

INEQUITIES IN ADVANCED COURSEWORK:

What's Driving Them and What Leaders Can Do



The Education Trust

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#AdvancedCoursework

The disparities in access to advanced coursework are not inevitable. State leaders, as well as district and school leaders, can take meaningful steps to put their state on the path to fair representation, by setting clear goals for advancing access to and success in advanced coursework, using data to identify the barriers that prevent students of color and students from low-income backgrounds from enrolling in advanced courses, and implementing the right statewide solutions for their particular problems.

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Kayla Patrick, *P-12 data and policy analyst*; **Allison Socol**, *assistant director of P-12 policy*;
Ivy Morgan, *associate director for analytics*

IN THIS REPORT, The Education Trust examines the many ways Black and Latino students are locked out of the advanced coursework opportunities that can set them up for success in college and careers. Here, we paint a picture at both national and state levels of how these students are denied access to meaningful advanced coursework opportunities, from elementary to middle to high school. We also diagnose the particular types of barriers standing in their way and offer actionable solutions for state, district, and school leaders to address those barriers. In some instances, the problem is that Black and Latino students attend a school without any advanced courses; in others, they attend a school that enrolls too few students in advanced coursework overall, or one

with inequitable course assignment, meaning Black and Latino students in particular are being denied access to courses. Also, within a particular state, the problems are often different for Black students than Latino students. In all cases, unearthing these barriers to opportunity will help state leaders pursue targeted solutions that will actually move the needle for both groups of students.

FINDING 1: Black and Latino students are successful in advanced courses when given the opportunity.

FINDING 2: While it is clear Black and Latino students are often successful in advanced coursework opportunities, they are still not fairly represented in advanced courses.

FINDING 3: Nationally, inequities are largely due to (1) schools that serve mostly Black and Latino students not enrolling as many students in advanced classes as schools that serve fewer Black and Latino students; and (2) schools — especially racially diverse schools — denying Black and Latino students access to those courses.

3(a) Courses Offered: Nationally, Black and Latino students are fairly represented among schools that offer advanced courses. But there are still too many schools that don't offer the courses at all.

3(b): Total Seats: The schools that enroll the most Black and Latino students have slightly fewer students enrolled overall in advanced courses than schools that serve fewer Black and Latino students.

3(c): Share of Seats: Among schools that offer advanced courses, Black and Latino students are often denied access to those courses. This is especially true in racially diverse schools.

WHAT STATE LEADERS CAN DO:

1. Set clear, measurable goals for advancing access to and success in advanced coursework and commit to publicly measuring state and district progress toward those goals.
2. Use data to identify the barriers that prevent students of color and students from low-income backgrounds from enrolling in advanced courses.
3. Invest dollars to expand advanced coursework opportunities in schools serving the most Black and Latino students.
4. Expand eligibility and increase access so that Black and Latino students have a fair chance to take advanced courses.
5. Provide sufficient support for students to prepare for advanced coursework and for their success once they are enrolled.

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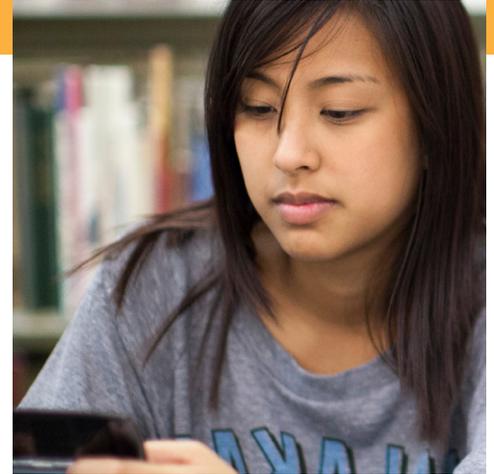
BLACK AND LATINO STUDENTS across the country experience inequitable access to advanced coursework opportunities. They are locked out of these opportunities early when they are denied access to gifted and talented programs in elementary school, and later in middle and high school, when they are not enrolled in eighth grade algebra and not given the chance to participate in Advanced Placement (AP), International Baccalaureate (IB), and dual enrollment programs. As a result, these students are missing out on critical opportunities that can set them up for success in college and careers.¹

This is not a new problem. Researchers have known for decades that Black and Latino students are assigned to advanced courses at much lower rates than their peers.² In 2013, The Education Trust, for example, looked closely at AP and IB participation rates nationally and by school and found that

hundreds of thousands of students of color and students from low-income backgrounds were missing out on these opportunities.³ Yet, despite the many relevant studies, there has been little widespread progress. The underrepresentation of Black students in gifted and talented programs, for instance, has barely budged since 1993.⁴

Beyond missing out on critical opportunities, Black and Latino students also are being sent a harmful message that advanced courses are not for them, or worse, that they are not smart enough to participate. It's a dangerous perception that fuels the persistent gaps in opportunities that exist in schools across the country. Yet, when advanced opportunities are extended to students of color and when teachers receive training and resources, these students thrive alongside their peers.⁵ In general, students in advanced courses work harder and engage more in school, leading to fewer absences and suspensions and higher graduation

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rates.⁶ This is in part due to higher teacher and counselor expectations and support that come with being enrolled in advanced coursework.

The truth is that Black and Latino students are not receiving these opportunities for reasons that have everything to do with policies, adult decisions, and practices and little to do with students' academic abilities.⁷ This paper and the accompanying [state data tool](#) tell that story. In this analysis, we paint a picture at both national and state levels of how these students are denied access to meaningful advanced coursework opportunities, from elementary to middle to high school. We also diagnose the particular types of barriers standing in their way and offer actionable solutions for state, district, and school leaders to address those barriers. In some states, the problem is that Black and Latino students attend a school without any advanced courses; in others, they attend a school that enrolls too few students in advanced

coursework overall, or one that denies them their fair share of seats in those courses. Also, within a particular state, the problems are often different for Black students than Latino students. In all cases, unearthing these barriers to opportunity will help state leaders pursue targeted solutions that will actually move the needle for both groups of students.

The disparities in access to advanced coursework are not inevitable. State leaders, as well as district and school leaders, can take meaningful steps to put their state on the path to fair representation, by setting clear goals for advancing access to and success in advanced coursework, using data to identify the barriers that prevent students of color and students from low-income backgrounds from enrolling in advanced courses, and implementing the right statewide solutions for their particular problems. We offer corresponding policy solutions that state leaders should pursue to address these barriers.

In some states, the problem is that Black and Latino students attend a school without any advanced courses; in others, they attend a school that enrolls too few students in advanced coursework overall, or one that denies them their fair share of seats in those courses. Also, within a particular state, the problems are often different for Black students than Latino students.

OUR ANALYSIS

While there are many more courses and programs that can make up a challenging and engaging curriculum, this report focuses solely on gifted and talented programs, eighth grade Algebra I, and Advanced Placement (AP). The public availability of data for these opportunities for all schools in the country allows for comparisons across states. While these opportunities are not exhaustive, we also selected them because they clearly illustrate the inequities that exist at a variety of critical points in a student's time in school.

We begin our analysis by looking at eighth grade Algebra I success rates to debunk the myth that students of color do not excel in advanced courses. Next, we examine whether Black and Latino students are “fairly represented” in advanced coursework opportunities. If Black and Latino students were fairly receiving advanced coursework opportunities, their share of enrollment among all students would be comparable to their share of enrollment among students in the course. For example, if 20% of students in a given state are Black, fair representation means that 20% of students enrolled in advanced courses in that state are Black. Finally, we show how different types of inequities play out in states.

Specifically, we analyzed data from the U.S. Department of Education's 2015–16 Civil Rights Data Collection (CRDC) and Common Core of Data (CCD) to compare the proportion of Black and Latino students enrolled in each advanced coursework opportunity (gifted and talented programs, eighth grade Algebra I, and Advanced Placement) to the proportion of Black and Latino students enrolled in schools.⁸ For each opportunity, our analysis includes the following measures:

- Percentage of students attending schools who are Black or Latino
- Percentage of students attending schools that offer the course who are Black or Latino
- Percentage of students enrolled in the course overall who are Black or Latino
- Percentage of students enrolled in the course in schools with the highest and lowest percentages of Black and Latino students

Our findings include nationwide comparisons of these percentages. In an accompanying [data tool](#), we present state-by-state comparisons of these percentages. For more details on our data and measures, please see the technical note on page 28.



WHAT IS FAIR REPRESENTATION?

If Black and Latino students were fairly represented in an advanced course, we would expect their share of enrollment overall to be similar to their share of enrollment in the advanced course.

WHAT WE LEARNED:

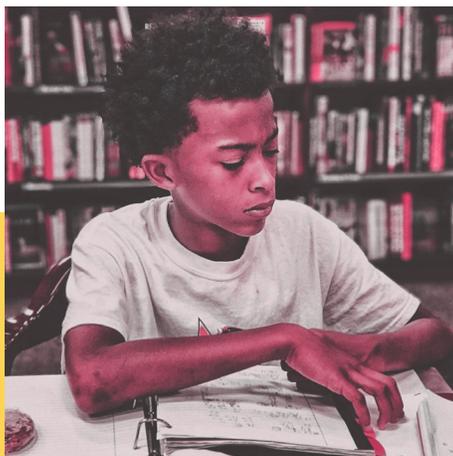


In this section we present national findings. However, the story is different from state to state. [See our state data tool for state-level information.](#)

1: THE DATA SHOWS THAT BLACK AND LATINO STUDENTS ARE SUCCESSFUL IN ADVANCED COURSES WHEN GIVEN THE OPPORTUNITY.

