (2015), <https://scholars.unh.edu/cgi/viewcontent.cgi?article=1234&context=carsey>.
- <sup>11</sup> College Board, "AP Course Ledger: Woodrow Wilson High School," accessed January 28, 2019. <https://apcourseaudit.inflexion.org/ledger/school.php?a=NzA2NA==&b=MA==>; College Board, "AP Course Ledger: Anacostia High School," accessed January 28, 2019. <https://apcourseaudit.inflexion.org/ledger/school.php?a=Njk3MA==&b=MA==>. Per district policy, high schools are supposed to offer at least eight AP courses.
- <sup>12</sup> See, for example, Suneal Kolluri, "Advanced Placement: The Dual Challenge of Equal Access and Effectiveness," *Review of Educational Research* 88, no. 5 (2018): 671–711; Kristin Klopfenstein, "Advanced Placement: Do Minorities Have Equal Opportunity?" *Economics of Education Review* 23, no. 2 (2004): 115–31, hereafter cited as Klopfenstein (2004a); and Jeannie Oakes and Gretchen Guiton, "Matchmaking: The Dynamics of High School Tracking Decisions," *American Educational Research Journal* 32, no. 1 (1995): 3–33.
- <sup>13</sup> Steve Farkas and Ann Duffett, *Growing Pains in the Advanced Placement Program: Do Tough Trade-Offs Lie Ahead?* (Washington, DC: Thomas B. Fordham Institute, 2009), 13.
- <sup>14</sup> This represents the percentage of examinees who scored at or above the criterion score on either the SAT (1110 on the reading and math sections combined) or the ACT (composite score of at least 24). Campus, district, and state reports for 2015–16 that include this indicator can be found at Texas Education Agency, "2016–17 Texas Academic Performance Reports," accessed November 5, 2018. <https://rptsvr1.tea.texas.gov/perfreport/tapr/2017/index.html>.
- <sup>15</sup> For more on this turbulent period, see Yamil Berard, "Dansby Resigns as Fort Worth School Superintendent," *Fort Worth Star Telegram*, June 2, 2014. <https://www.star-telegram.com/news/local/community/fort-worth/article3860477.html>; Tim Madigan and Yamil Berard, "Dansby, School Board: A Bitter Divorce," *Fort Worth Star Telegram*, June 10, 2014. <https://www.star-telegram.com/news/local/community/fort-worth/article3861408.html>.

- <sup>16</sup> Cohort 1 began with two schools in 2013–14 and continued through 2015–16; Cohort 2 began with three schools in 2014–15 and continued through 2016–17.
- <sup>17</sup> “Participating students” means individuals who take at least one math, science, or English exam. Numbers may contain slight errors due to some data being concealed for student privacy. Data were combined for the two cohorts of schools, meaning the baseline years (2012–13 and 2013–14) were combined, year 1 (2013–14 and 2014–15) were combined, and so on. Baseline data for “unique students” showing participation and performance come from FWISD; all other data from NMSI.
- <sup>18</sup> We reviewed memoranda of agreement between FWISD and NMSI for both school cohorts, yielding an estimated total cost for the three-year intervention at each school, which we divided by the number of qualifying scores earned.
- <sup>19</sup> The College Board provides a \$32 fee reduction per exam for students with financial need. Those eligible for the Federal free or reduced-price lunch program qualify for that reduction on all AP Exams that they take in a given year. Others may also be eligible if their school or district participates in the Community Eligibility Provision (CEP). Because of periodic changes in federal policy with regard to how this eligibility is determined (in 2010, for example, policy change expanded the use of the CEP provision), trends in low-income participation tabulated by the College Board may not represent apples-to-apples comparisons.
- <sup>20</sup> For the percentage of low-income Class of 2018 students who took at least one AP exam before graduating, see College Board, “Class of 2018 Data,” accessed August 6, 2019. <https://reports.collegeboard.org/ap-program-results/class-2018-data>. For the numbers from which the percentage above is derived for the Class of 2003, see *The 10th Annual AP Report to the Nation* (New York: College Board, 2009), 6. <https://secure-media.collegeboard.org/digitalServices/pdf/ap/rtn/10th-annual/10th-annual-ap-report-to-the-nation-single-page.pdf>.
- <sup>21</sup> U.S. Department of Education, National Center for Education Statistics, *Concentration of Public School Students Eligible for Free or Reduced-Price Lunch*, (May, 2018), 1, accessed August 5, 2019, [https://nces.ed.gov/programs/coe/pdf/Indicator\\_CLB/coe\\_clb\\_2018\\_05.pdf](https://nces.ed.gov/programs/coe/pdf/Indicator_CLB/coe_clb_2018_05.pdf).
- <sup>22</sup> Theokas and Saaris, *Finding America’s Missing AP and IB Students* (Washington DC: Education Trust, 2013).
- <sup>23</sup> Data taken from state reports available at *The 10th Annual AP Report to the Nation*.
- <sup>24</sup> This description of the Mississippi Public School Consortium was added to this report by Jack Kent Cooke Foundation staff to provide further information; it was not part of the authors’ research or book.
- <sup>25</sup> Theokas and Saaris (2013).
- <sup>26</sup> Malkus (2016).
- <sup>27</sup> Data taken from state reports available at *The 10th Annual AP Report to the Nation*.
- <sup>28</sup> *The 10th Annual AP Report to the Nation*.
- <sup>29</sup> *The 10th Annual AP Report to the Nation*.
- <sup>30</sup> Dong Wook Jeong, “Student participation and performance on Advanced Placement exams: Do state-sponsored incentives make a difference?” *Educational Evaluation and Policy Analysis* 31, no. 4 (2009): 346–366; Kolluri 2018; Conger et al., 2009; Klopfenstein, 2004a; Klugman, 2013.
- <sup>31</sup> Maria Estela Zarate and Harry P. Pachon, *Gaining or losing ground? Equity in offering Advanced Placement courses in California high schools 1997–2003* (Los Angeles, CA: Tomás Rivera Policy Institute, 2006); Conger et al. (2009); Klopfenstein (2004).
- <sup>32</sup> Ron La Brecque, “Something More than Calculus,” *New York Times*, November 6, 1988. <https://www.nytimes.com/1988/11/06/education/something-more-than-calculus.html>.
- <sup>33</sup> See, for example, Ron Edmonds, “Effective Schools for the Urban Poor,” *Educational Leadership* 37, no. 1 (1979): 15–24.
- <sup>34</sup> College Board, “AP Program Results: Class of 2018, Expanding AP Access,” accessed February 7, 2019. <https://reports.collegeboard.org/ap-program-results/expanding-ap-access>.
- <sup>35</sup> “Chancellor Fariña Announces 63 High Schools to Offer New Advanced Placement Courses for 2016–17 through AP for All,” press release, New York City Department of Education, June 13, 2016. <https://www.schools.nyc.gov/about-us/news/announcements/contentdetails/2016/06/13/chancellor-fariña-announces-63-high-schools-to-offer-new-advanced-placement-courses-for-2016-17-through-ap-for-all>.
- <sup>36</sup> David M. Herszenhorn, “Revised Admission for High Schools,” *New York Times*, October 3, 2003. <https://www.nytimes.com/2003/10/03/nyregion/revised-admission-for-high-schools.html>; Elizabeth A. Harris and Ford Fessenden, “The Broken Promises of Choice in New York City Schools,” *New York Times*, May 5, 2017. <https://www.nytimes.com/2017/05/05/nyregion/school-choice-new-york-city-high-school-admissions.html>.
- <sup>37</sup> “NYC Department of Education, College Board and National Math and Science Initiative Collaborate to Launch the NYC Advanced Placement Expansion Initiative,” press release, College Board, September 30, 2013. <https://www.collegeboard.org/releases/2013/nyc-department-education-college-board-and-national-math-and-science-initiative-collaborate-0>.
- <sup>38</sup> Authors’ correspondence with NMSI (2017).
- <sup>39</sup> The supported subjects by then included English Language and Composition, making a total of seven. Data for the first cohort of AP Expansion schools come from the New York City Department of Education.
- <sup>40</sup> These data were provided to the authors by the New York City Department of Education.

