SHUT OUT: Black and Latino Students and Students from Low-Income Backgrounds are Denied Access to AP STEM Opportunities

A new study from The Education Trust finds students voice interest and college aspirations in STEM but are excluded from AP STEM courses

WASHINGTON — Despite students saying that STEM courses are their favorite subject areas and that they aspire to go to college, Black and Latino students and students from low-income backgrounds continue to be excluded from crucial learning opportunities available through AP STEM courses, according to a new report from Education Trust and Equity Opportunity Schools, Shut Out: Why Black and Latino Students are Under-Enrolled in AP STEM Courses.

This new research highlights that a positive and inviting school climate plays an important role in getting more Black and Latino students in advanced courses that would nurture their aspirations and interests and position them to thrive in college and future careers.

“Students who are ready and eager to take advanced placement courses at their schools shouldn’t be shut out because seats are not available or they don’t feel welcomed in these courses,” said Dr. Allison Socol, assistant director of P-12 policy at The Education Trust. “District and school leaders must lead efforts to build more welcoming and inclusive learning environments that ensure students who are interested in STEM professions are able to enroll and succeed in AP STEM courses.”

Based on a sample of 80 districts across 24 states and survey data from 200,000 students across 184 schools, Shut Out: Why Black and Latino Students are Under-Enrolled in AP STEM Courses finds:

- 2 in 5 Black and Latino students and 1 in 4 students from low-income backgrounds say STEM courses are their favorite courses and aspire to go to college
- But very few Black and Latino students are enrolled in AP STEM courses that would prepare them for college and a STEM career (e.g., less than 2% of STEM-interested and college-aspiring Black and Latino students and students from low-income backgrounds are in AP Biology)
- School climate matters greatly in helping students access advanced coursework opportunities, especially when they build on students’ interests and aspirations
  - Students who want to go to college are 105% more likely to take an AP class than those who do not aspire to attend college
  - Students who want to go to college are 11% more likely to take an AP class when they feel a sense of belonging in AP classes
  - Students who want to go to college are 16% more likely to take an AP class when they receive information on how to enroll in AP courses.
“We believe this report makes plain that is time to think differently about how to identify, engage and resource Black and Latinx students. Thousands of students are ready to succeed in AP STEM right now but are being denied access through outdated metrics, unnecessary prerequisites, and myopic student selection criteria.” Dr. Sasha Rabkin, President, Equal Opportunity Schools.

In Shut Out: Why Black and Latino Students are Under-Enrolled in AP STEM Courses, The Education Trust teamed up with Equal Opportunity Schools — a nonprofit organization that partners with school, district, and state leaders to close race and income enrollment gaps in AP and IB programs — to look specifically at access to AP courses in science, technology, engineering, and math (STEM). From a sample of 80 districts across 24 states, we analyzed student survey data, administrative school files, school course enrollment, and interviewed a number of school leaders and educators to help contextualize the data.

The Education Trust previously estimated that nearly 225k Black and Latino students are missing from AP courses they should otherwise have access to while in high school. Missed opportunities to enroll Black and Latino students in AP STEM courses have profound negative implications for students’ overall preparation for and success in college and limit the diversity of the STEM workforce. According to The Pew Research Center, Black people represent 11% of the workforce but are only 9% of those in STEM jobs. Similarly, Latino people make up 17% of the workforce but only 8% of those in STEM jobs. Jobs in STEM fields often come with higher-paying salaries that, over time, could help close the racial wealth gap that finds Black households to have only a fraction of the wealth of White households.

Many state, district, and school leaders have not addressed systemic barriers and conditions that make it difficult, and in some cases impossible, for students to enroll in AP STEM courses, including a failure to create school climates that make underserved students feel welcomed in these courses.

To increase enrollment of students of color in STEM courses, Ed Trust calls on state leaders to:

- Enact and encourage more equitable enrollment policies and practices, such as identifying students for advanced courses using multiple measures and implementing automatic enrollment policies
- Cover the costs of exams, transportation, and other materials to eliminate the cost of enrollment in advanced coursework opportunities and require districts and school to share information about enrolling in advanced coursework opportunities in families’ home languages
- Provide technical support to schools and districts failing to adequately enroll students of color, students from low-income families in advanced coursework opportunities
- Invest in increasing the diversity of the teacher workforce, given the research that students of color are more likely to be referred for advanced coursework when they have a teacher of color

District and school leaders can also increase the number of Black, Latino, and students from low-income backgrounds who enroll in AP STEM courses by:

- Ensuring that high schools have adequate college counselors and other trusted adults who can help students identify courses that are rigorous and challenging, meet their interests and put them on the path for college and career success
- Collect data through surveys of students, families, and educators to better understand students’ interests and aspirations and to improve school climate
- Recruit and support additional educators of color
- Provide professional development to educators and administrations about proactively identifying Black and Latino students for advanced courses and using culturally relevant curricula and instructional practices
“Black and Latino students, and those from families with lower incomes are being systematically excluded from participating in AP STEM courses and ultimately our nation’s most prestigious universities,” said Denise Forte, interim CEO of The Education Trust. “This new research changes the narrative that this is because students are ‘not interested’ or ‘prepared’ for these courses and put the burden directly on state, district and local school officials to create conditions that will allow these students to access and thrive in these courses.”

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**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. Learn more: [https://edtrust.org/issue/closing-gaps-across-the-achievement-spectrum/](https://edtrust.org/issue/closing-gaps-across-the-achievement-spectrum/)

**About Equal Opportunity Schools**
Equal Opportunity Schools is a national organization serving school districts of all sizes. We are here to help better serve students of color and low-income students and improve the accessibility of advanced learning classes. We provide tools such as a gaps chart analysis, equity pathways reports, beginning and end-of-year student/administrator surveys, best practices from more than 700 schools in 220+ districts across 33 states, and support to make equity and improved access to rigorous courses a district priority. For more information, please visit [www.eoschools.org](http://www.eoschools.org).