Let's start here. Despite a widely held myth, Black and Latino students can succeed in advanced opportunities when given the chance. Consider eighth grade Algebra I success rates. Data shows that Black and Latino students pass eighth grade algebra at a rate proportional to their overall enrollment, meaning a similar share of Black and Latino students who take the course, pass the course.⁹ Among schools for which we have passing data for Black students, those students represent 20% of the students enrolled in eighth grade algebra and 19% of the students who pass eighth grade algebra. Similarly, Latino students represent 27% of the students enrolled in eighth grade algebra and 26% of students passing (**Figure 1**).¹⁰

FIGURE 1: Percentage of Black and Latino Students Enrolled in Eighth Grade Algebra and Percentage of Those Passing



BLACK STUDENTS:

ENROLLED: 20%

PASSING: 19%



LATINO STUDENTS:

ENROLLED: 27%

PASSING: 26%

Note: This is among schools that have unsuppressed passing data for Black or Latino students.

Source: Ed Trust calculations based on data from the 2015–16 Civil Rights Data Collection (CRDC) and the 2015–16 Common Core of Data (CCD).

2: BLACK AND LATINO STUDENTS ARE STILL NOT FAIRLY REPRESENTED IN ADVANCED COURSES.

While it is clear that Black and Latino students can be — and very often are — successful in advanced coursework, too many never get the chance to participate in gifted and talented courses, eighth grade Algebra I courses, and AP courses.

Gifted programs: Access to gifted and talented programs is one of the first barriers to opportunity that students of color encounter in the K-12 system. In elementary schools, gifted programs — which often emphasize enrichment, self-esteem, and parental engagement — can prepare students for advanced middle school courses. Although gifted and talented programs vary widely across states and districts and have mixed results,¹¹ the research makes clear that gifted and talented programs change educators' perceptions of Black children. More specifically, when Black students are enrolled in gifted and talented programs, educators are more likely to view them as capable or advanced. This perception subsequently opens the door for advanced course opportunities, like Advanced Placement, in the future.¹²

Our analysis shows that although Black students make up 16% of elementary schoolers, they make up only 9% of students in gifted and talented programs. Similarly, 1 in 4 elementary school students are Latino, but Latino students make up just 18% of gifted and talented enrollment (**Figure 2**). If Black and Latino students were actually given a fair chance to participate, we would expect to see **an additional 75,893 Black students and 103,026 Latino students enrolled in gifted and talented programs in elementary schools** around the country.¹³ Denying access to these students sends the message that the earliest “on-ramp” to advanced opportunities is not for them.

Eighth grade Algebra I: Lack of access to critical opportunities continues in middle schools. Taking eighth grade Algebra I helps set students on a path to take high school math classes that are required for admission to

many four-year colleges. For example, students who do not take algebra in eighth grade will not reach calculus in high school without doubling up on math courses or taking summer courses. In addition, taking eighth grade algebra has a wide range of positive effects on students. Studies show that students who take algebra in eighth grade, regardless of prior preparation, have higher grade-point averages and ACT scores, and are more likely to graduate high school and go to college.¹⁴

Black students make up 15% of the eighth grade student body in the United States, but only 10% of students enrolled in eighth grade Algebra I. Similarly, a quarter of eighth graders are Latino, but only 18% of the students enrolled in eighth grade Algebra I are Latino (**Figure 3**). If Black and Latino students had a fair opportunity to participate in eighth grade Algebra I across the country, schools would enroll **an additional 43,019 Black students and 59,452 Latino students in eighth grade Algebra I courses**.¹⁵

Advanced Placement courses: At the high school level, AP courses help prepare students for college-level coursework, increase students' chances of college admission, and improve students' odds of future success.¹⁶ In fact, one of the strongest predictors of success in college is access to rigorous courses in high school.¹⁷ Enrolling in high-level high school courses also allows students to fulfill important prerequisites for college courses, helping avoid additional college costs.

While eight states and the District of Columbia require all high schools to offer AP courses,¹⁸ there is a lot of work to do across the country to ensure that Black and Latino students have the same access to those AP courses as their peers and that they enroll in those courses.¹⁹ Black students make up 15% of high schoolers nationwide, but only 9% of students enrolled in at least one AP course. Latino students are also underrepresented. Although nearly a quarter of high school students are Latino, only 21% of AP students are Latino (**Figure 4**).²⁰ If Black and Latino students had a fair chance to enroll, we would see **157,513 more Black students and 68,102 more Latino students in AP courses**.²¹

FIGURE 2: Percentage Enrolled in **Elementary Schools** vs. Percentage Enrolled in **Gifted and Talented Programs**

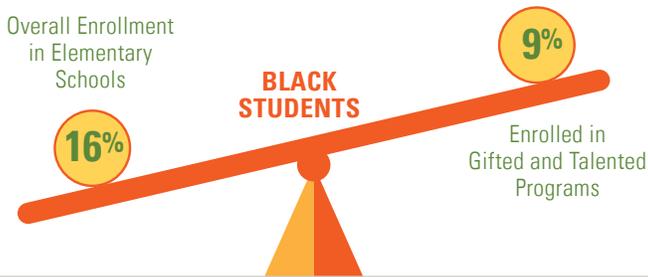


FIGURE 3: Percentage Enrolled in **8th Grade Overall** vs. Percentage Enrolled in **8th Grade Algebra I**

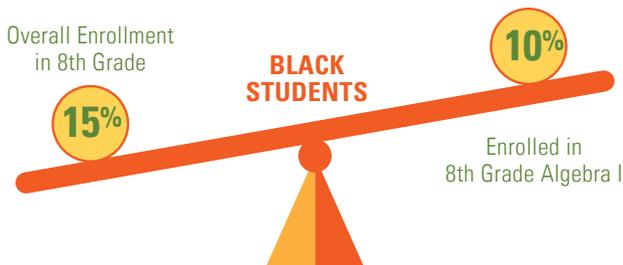
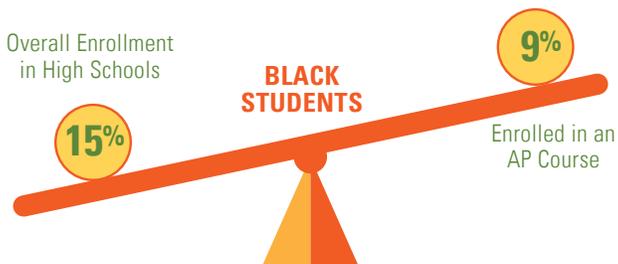


FIGURE 4: Percentage Enrolled in **High Schools** vs. Percentage Enrolled in **Advanced Placement Courses**



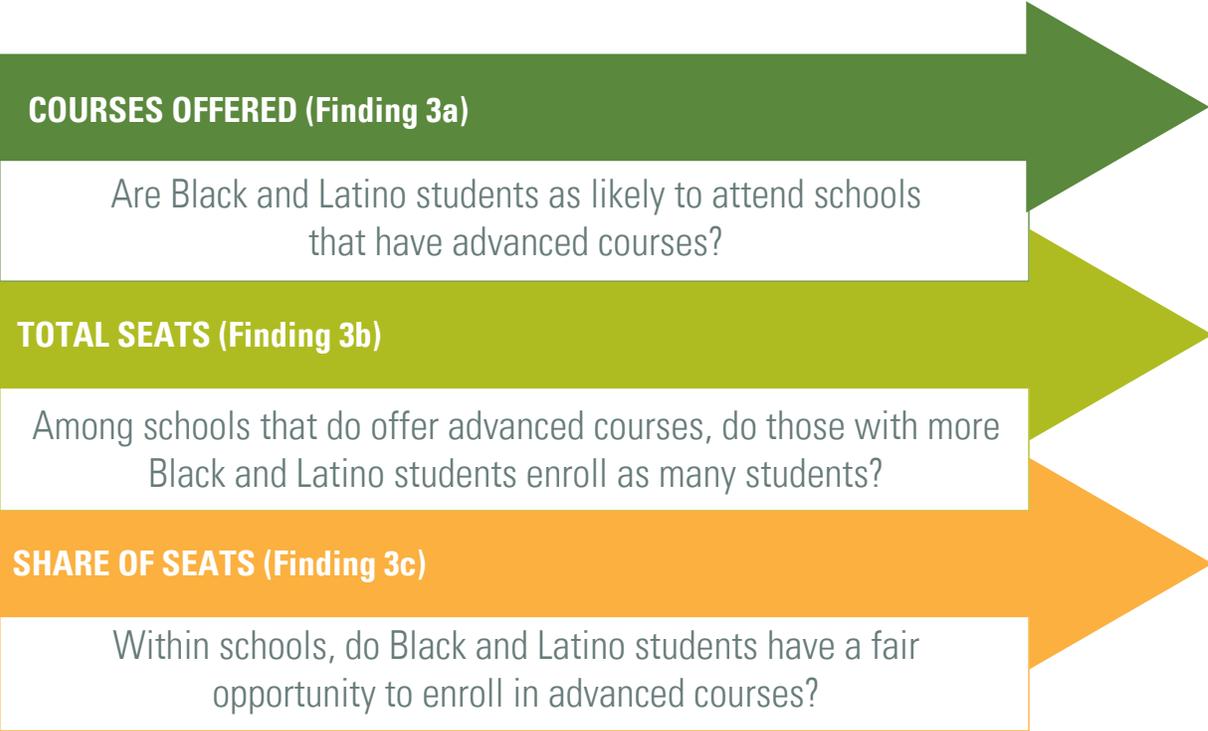
Source: Ed Trust calculations based on data from the 2015–16 Civil Rights Data Collection (CRDC) and the 2015–16 Common Core of Data (CCD).

3: NATIONALLY, INEQUITIES ARE LARGELY DUE TO (1) SCHOOLS THAT SERVE MOSTLY BLACK AND LATINO STUDENTS HAVING FEWER TOTAL SEATS IN ADVANCED CLASSES; AND (2) SCHOOLS — ESPECIALLY RACIALLY DIVERSE SCHOOLS — DENYING BLACK AND LATINO STUDENTS ACCESS TO THOSE SEATS.*

Using Data to Diagnose the Problem.