- <sup>41</sup> Saul Geiser and Veronica Santelices, "The Role of Advanced Placement and Honors Courses in College Admission." (Berkeley, California: University of California-Berkeley, Center for Studies in Higher Education, Research and Occasional Paper Series: CSHE, 4.04, 2004). Heather Rose and Julien Betts, "The Effect of High School Courses on Earnings." *The Review of Economics and Statistics*, 86, no. 2 (2004): 497–513. Mark C. Long, Patrice Iatarola, and Dylan Conger, "Explaining Gaps in Readiness for College-Level Math: The Role of High School Courses." *Education Finance and Policy*, 4, no. 1 (2009) 1–33.
- <sup>42</sup> Kolluri (2018); Klopfenstein (2004): 115–31; Oakes and Guiton (1995).
- <sup>41</sup> A recent Jack Kent Cooke Report found that in 2015 only five states required pre-service teacher training programs to provide instruction on teaching gifted learners. See Jonathan Plucker et al., *Equal Talents, Unequal Opportunities*, 2<sup>nd</sup> ed. (Lansdowne, VA: Jack Kent Cooke Foundation, 2018).
- <sup>43</sup> For a detailed discussion of the correlations between passing AP exams and future educational and life benefits, see the Appendix of our book, *Learning in the Fast Lane* (2019).
- <sup>44</sup> AP, of course, is not the only source of such opportunities and benefits. Several other respected programs, most notably the International Baccalaureate (IB), offer similar rewards. But these programs are much smaller in scope. A more popular method — which Advanced Placement in a sense attempts to mimic — is dual enrollment (also known as dual credit), whereby colleges make available their own courses to high school students, either within the high school or on a nearby college campus. This is a direct and comparatively easier route to more certain college credit, while simultaneously introducing high school students at little or no cost into a college-bound culture and affording them experience with college-level academics, expectations, and practices. But the quality of dual enrollment programs varies widely, with wide variation in course delivery mode (i.e., taught by college instructors on their own campus or in high school) and instruction (some instructors are college professors, others are high school teachers). Credit from such a course depends entirely on the instructor's judgment, meaning there is no external quality control or uniform standard such as we find with AP (and IB).





The Jack Kent Cooke Foundation is dedicated to advancing the education of exceptionally promising students who have financial need. Since 2000, the Foundation has awarded over \$200 million in scholarships to over 2,600 students from 8th grade through graduate school, along with comprehensive educational advising and other support services. The Foundation has also provided \$110 million in grants to organizations that serve such students.



[www.jkcf.org](http://www.jkcf.org)

The Thomas B. Fordham Institute promotes educational excellence for every child in America via quality research, analysis, and commentary, as well as advocacy and exemplary charter school authorizing in Ohio. It is affiliated with the Thomas B. Fordham Foundation. For further information, please visit our website at [www.fordhaminstitute.org](http://www.fordhaminstitute.org). The Institute is neither connected with nor sponsored by Fordham University.



[www.fordhaminstitute.org](http://www.fordhaminstitute.org)