Why are Black and Latino students underrepresented in advanced courses? Is the problem that some schools don't offer advanced courses at all? That some schools don't enroll as many students in the courses? Or that, within schools, Black and Latino students aren't given a fair opportunity to enroll? Diagnosing the source of the problem is essential to adopting appropriate policy solutions.

To answer these questions, we examined the enrollment data of schools that offer gifted and talented programs, eighth grade Algebra I, and Advanced Placement courses; the number of Black and Latino students enrolled in those courses; and Black and Latino students' share of enrollment.



**We are using total enrollment in the course as a proxy for the number of seats because the data used in this analysis does not tell us the total number of seats or slots available for each course.*

3(a) Courses Offered: NATIONALLY, BLACK AND LATINO STUDENTS ARE FAIRLY REPRESENTED AMONG SCHOOLS THAT OFFER ADVANCED COURSES. BUT THERE ARE STILL TOO MANY SCHOOLS THAT DON'T OFFER THE COURSES AT ALL.

The reason that large numbers of Black and Latino students are missing from gifted and talented programs, eighth grade Algebra I courses, and Advanced Placement courses is not because Black and Latino students attend schools that do not offer these courses. What's more, Black and Latino students are fairly represented among schools that offer advanced coursework. Below, we compare the percentage of Black and Latino students in all schools to the percentage of Black and Latino students in schools with each type of advanced coursework opportunity to get a clearer picture.

Gifted and talented: Black students make up 16% of elementary schoolers and 15% of students enrolled in schools that offer gifted and talented programs. Latino students are also fairly represented among students attending schools that offer gifted and talented programs.

Eighth grade Algebra I: Black students make up 15% of students enrolled in eighth grade, and 14% of the students attending schools that offer eighth grade algebra. Latino students make up 25% of eighth graders, and 24% of students enrolled in schools that offer eighth grade algebra.

Advanced Placement: Black and Latino students have fair access to schools that offer at least one advanced placement course. Black students are 15% of U.S. high schoolers and 15% of students in schools offering at least one AP course. Latino students are 24% of U.S. high schoolers and 24% of students in schools offering at least one AP course.

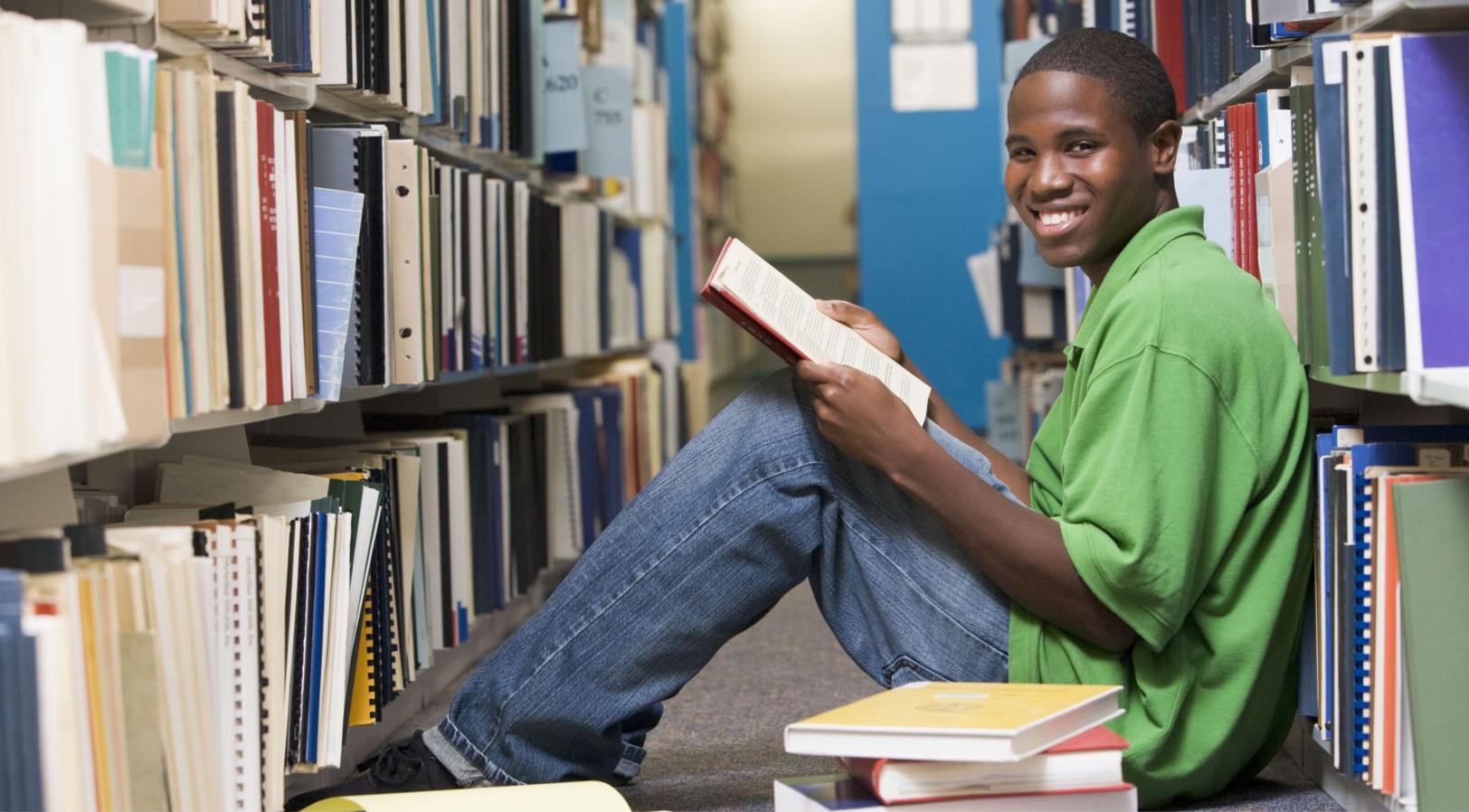
But having access to just one AP course is not enough. A single AP biology course, for example, does not increase opportunity for the thriving student who would benefit from AP calculus or an enthusiastic writer who would excel in an AP English course. Instead, students should have *meaningful* access — defined in this analysis as a

diverse range of courses, including math, science, and another subject.²² By this measure too, Black and Latino students have fair access — Black and Latino students make up 15% and 24% of high school students, and 14% and 25% of students enrolled in schools with a diverse range of courses, respectively.

Of course, *fair* access doesn't mean *sufficient* access. There are too many students of all races and ethnicities who attend schools that don't have a gifted and talented program, an eighth grade Algebra I course, or Advanced Placement courses. For example:

- **Gifted and talented:** 3 in 10 elementary school students attend schools without a gifted and talented program.
- **Eighth grade Algebra I:** 2 in 10 eighth graders attend middle schools that do not offer an eighth grade Algebra I course.
- **Advanced Placement:** Nearly 1 in 10 high school students attend schools that do not offer a single AP course. That, in and of itself, is a problem. Another problem is that 1 in 4 high school students attend schools that do not offer a diverse range of Advanced Placement courses.

The lack of advanced courses in some schools is definitely a concern, but it isn't what's driving the disparities in access to advanced opportunities for Black and Latino students. Nationally, racial and ethnic inequities are largely due to two reasons: (1) schools that serve mostly Black and Latino students are not enrolling as many students in advanced classes as schools that serve fewer of these students; and (2) schools that do offer the courses — especially racially diverse schools — are denying Black and Latino students access.



THE ROLE OF PRIOR PREPARATION OR “READINESS” FOR ADVANCED COURSEWORK

To be clear, many schools and districts are failing to adequately prepare Black and Latino students for advanced coursework opportunities. The national data that we use for this analysis does not allow us to directly examine the impact that inequities in prior opportunity and preparation (e.g., access to high-quality early childhood education or rigorous instruction and curricula in kindergarten and first grade) have on the gaps that we see. But we *can* use data on access, participation, and prior achievement for individual students from one large school district that is typical in this regard. Contrary to common beliefs, prior preparation (based on previous years’ achievement data) and opportunity only explains **half of the gap** in enrollment in advanced courses between students of color and their White peers. The other half of the gap is explained by differences in course offerings and whether students who demonstrate readiness for advanced coursework are actually enrolled in the courses. These inequities in prior achievement are real but not impossible to close and the response from states and districts should be to invest more effectively and deeply to address these inequities earlier on. See the sidebar on page 24 about District X, where our partners at [Education Resource Strategies](#) — who work directly with districts and have access to student achievement data — take a closer look at what’s driving the gaps in eighth grade algebra enrollment.

3(b) Total Seats: THE SCHOOLS THAT ENROLL THE MOST BLACK AND LATINO STUDENTS HAVE SLIGHTLY FEWER SEATS IN ADVANCED COURSES OVERALL THAN SCHOOLS THAT SERVE FEWER BLACK AND LATINO STUDENTS.

Imagine two middle schools, each with 100 eighth graders: School A enrolls 75% Black and Latino students, and there are 25 eighth grade Algebra I seats. School B is 10% Black and Latino, and there are 30 eighth grade Algebra I seats. The course is available at both schools, but slightly more students at the second school actually have the opportunity to take it.

Across the nation, schools (like School A) that are majority Black or Latino have fewer seats in advanced courses. While these schools serve 25% of the nation's elementary, middle, and high school students, they represent just 18% of students enrolled in gifted and talented programs, 20% of those enrolled in eighth grade Algebra I, and 22% of those enrolled in AP courses.

In some states, this problem is substantial.

For example, Tennessee ranks last when it comes to Black student representation in AP high school courses. One reason for this disparity is that schools that are majority Black have fewer students enrolled in advanced courses. In Tennessee, the schools serving the most Black students enroll only 17% of the state's students in AP courses, even though they have 25% of the state's high school students.

3(c) Share of Seats: AMONG SCHOOLS THAT OFFER ADVANCED COURSEWORK, BLACK AND LATINO STUDENTS ARE OFTEN DENIED ACCESS TO ADVANCED COURSES. THIS IS ESPECIALLY TRUE IN RACIALLY DIVERSE SCHOOLS.

Visit a racially diverse school and you may see many Black and Latino students in the hallways, but you will see far fewer in advanced course classrooms.

Gifted and talented: While Black students make up 15% of students in elementary schools that offer gifted and talented programs, they are only 9% of students enrolled in these programs. Latino students are 28% of students in schools with gifted and talented programs, but only 18% of students enrolled in these programs.

Eighth grade Algebra I: Black students are 14% of eighth graders in schools that offer eighth grade Algebra I, but only 10% of students enrolled in the course. Similarly, Latino students are 24% of eighth graders in schools with eighth grade Algebra I, but they comprise only 18% of eighth grade Algebra I enrollment.

Advanced Placement: Black students make up 15% of students at schools with at least one AP course, but are only 9% of those enrolled in AP courses. Latino students comprise 24% of students enrolled in schools that offer at least one AP course, but are only 21% of students enrolled in AP courses.

Take, for example, Oak Park and River Forest High School (OPRF), a large, racially and socioeconomically diverse school located in a suburb just eight miles outside of downtown Chicago. The school was the subject of the 2018 award-winning docuseries, [America to Me](#). OPRF offers 21 different AP courses. In 2019, Black students made up 20% of the student body but only 9% of students enrolled in AP courses. Oak Park offers a wide range of AP courses, but Black students are denied fair access to those courses.²³

OPRF is not an anomaly. In fact, our analysis suggests that the most racially diverse schools, where Black or Latino students make up a moderate size of the student body, are more likely to have disparities in

access to advanced coursework opportunities. That is, schools in which 10%-50% of the students are Black and Latino are among the least likely to fairly enroll those students in advanced courses (**Figure 5**). The schools that more fairly enroll Black and Latino students in AP and eighth grade Algebra I courses are those that predominantly serve Black and Latino students (although, as described above, those schools are more likely to have lower advanced coursework enrollment overall). This finding is consistent with a wealth of literature that suggests that some schools track students by race/ethnicity in ways that maintain racial segregation²⁴ and contribute to the general pattern of lower AP access for historically marginalized students.²⁵

FIGURE 5: Representation of Black or Latino Students in AP Courses by School Demographics

Number of Black Students in AP for Every 10 Black Students Who Should Be in AP



Number of Latino Students in AP for Every 10 Latino Students Who Should Be in AP



Reading This Figure: In racially diverse schools, where Black and Latino students make up 10-50% of students, there are 5.5 Black students enrolled for every 10 Black students who *should* be enrolled in AP courses (so that their enrollment in AP courses is proportional to their overall enrollment) and 7.4 Latino students enrolled for every 10 Latino students who should be enrolled. These are the schools where Black and Latino students are most unfairly represented among AP course takers.





STATE STORIES

USING DATA TO DIAGNOSE THE PROBLEM AND FIND A SOLUTION

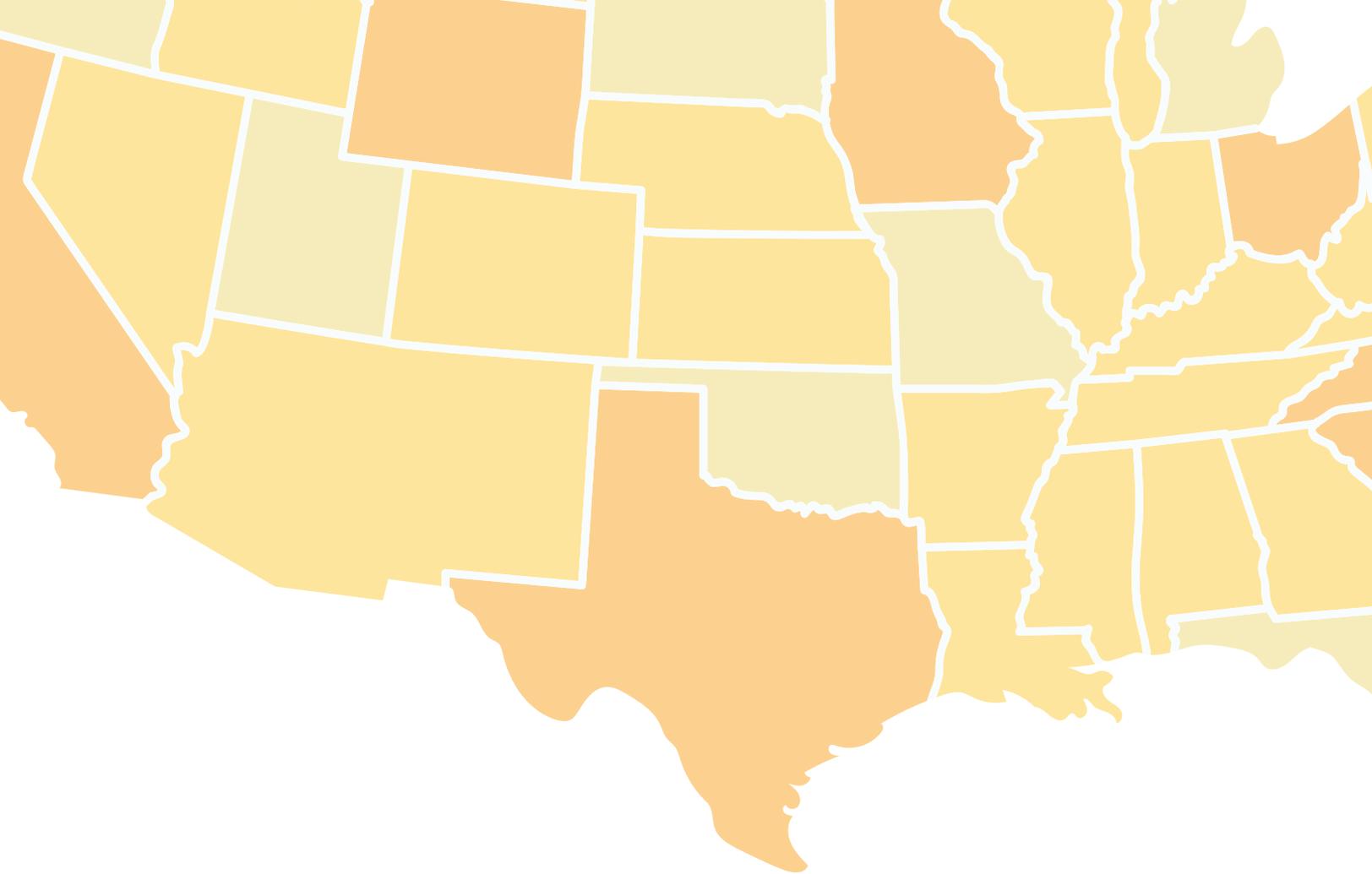
The challenges to expanding access to and success in advanced coursework vary by state and by grade level. State-level data shows that in almost every state, Black and Latino students are underrepresented in each of the advanced coursework opportunities we examined. But in some states, the lack of representation is egregious. For example, Pennsylvania is at or near the bottom of all states for access to advanced coursework opportunities at every level (gifted and talented, eighth grade Algebra I, and AP) for both Black and Latino students. In fact, Pennsylvania is worst in the country when it comes to giving Black students access to gifted and talented programs and Latino students access to AP courses. In Kentucky, underrepresentation in advanced coursework begins early and is especially stark for Black students. Kentucky is one of the worst states when it comes to Black student representation in gifted and talented programs and eighth grade Algebra I, and it is in the bottom half of states for Black student AP representation. Meanwhile, Latino students in New

York are particularly underserved — the state ranks among the worst when it comes to giving Latino students access to advanced coursework at every level. ([Use our state-by-state data tool to see what's happening in your state.](#))

But what's driving these gaps? In more than half of states, Black and Latino students are fairly represented in schools that offer at least one advanced course opportunity.

However, in all but a handful of states, Black and Latino students attend schools that have fewer seats in advanced coursework, among schools that offer such courses.

North Carolina is a case in point. Black students who actually get the chance to enroll in Algebra I in eighth grade are succeeding. Among schools for which we have passing data for Black students, those students represent 19% of eighth graders who are enrolled in algebra and 19% of eighth graders who pass algebra.²⁶ But Black students are severely underrepresented in



the course: Black students represent just 14% of eighth graders enrolled in eighth grade algebra in the state, despite comprising 25% of the eighth grade population. The data shows that there are fewer total seats in eighth grade Algebra I in the North Carolina schools with the most Black students, where just 80 of every 100 students who should be enrolled to achieve fair representation in the course are actually enrolled. Black students in the state are also denied access to eighth grade Algebra I seats within North Carolina schools, where only 55 of every 100 Black students who attend schools that offer the course, and should be enrolled in it, are actually enrolled. This means that, in North Carolina, policymakers and advocates should focus on policy and practice changes that (1) increase the number of eighth grade algebra seats in schools with high concentrations of Black students and (2) address the within-school barriers to entry for Black eighth graders.

In other states, the story changes. In **New York**, where Latino students are 28% of elementary students but only 11% of gifted and talented participants, the programs frequently don't exist at all in the schools Latino students attend. On top of that, Latino elementary students are not fairly enrolled in existing seats — only 53 of every 100 Latino students who should be enrolled in the program are enrolled. In New York, policymakers and advocates should focus their efforts on (1) creating new gifted and talented programs in schools serving primarily Latino students and (2) addressing the within-school barriers to participation in gifted and talented programs that exist for Latino children.

EXAMPLE OF DATA IN ACTION: NEW YORK ADVOCATES DEMAND ACCESS AND OPPORTUNITY FOR STUDENTS OF COLOR

An [analysis](#) by the New York Equity Coalition found similar disparities in access to and representation in “gatekeeper” courses in middle and high school, such as Algebra I, calculus, physics, and AP or IB.²⁷ Following the release of the New York Equity Coalition’s report, the coalition called on New York leaders to take steps to ensure that all students have access to the critical courses that will prepare them for success in college, careers, and civic life. Hundreds of New Yorkers — including parents, educators, and community members — signed onto the 5x25 agenda, which lays out five commitments to every student in the graduating class of 2025, the cohort of students who entered sixth grade in fall 2018. In partnership with The New York Equity Coalition, the New York State Department of Education issued [guidance](#) to school districts to improve equitable access to advanced coursework.²⁸ State advocates and policymakers can use our new state [data tool](#) and policy recommendations to take similar action in their state.

In **Maryland**, both Black and Latino students are underrepresented in Advanced Placement courses. But there are different reasons for each group’s lack of access. Black and Latino students are nearly as likely as their peers to attend a school that offers AP courses. However, both Black and Latino students are unfairly denied access to Advanced Placement courses offered within their school — for every 100 Black or Latino students who should be enrolled, only 61 Black students and 67 Latino students are actually enrolled in AP courses. Black students face an additional challenge to fair representation: the schools serving the most Black students have fewer students enrolled in Advanced Placement courses — these schools enroll just 16% of all students in AP courses, even though 25% of all high school students attend them. In Maryland, policymakers and advocates should focus on (1) increasing the number of Advanced Placement seats in the schools serving the most Black students and (2) addressing the within-school barriers to entry for both Black and Latino students across the state.



To explore how well your state’s schools are serving Black and Latino students, please [see our state-by-state analyses and data tool](#).



WHY IS THIS HAPPENING?

Our findings shine a light on many of the systemic barriers that lock Black and Latino students out of critical opportunities:

Resource inequities: As documented in our [Funding Gaps report](#), school districts that serve large populations of students of color receive far less funding than those serving White and more affluent students.²⁹ Too often, those funding gaps are exacerbated by unfair spending practices within districts.³⁰ These funding inequities have a profound effect on the educational opportunities districts and schools are able to provide, including advanced coursework opportunities.

Educator bias: One of the biggest barriers for Black and Latino students is the overreliance on the recommendations of teachers and counselors, whose judgments may be shaped by implicit (or even explicit) racial bias, and who may have a singular idea about who or what is considered “gifted,” for example. As a result of these biases, high-achieving Black and Latino students are routinely denied advanced opportunities.³¹

Assessment and grading bias: Eliminating racial and cultural bias in tests (whether they are written by publishers or school staff) and grading practices is an ongoing challenge for schools. Testing materials can undermine diversity, reinforce stereotypical roles, and devalue racial and cultural differences.³² And because teachers are not immune to racial bias, those biases can show up in their grading practices.³³

Lack of access to diverse educators: About 41% of U.S. K-12 public school students are Black or Latino, but only 16% of teachers are Black or Latino. This means many Black and Latino students are missing out on the

benefits of having teachers of the same race or ethnicity. Research suggests, for example, that at the elementary level, the teacher’s race — holding constant previous assessment scores, sex, age of kindergarten entry, socioeconomic status — plays a large role in whether or not Black students are identified for gifted programs.³⁴

Inequitable access to quality early childhood opportunities: High-quality early learning opportunities are an important pathway to strong academic outcomes for Black and Latino students. In fact, differences in the quality of children’s early childhood experiences affect the way educators identify giftedness in young children.³⁵ For example, students who have access to high-quality early childhood opportunities that focus on developmentally appropriate academics perform better on gifted assessments. Therefore, high-quality early childhood opportunities can increase the number of Black and Latino students in gifted education.³⁶

Lack of communication with families about advanced opportunities: Sometimes, schools make it difficult for families to find out about advanced coursework opportunities. A lack of communication and meaningful engagement with families — for example, a failure to accommodate parents’ work schedules or to provide materials in a language other than English can lead to fewer advanced coursework opportunities for Black and Latino students.³⁷

Our policy recommendations are designed to address these inequities and to expand opportunities for Black and Latino students.

STATE POLICY SOLUTIONS

These disparities are not inevitable. While some state leaders are taking steps to address this issue, others say it's a local problem that's out of their hands. The truth is, there are plenty of things state leaders can do to reduce inequities and boost Black and Latino student representation in advanced courses. (See "What District and School Leaders Can Do" on page 24.)

ALL STATES SHOULD:

1. **Set clear, measurable goals for advancing access to and success in advanced coursework and commit to publicly measuring state and district progress toward those goals.**

These goals should state that, within an ambitious and explicit number of years, Black and Latino students will be fairly represented and successful in rigorous coursework from elementary school through high school, including gifted and talented programs, eighth grade algebra, IB, and AP courses.

States should also set intermediate targets that allow them — and the public — to monitor progress toward those goals.

Include these goals — and plans to meet them — in highly visible communications, such as back to school messages and state of the state addresses.



2. **Use data to identify the barriers that prevent students of color and students from low-income backgrounds from enrolling in advanced courses.**

Collect and publish disaggregated data annually to monitor representation in advanced coursework opportunities (gifted and talented, eighth grade algebra, AP, and IB) in each district and school by student group.

Use quantitative and qualitative data to determine if there are barriers to fair representation (e.g., whether students of color attend schools that offer the course, there are enough seats in the course, they are given their fair share of seats, and they have the supports they need to be successful) statewide and by district, so that districts can implement the right solutions to the right problem. It is important to look at Black and Latino student experiences separately and intentionally, as our analysis shows that the type of systemic barriers these students encounter are not always the same.

STATES MUST THEN IMPLEMENT THE RIGHT STATEWIDE SOLUTIONS.

3. **Where schools serving the most Black and Latino students do not have any or enough advanced courses, states should invest to expand advanced coursework opportunities in those schools — either through more courses or seats or both — by:**

Providing funding to districts or schools that primarily serve Black and Latino students to offer more or a more diverse array of advanced courses, providing transportation to students in isolated or underserved schools, and/or purchasing necessary curricular materials.

Creating programs to allow fully certified teachers to serve students in other schools (e.g., through blended learning that is accompanied by state support for the necessary technology and infrastructure and state oversight of class size and course quality).

Providing guidance and technical assistance to districts to identify opportunities to reallocate resources to increase the number of courses and/or seats in underserved schools.

Creating programs to recruit or train teachers to teach advanced courses.

➔ STATE SOLUTIONS AT WORK

Illinois Provides Competitive Grants to Low-Income Districts to Increase AP Capacity

The Illinois State Board of Education offers [competitive grants](#) to districts with at least one low-income secondary school to build capacity to offer Advanced Placement courses. Schools that receive the grants may use the funds for the development and purchase of necessary course materials and books, tutoring to prepare students for AP courses, and recruitment targeting historically underrepresented students and their families — and they must use at least at least 20% of the funds to provide professional development to educators and administrators.

4. **Where Black and Latino students do not have a fair chance to take advantage of advanced coursework opportunities already offered within their schools, states should require and support districts to expand eligibility and increase access to advanced courses, by:**

Requiring the use of multiple measures to identify students for advanced coursework. In addition to using teacher and counselor recommendations, data such as course exam scores, previous scores on state tests, PSAT/SAT scores, and grades in relevant subject areas should all be used to identify students prepared for advanced coursework. All exams used to identify students for advanced opportunities, especially for gifted and talented programs, should be culturally responsive.

Requiring and providing funding to support schools and districts in implementing universal screening for gifted and talented programs. Research suggests that universal screening is more effective than relying on teachers' recommendations at addressing the under-identification of Black and Latino students.³⁸

➔ STATE SOLUTIONS AT WORK

Colorado Offsets Costs for Universal Screening for Gifted and Talented

In 2014, the Colorado legislature passed [a bill](#) that allows districts to apply for funds to offset costs of universal screening for gifted and talented programs. When Denver Public Schools then switched from a method that required parents to submit an application to have their children tested for gifted and talented eligibility to a universal screening approach, nearly 1 in 4 students identified as gifted and talented were Latino — [twice the proportion](#) as the year before.

Requiring automatic enrollment, so that students identified for advanced coursework through any of the means above are automatically enrolled in advanced courses, unless their families opt them out.

Investing in teacher and school counselor diversity, because research shows that educators of color are more likely to hold students of color to high expectations and identify them for advanced opportunities.³⁹ This is critically important in both the advanced courses themselves and the courses students take before getting to those advanced courses.

➔ STATE SOLUTIONS AT WORK

A Wave of Automatic Enrollment Policies

To address the underrepresentation of Black and Latino students in advanced courses, advocates in Washington State fought for years to pass HB 1599, which requires that students who meet or exceed grade-level standards on state exams be placed into the next most rigorous level of advanced courses offered in their high school. This state policy was inspired by the success of districts like Federal Way and Tacoma Public Schools, which implemented similar policies and saw a [dramatic increase](#) in the percentage of historically underrepresented groups taking advanced courses. For example, since implementing an automatic enrollment policy, Tacoma Public Schools has tripled the percentage of historically underserved students in advanced classes from 19.5% to 60%.

North Carolina and Colorado have passed similar policies in recent years.

Providing professional development opportunities to districts, so that principals, teachers, and counselors can learn about traditional barriers to access and success in advanced coursework, how to use multiple measures to determine eligibility for advanced coursework, and how to be proactive in identifying Black and Latino students for advanced course opportunities.

Eliminating financial barriers: Invest in subsidies, so that no students from low-income families are required to pay fees for books; pay to take exams to qualify for, get into, or get credit for advanced courses; or pay for transportation to advanced courses.

Requiring that information about all advanced courses (including waived fees, course offerings, benefits of enrolling, details on admissions test, and course requirements) **be shared with students and families** and be made available in families' home languages.

5. Finally, states should provide sufficient support for students to prepare for advanced coursework and for their success once enrolled. States should also support districts by providing the resources necessary to prepare students for advanced coursework opportunities, such as:

Requiring districts to adopt a culturally relevant, rigorous, and engaging curriculum in which students can see themselves and are prepared for advanced coursework.

Offering short-term, targeted support to students who are very close to the cut-off score on qualifying tests and exams and providing additional opportunities for students to demonstrate readiness for advanced courses (e.g., after-school, Saturday, or summer enrichment programs)

Investing in high-quality early childhood opportunities for children of color and children from low-income families. Selective academic opportunities begin as early as kindergarten — and are often especially relevant in second grade, where gifted and talented screenings often occur. High-quality early childhood education can help to ensure that all students are ready to succeed in advanced opportunities in second grade and beyond.

States should also support Black and Latino students' success in advanced courses by:

Requiring subject matter expertise in teachers who teach advanced courses, and prioritizing support for diverse teachers to obtain such expertise.

Requiring or incentivizing districts to support teachers while they are teaching advanced courses by providing real-time, ongoing support from school leaders or master educators and time to collaborate with colleagues across the school and district. Teachers should also have time and support for ongoing teacher training in subject matter, relevant pedagogy, and tools to identify and address racial bias in advanced classrooms.

Requiring that districts provide additional advanced coursework preparation and support for students who need it. This may include free after-school or summer preparation courses, as well as additional in-course supports like tutoring. This is key, because expanding access cannot just be about adding classes and seats. It must also give Black and Latino students the additional resources and supports that many of their peers receive and that they need to succeed in advanced courses, including stronger and more diverse teachers; high-quality curricula and assignments; additional academic supports, such as tutoring, and a positive, culturally sustaining school climate, to name a few.

➔ STATE SOLUTIONS AT WORK

Florida Expands AP Access and Success for Latino Students

Florida has taken a number of steps to expand access to advanced coursework for underrepresented students. Nearly two decades ago, the state began providing [free PSAT tests](#) to all high school sophomores, so educators could use the test scores to identify high-achieving Black and Latino students who were being overlooked for advanced coursework. Florida also provides materials and teacher training to expand access to AP programs in schools serving historically underserved student groups. As a result of these efforts, the state has significantly increased access to and success in AP coursework for Latino students. For example, in 2000, only 5,800 passed an AP exam with a score of 3 or higher; in 2015, the number of Latino students passing at least one AP exam was 42,000.





WHAT DISTRICT AND SCHOOL LEADERS CAN DO

District data analysis by our partners at Education Resource Strategies

This report draws on an analysis of inequities in access to advanced coursework and provides recommendations for what state leaders can do to address these disparities. But we can't ignore the important role that district and school leaders have in increasing access to and success in advanced courses.

Just as state leaders must use data to diagnose problems, district leaders must strive to understand the root causes of differences in advanced course enrollment. In the example below, we team up with our partners at [Education Resource Strategies](#), who work directly with districts and have access to student achievement data, to take a closer look at what's driving the gaps in eighth grade algebra enrollment in a typical district.

District X is a large and diverse district serving over 100,000 students. About 40% of the students are Black, 20% are Latino, and 30% are White. In this district, Algebra I is offered in eighth grade as an important step toward achieving college readiness, and more than one-quarter of all eighth grade students are enrolled in Algebra I. However, White and Asian students are three times more likely to be enrolled in the course than Black, Latino, and Native students (48% compared with 16%) **(Figure 6)**.^[i]

In order to develop strategies to eliminate this gap and increase enrollment for students of color in eighth grade algebra, district leaders must understand what's driving it.

1. Are there inequities in prior opportunities and preparation, such as inequitable access to effective teachers, that impact whether students are deemed eligible for more advanced coursework?
2. Are there inequities in assignment to advanced coursework within schools that persist even when students of color are academically prepared?

3. Are there inequities in access across schools — where schools with greater concentrations of students of color or students from low-income families are less likely to offer advanced courses?

In District X, the answer to each of those questions is yes.^[ii] There are underlying differences in prior student performance, which are caused by inequities in prior opportunities and preparation. It is important for District X to close prior opportunity gaps. But those differences in prior achievement only explain about half of the gap between students of color and their peers.

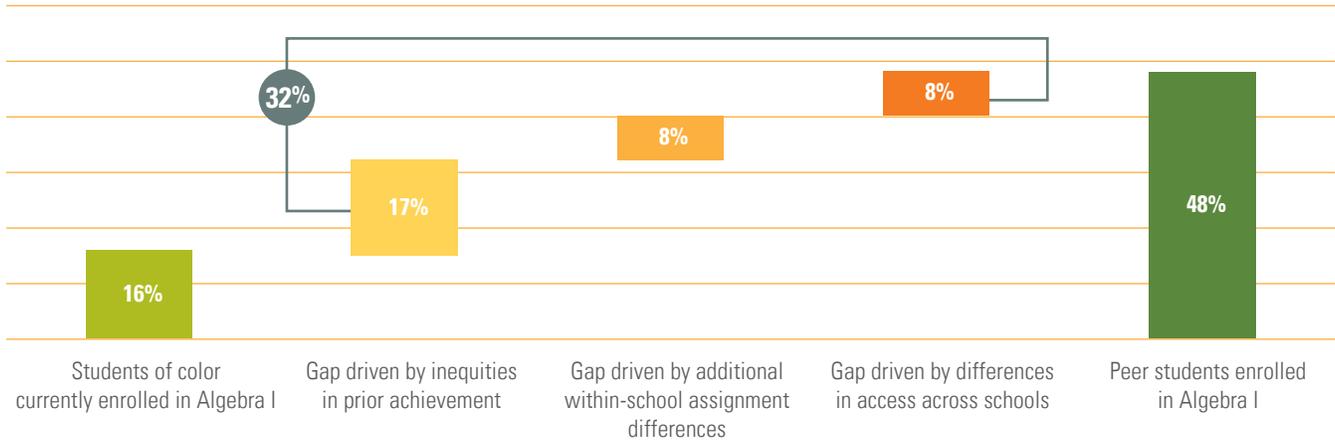
In other words, even if this district closed its achievement gap between students of color and peers in seventh grade, the district would still have substantial work to do to reach fair representation in eighth grade algebra.

The other half of the gap is driven in equal parts by students of color being denied access to the course in their schools, even when they meet the same achievement levels as peers, and differences in whether the schools that students of color attend offer enough seats in the course or offer the course at all.

^[i] Students of color here include Black, Latino, and Native students; peers include White and Asian students.

^[ii] We used the following methodology to answer each of these three questions. Question 1: We calculated new rates of seventh-grade math proficiency for students of color such that the distribution of performance for students of color within each school matched those of peers, and assumed students of color were assigned to eighth grade Algebra I at the actual rates we observed in the data for each level of proficiency. Question 2: After adjusting for differences in prior performance per Question 1, we then calculated what the eighth grade Algebra I enrollment rate for students of color would be if students of color in each school were equally likely to be enrolled in eighth grade Algebra I as their peers. Question 3: After controlling for differences in prior performance and differences in enrollment rates within schools per Question 2, we finally calculated what the eighth grade Algebra I enrollment rate for schools with more than 75% students of color would be if their overall enrollment rate for this course were raised to 35%, the average for all other schools in the district.

FIGURE 6: Drivers of Gap in Enrollment in Eighth Grade Algebra Between Students of Color and Peers



Reading Figure: Sixteen percent of students of color are enrolled in eighth grade Algebra I, while 48% of peers are enrolled in the course, which represents a gap of 32 percentage points; more than half of that gap — 17 points — is explained by differences in prior achievement (driven by prior opportunities) for students of color, 8 points of the gap is due to differences in within-school assignment, and 8 points is due to differences in availability of the course across schools. Note: Detail may not sum to total due to rounding.

DISTRICT AND SCHOOL POLICY SOLUTIONS

As we highlighted in [Systems for Success: Thinking Beyond Access to AP](#) and other reports in our [Shattering Expectations series](#), there are a number of policy solutions that district and school leaders can implement to help eliminate disparities in access to advanced coursework, including:

- Provide teachers with ongoing professional development and support in teaching advanced courses, as well as regular bias training to gain cultural competency.
- Adopt rigorous, standards-aligned curricula and assessments and provide and distribute high-quality instructional materials to all schools.
- Ensure that the district's core curriculum and course sequencing pathways prepare all students to enroll and succeed in advanced courses.
- Examine the district's policies for bias in identifying students for advanced coursework.
- Require that all information about advanced coursework (including process district uses to assign students to courses, courses offered, benefits of taking courses, waived fees, and course requirements) be given to all students and families and be made available in family's primary language.

And there are districts and schools that have put in place policies to address this issue — and reported progress.

For example:

- One large urban school district implemented universal gifted and talented screening for second grade students and saw a 130% increase of Latino students and an 80% increase of Black students identified for gifted and talented programs.⁴⁰
- Wake County Public Schools in North Carolina implemented a policy to assign middle school students to accelerated math and eighth grade algebra when they demonstrate success in prior coursework and thereby significantly increased Black and Latino enrollment in eighth grade algebra.⁴¹
- Alhambra High School, a large, racially diverse school outside of Los Angeles, changed outdated assumptions and policies about Advanced Placement by moving to open enrollment and dramatically increased access to and success in rigorous coursework, especially for Latino students.⁴²

But our analyses confirm that, despite increased attention on increasing access to and success in advanced coursework in some places, Black and Latino students continue to be underrepresented across the country. District and school efforts have not solved this problem, and too few states are tackling the issue in a serious way. We need to add sustained, intentional state-level action.

ENDNOTES

1. J. Brown, B. Dalton, J. Laird, and N. Ifill, "Paths Through Mathematics and Science: Patterns and Relationships in High School Coursetaking," NCEES 2018-118, (Washington, D.C., National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, 2018); Dorothyjean Cratty, "Potential for Significant Reductions in Dropout Rates: Analysis of an Entire 3rd Grade State Cohort," *Economics of Education Review* 31(5): 644-662 (2012); [College Board \(2016\), "AP Student Success at the College Level," https://aphighered.collegeboard.org/sites/default/files/ap-student-success-college-recent-research.pdf.](https://collegeboard.org/sites/default/files/ap-student-success-college-recent-research.pdf)
2. D. Ford, "The Underrepresentation of Minority Students in Gifted Education: Problems and Promises in Recruitment and Retention," *The Journal of Special Education*, (April 1998), Ford, Harris, et al. n.d., Grantham and Ford 2003, Taliaferro, DeVance and DeCuirGunby 2008, Flores 2007, ETS n.d.; Daniel G. Solorzano and Armida Ornelas (2010), https://www.jstor.org/stable/40364293?seq=1#page_scan_tab_contents, "A Critical Race Analysis of Latino/a and African American Advanced Placement Enrollment in Public High Schools," *The High School Journal* (Feb.-Mar. 2004), <https://dschool-old.stanford.edu/sandbox/groups/k12/wiki/d1b03/attachments/a6bda/Team%206%20Critical%20analysis%20of%20essionID=8cbdfc6129ceb041dbad2247ffc9d0112fd0ebce>
3. Christina Theokas and Reid Saaris, "Finding America's Missing AP and IB Students," (Washington, D.C.: The Education Trust, June 2013), [https://edtrust.org/resource/finding-americas-missing-ap-and-ib-students/.](https://edtrust.org/resource/finding-americas-missing-ap-and-ib-students/)
4. Donna Y. Ford, and Tarek C. Grantham, "Providing Access for Culturally Diverse Gifted Students: From Deficit to Dynamic Thinking," *Theory into Practice* (Summer, 2003), https://campbellms.typepad.com/files/culturally_diverse_gt-1-class-reading.pdf. In 1993, Black students were 16% of enrollment and 8.4% of students enrolled in gifted programs. In our analysis of the most recent data, Black students are 16% of enrollment and 9% of students enrolled in gifted and talented programs.
5. Carol Corbett Burris, Jay P. Heubert, and Henry M. Levin, "Accelerating Mathematics Achievement Using Heterogeneous Grouping," *American Educational Research Journal* 43, no. 1, (Spring 2006): 137-154; David Card and Laura Giuliano, "Can Tracking Raise the Test Scores of High-Ability Minority Students?," *American Economic Review* 106, no. 10, (October 2016): 2783-2816; Takako Nomi and Elaine M. Allensworth, "Sorting and Supporting Why Double-Dose Algebra Led to Better Test Scores but More Course Failures," *American Educational Research Journal* 50, no. 4 (August 1, 2013): 756-788.; Mary Kay Stein, Julia Heath Kaufman, Milan Sherman, and Amy F. Hillen, "Algebra A Challenge at the Crossroads of Policy and Practice," *Review of Educational Research* 81, no. 4, (December 1, 2011): 453-492.
6. Lee V. Stiff and Janet L. Johnson, "Mathematical Reasoning and Sense Making Begins with the Opportunity to Learn," (2011) in M. E. Strutchens & J. Reed (Eds.), *Focus in High School Mathematics: Fostering Reasoning and Sense Making for All Students*, (Reston, VA: National Council of Teachers of Mathematics, 2011): 85-100; Lee V. Stiff, Janet L. Johnson, and Patrick Akos, "Examining What We Know for Sure: Tracking in Middle Grades Mathematics," in W. Tate, K. King, C. R. Anderson (Eds.), *Disrupting Tradition: Research and Practice Pathways in Mathematics Education*, (Reston, VA: National Council of Teachers of Mathematics, 2011): 63-75.
7. *The Opportunity Myth: What Students Can Show Us About How School Is Letting Them Down—and How to Fix It*, (New York: The New Teacher Project, 2018). (New York, NY: McGrath & Kuriloff, 1999; Jeannie Oakes and Gretchen Guiton, "Matchmaking: The Dynamics of High School Tracking Decisions," *American Educational Research Journal* 32, no. 1 (March 1, 1995): 3-33; Elizabeth L. Useem, "Student Selection into Course Sequences in Mathematics: The Impact of Parental Involvement and School Policies," *Journal of Research on Adolescence* 1, no. 3 (1991): 231-250.
8. U.S. Department of Education Office for Civil Rights, "Civil Rights Data Collection, Public Use School-Level Survey Data, 2015–16," <https://www2.ed.gov/about/offices/list/ocr/docs/crdc-2015-16.html> (Downloaded April 2018); National Center for Education Statistics, "Common Core of Data, Public Elementary/Secondary School Universe Survey Data, 2015–16," <https://www2.ed.gov/about/offices/list/ocr/docs/crdc-2015-16.html> (Downloaded April 2018)
9. Data for passing rates are for schools for which we have data on Black and Latino student passing eighth grade algebra. In the Civil Rights Data Collection, data on students passing eighth grade algebra are suppressed if the number of students is less than 2. This analysis only includes schools where we have eighth grade algebra passing data for the relevant group of students. Those schools enroll 74% of Black students and 78% percent of Latino students enrolled in eighth grade algebra. While Black and Latino students make up 15% and 21% of eighth graders, respectively, in schools that offer eighth grade algebra, they make up 20% and 26% of eighth graders, respectively, in schools with passing data.
10. Data for passing rates are for schools for which we have data on Black and Latino students passing eighth grade algebra. In the CRDC, data on students passing eighth grade algebra are suppressed if the number of students is fewer than 2. This analysis only includes schools where we have eighth grade algebra passing data for the relevant group of students. Those schools enroll 74% of Black students and 78% of Latino students enrolled in eighth grade algebra. While Black and Latino students make up 15% and 21% of eighth graders, respectively, in schools that offer eighth grade algebra, they make up 20% and 26% of eighth graders, respectively, in schools with passing data.
11. Carolyn Callahan, Tonya Moon, and Sarah Oh, Status of Elementary Gifted Programs, 2013, (Charlottesville, VA: National Research Center on the Gifted and Talented), <http://www.nagc.org/sites/default/files/key%20reports/ELEM%20school%20GT%20Survey%20Report.pdf>.
12. Karolyn Tyson, *Integration Interrupted: Tracking, Black Students, & Acting White After Brown*, (Oxford: Oxford University Press, 2011).

13. To calculate this value, we multiply the proportion of students enrolled in elementary school who are Black or Latino by the total number of students enrolled in gifted and talented programs, and subtract the number of Black or Latino students who are enrolled in the programs.
14. Kirk Walters, Whitney Cade, Marisa de la Torre, Jordan Rickles, and Ryan Eisner, "Expanding Access to 8th Grade Algebra: Does Readiness Matter?" (American Institutes for Research, 2018), <https://appam.confex.com/appam/2018/webprogram/Paper27790.html>.
15. To calculate this value, we multiply the proportion of eighth graders who are Black or Latino by the total number of students enrolled in eighth grade Algebra I, and subtract the number of Black or Latino students who are enrolled in the course.
16. Theokas and Saaris, "Finding America's Missing AP and IB Students"; The College Board, "Class of 2018 AP Data Overview," <https://reports.collegeboard.org/ap-program-results/class-2018-data>.
17. Clifford Adelman, "The Toolbox Revisited: Paths to Degree Completion from High School Through College," (U.S. Department of Education, 2006).
18. In addition to the District of Columbia, Arkansas, Connecticut, Indiana, Iowa, Louisiana, Mississippi, South Carolina, West Virginia all require AP courses to be available.
19. "50-State Comparison: Advanced Placement Policies," (Education Commission of the States, 2016), <https://www.ecs.org/advanced-placement-policies/>.
20. The Civil Rights Data Collection no longer reports the number of students taking world languages. However, data from College Board suggest that the overall representation of Latino students in AP is slightly inflated by participation in AP Spanish. In 2018, Latino students took 23% of all advanced placement exams and 71% of the AP Spanish and Culture exams.
21. To calculate this value, we multiply the proportion of students enrolled in high school who are Black or Latino by the total number of students enrolled in at least one Advanced Placement course, and subtract the number of Black or Latino students who are enrolled in at least one course.
22. The CRDC only includes data on enrollment in Advanced Placement mathematics, science, and other disciplines (including English, social science, and foreign languages); it does not include enrollment data in specific subjects.
23. Illinois Report Card, 2017-2018, Oak Park & River Forest High School, <https://www.illinoisreportcard.com/School.aspx?schoolid=060162000130001>.
24. Sarah Garland, *Divided we Fail: The Story of an African American Community That Ended the Era of School Desegregation*, (Beacon Press Books, 2013).
25. Suneal Kolluri, "Advanced Placement: The Dual Challenge of Equal Access and Effectiveness," (American Educational Research Association, July 2018): 671-711, <https://journals.sagepub.com/stoken/default+domain/eVvTYW2kvlCtcDjUzhWu/full#>; Karolyn Tyson, *Integration Interrupted: Tracking, Black Students, & Acting White After Brown*, (Oxford: Oxford University Press, 2011); Jeannie Oakes, *Keeping Track: How Schools Structure Inequality*, (New Haven: Yale University Press, 2005); Charles Clotfelter, Helen Ladd, and Jacob Vigdor, "Segregation and Resegregation in North Carolina's Public School Classrooms," (North Carolina Law Review, 2002), https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1991&context=faculty_scholarship.
26. Data for passing rates are for schools for which we have passing data on Black and Latino students in eighth grade algebra.
27. <https://equityinedny.edtrust.org/wp-content/uploads/sites/14/2018/05/Within-Our-Reach.pdf>
28. State Education Department Issues Guidance to Increase Equitable Access to Advanced Coursework for All Students," New York State Education Department, Press Release, November 18, 2019, www.nysed.gov/news/2019/state-education-department-issues-guidance-increase-equitable-access-advanced-coursework.
29. Ivy Morgan and Ary Amerikaner, "Funding Gaps 2018" (Washington, D.C., The Education Trust, 2018), <https://edtrust.org/resource/funding-gaps-2018/>.
30. Marguerite Roza, Paul T. Hill, Susan Sclafani, and Sheree Speakman, "How within-district spending inequities help some schools to fail," *Brookings Papers on Education Policy*, no. 7 (2004): 201-227.
31. Ford, Donna Y., and Tarek C. Grantham. 2003. "Providing Access for Culturally Diverse Gifted Students: From Deficit to Dynamic Thinking." *Theory into Practice*. https://campbellms.typepad.com/files/culturally_diverse_gt-1-class-reading.pdf; Kolluri, Suneal. 2018. "Advanced Placement: The Dual Challenge of Equal Access and Effectiveness." *AERA* 671-711. <https://journals.sagepub.com/stoken/default+domain/eVvTYW2kvlCtcDjUzhWu/full#>; Ford, Donna, Brian Wright, Ahmad Washington, and Malik Henfield. 2016. "Access and Equity Denied: Key Theories for School Psychologists to Consider When Assessing Black and Hispanic Students for Gifted Education." *School Psychology Forum: Research in Practice* 265-277.
32. Ford, Donna, Brian Wright, Ahmad Washington, and Malik Henfield. 2016. "Access and Equity Denied: Key Theories for School Psychologists to Consider When Assessing Black and Hispanic Students for Gifted Education." *School Psychology Forum: Research in Practice* 265-277.
33. Joe Feldman, *Grading for equity: What it is, why it matters, and how it can transform schools and classrooms*, (Corwin Press, 2018).
34. Grissom, Jason, and Christopher Redding. 2016. "Discretion and Disproportionality: Explaining the Underrepresentation." *AERA Open* 1-25. <https://journals.sagepub.com/doi/pdf/10.1177/2332858415622175>.
35. Ford, Donna, Brian Wright, Ahmad Washington, and Malik Henfield. 2016. "Access and Equity Denied: Key Theories for School Psychologists to Consider When Assessing Black and Hispanic Students for Gifted Education." *School Psychology Forum: Research in Practice* 265-277.

36. Ford, Donna, Brian Wright, Ahmad Washington, and Malik Henfield. 2016. "Access and Equity Denied: Key Theories for School Psychologists to Consider When Assessing Black and Hispanic Students for Gifted Education." *School Psychology Forum: Research in Practice* 265-277.
37. Ford, Donna Y., and Tarek C. Grantham. 2003. "Providing Access for Culturally Diverse Gifted Students: From Deficit to Dynamic Thinking." *Theory into Practice*. https://campbellms.typepad.com/files/culturally_diverse_gt-1-class-reading.pdf.
- Grantham, Tarek, and Donna Ford. 2003. "Beyond Self-Concept and Self-Esteem: Racial Identity and Gifted African American Students." https://www.researchgate.net/profile/James_lil2/publication/236806915_Effects_of_Locus_Control_on_African_American_High_School_Seniors'_Educational_Aspirations_Implications_for_Preservice_and_Inservice_High_School_Teachers_and_Counselors/links/5461eea90cf.
38. Card, David, and Laura Giuliano. 2015. *Can Universal Screening Increase The Representation of Low Income and Minority Students in Gifted Education*. Cambridge: National Bureau of Economic Research. <https://www.nber.org/papers/w21519.pdf>.
39. Gershenson, Seth, Stephen Holt, and Papageorge Nicholas. 2016. "Who believes in me? The effect of student–teacher demographic match on teacher expectations." *Economics Education Review* 209-224. <https://www.sciencedirect.com/science/article/abs/pii/S0272775715300959>.
- Grissom, Jason, and Christopher Redding. 2016. "Discretion and Disproportionality: Explaining the Underrepresentation." *AERA Open* 1-25. <https://journals.sagepub.com/doi/pdf/10.1177/2332858415622175>.
40. Card, David, and Laura Giuliano. 2015. *Can Universal Screening Increase The Representation of Low Income and Minority Students in Gifted Education*. Cambridge: National Bureau of Economic Research. <https://www.nber.org/papers/w21519.pdf>.
41. Shaun M. Dougherty et al., "Middle School Math Acceleration and Equitable Access to Eighth-Grade Algebra: Evidence From the Wake County Public School System," *Educational Evaluation and Policy Analysis* 37, no. 1_suppl (May 2015): 80S-101S. <https://doi.org/10.3102/0162373715576076>.
42. Griffin, Ashley, and Davis Dixon. 2017. "Systems for Success: Thinking Beyond Access to AP." <https://edtrust.org/resource/systems-success-thinking-beyond-access-ap/>.

TECHNICAL NOTE

About the Data

This analysis uses data from the 2015–16 Civil Rights Data Collection (CRDC) and the 2015–16 Common Core of Data (CCD).¹ Our analysis focuses on regular public schools (traditional and charter) and excludes the following types of schools, programs or facilities: alternative, special education, virtual, juvenile justice, preschool/kindergarten only, adult education, and ungraded. In addition, we excluded the following schools from the specified analyses:

- Schools in Hawaii were excluded from the gifted and talented analysis due to incorrect data submitted to the CRDC.²
- Schools in Florida were excluded from the eighth grade algebra passing analysis due to incorrect data submitted to the CRDC.³

The universe in our analysis includes a total of 86,440 schools, serving 49 million students. The gifted and

talented analysis includes 50,634 elementary schools that serve 24 million students; the eighth grade Algebra I analysis includes 25,315 schools that offer eighth grade, which serve 3.6 million eighth grade students; and 16,237 high schools that serve 14 million students.

We categorized elementary schools and high schools by applying the National Center for Education Statistics' definition for each type of school to CRDC data on grades offered. Elementary schools are those where the lowest grade offered is grade three or below and the highest grade offered is grade eight or below. High schools are those where the lowest grade is between grades seven and 12 (inclusive) and the highest grade is grade 12. We defined schools that offer eighth grade as those where both the CRDC and CCD indicated that the school offered eighth grade.

Eighth grade Algebra I enrollment: We use eighth grade enrollment data from the CCD for the eighth grade algebra analysis. In some instances the eighth grade

algebra enrollment for a group of students was higher than the CCD enrollment for that group of students. If the difference was two students or fewer, we bottom coded the algebra enrollment value to match the CCD eighth grade enrollment value; we dropped 578 schools where the difference was greater than two students.

Eighth grade Algebra I passing: The CRDC employs data making methods to protect student privacy in the algebra passing data. The rules mean that if two or fewer students passed the course, the actual value is coded as “-2,” which obscures the differences between values of 0, 1, or 2. As a result our analysis of students passing algebra only includes schools for which we have unmasked algebra passing data for the relevant group of students, or where there were at least five students in that group enrolled in the course (e.g., the analysis on Black students passing algebra only includes schools where we have passing data for Black students or where there were at least five Black students enrolled in algebra). This analysis captures 74% of Black students and 78% of Latino students enrolled in eighth grade algebra.

Measures of Representation

In the national analysis, we present one finding on success in eighth grade Algebra I:

1. The percentage of students who are Black (or Latino) who passed eighth grade Algebra I compared with the percentage of students who are Black (or Latino) who are enrolled in eighth grade Algebra I in schools with passing data for Black (or Latino) students.

We present four additional findings for each advanced coursework opportunity. The measures are defined as follows, using Latino enrollment in eighth grade Algebra I as the example (the measures for gifted and talented in elementary school and Advanced Placement in high school follow the same format).

2. The percentage of students who are Latino in eighth grade Algebra I compared with the percentage of students who are Latino in eighth grade.
- 3a. The percentage of students who are Latino in schools that offer eighth grade Algebra I compared with the percentage of students who are Latino in eighth grade.
- 3b. The percentage of the state’s students who are enrolled in eighth grade Algebra I in the schools with the most Black or Latino students that enroll 25% of the state’s eighth grade students.
- 3c. The percentage of students who are Latino in eighth grade Algebra I compared with the percentage of students who are Latino in schools that offer eighth grade Algebra I.

1. U.S. Department of Education Office for Civil Rights, “Civil Rights Data Collection, Public Use School-Level Survey Data, 2015–16,” <https://www2.ed.gov/about/offices/list/ocr/docs/crdc-2015-16.html> (Downloaded April 2018) and National Center for Education Statistics, “Common Core of Data, Public Elementary/Secondary School Universe Survey Data, 2015–16,” <https://www2.ed.gov/about/offices/list/ocr/docs/crdc-2015-16.html> (Downloaded April 2018).
2. U.S. Department of Education Office for Civil Rights, “Civil Rights Data Collection, 2015–16 Data Notes,” <https://ocrdata.ed.gov/Downloads/Data-Notes-2015-16-CRDC.pdf> (last accessed November 2019).
3. U.S. Department of Education Office for Civil Rights, “Civil Rights Data Collection, 2015–16 Data Notes,” <https://ocrdata.ed.gov/Downloads/Data-Notes-2015-16-CRDC.pdf> (last accessed November 2019).

ABOUT THE EDUCATION TRUST

The Education Trust is a national nonprofit that works to close opportunity gaps that disproportionately affect students of color and students from low-income families. Through our research and advocacy, Ed Trust supports efforts that expand excellence and equity in education from preschool through college; increase college access and completion, particularly for historically underserved students; engage diverse communities dedicated to education equity; and increase political and public will to act on equity issues.



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