

Within Our Reach: Who's in? Who's Out?

An analysis of advanced coursework enrollment in New York State 2021-22

Parents often wonder why their child is not enrolled in an honors or advanced course or have questions about how to ensure their child meets the criteria for enrollment. Yet, even when enrollment criteria are known or met, students of color and students from low-income backgrounds are disproportionately excluded from advanced and rigorous coursework.

This presents serious equity challenges since advanced courses provide students with an opportunity to develop the skills and knowledge necessary for success in college and their career. Courses such as computer science and Calculus, along with dual enrollment, Advanced Placement (AP), and International Baccalaureate (IB) can provide students with an edge in college admissions while improving the likelihood of postsecondary degree attainment and career success in highly skilled industries.

Yet, for too long, students of color and students from low-income backgrounds have been less likely to be enrolled in these courses compared to their non-low-income and White peers — and many stakeholders have wondered why. There are several reasons for this persistent challenge:

- Students of color and students from low-income backgrounds are less likely to attend schools that offer a menu of advanced courses
- Even when students of color and those from low-income background attend schools where advanced course are offered, they and students from other historically underserved groups are less likely to be enrolled in the advanced courses.
- Educator bias and a lack of teacher diversity has led to students of color being tracked away from advanced courses by their teachers and school counselors.
- Inequitable access to high quality early childhood learning opportunities for students of color and those from low income backgrounds exacerbates early learning gaps; leading to an overemphasis on remediation that limits access to advanced courses for these student groups.

- Enrollment criteria for advanced coursework is opaque. Many districts fail to communicate with families and students about advanced coursework opportunities and enrollment practices often include unnecessary barriers that limit access to for students of color and students from low-income backgrounds

The New York Equity Coalition recently reviewed data from the 2021-22 school year and found little change in access to advanced coursework in middle and high school since the 2019-20 school year. This is despite the important guidance NYSED released in 2019 to help districts expand equitable access to advanced coursework. The guidance was a critical first step, and provided a clear set of principles for districts to demonstrate when implementing their course access policy.

Every student in New York deserves an education that sets them on a path to a bright and prosperous future. Access to rigorous coursework is one way to ensure that students arrive at their postsecondary opportunities prepared. Now is the time to ensure that all students have access to information and the opportunity to enroll in advanced academic coursework and the role it can play in their postsecondary success.

KEY STATEWIDE FINDINGS

Finding 1:

American Indian, Black, Latinx, and students from low-income backgrounds are under-represented in a wide range of important advanced courses.

Finding 2:

Black, Latinx, and students from low-income backgrounds are more likely than their White and more affluent peers to attend schools where important advanced courses are not offered.

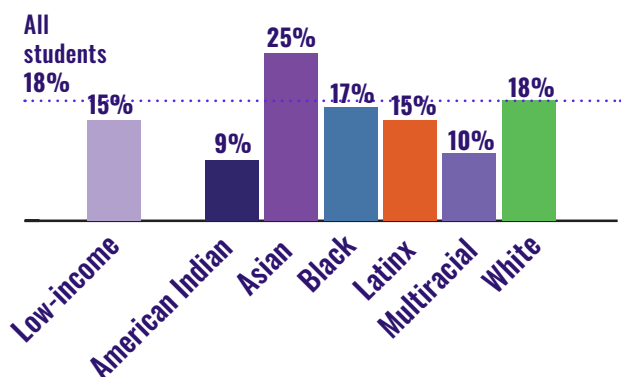
Finding 3:

Even in schools that offer important advanced courses, students who are from low-income backgrounds and Black and Latinx students are disproportionately under-enrolled in those courses.

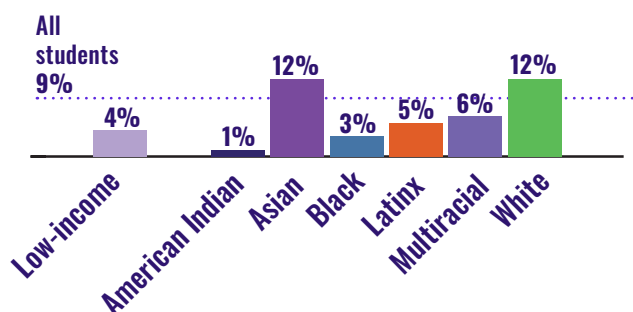
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Enrollment rate in important advanced courses by student demographics

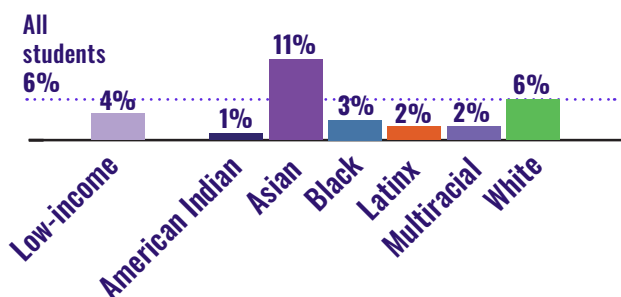
Grades 7-8 **algebra 1** enrollment rate by student demographics



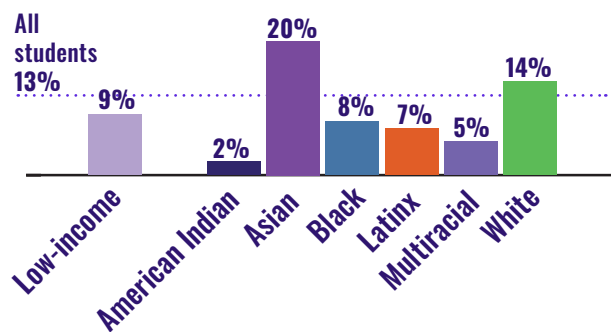
Grades 7-8 **earth science** enrollment rate by student demographics



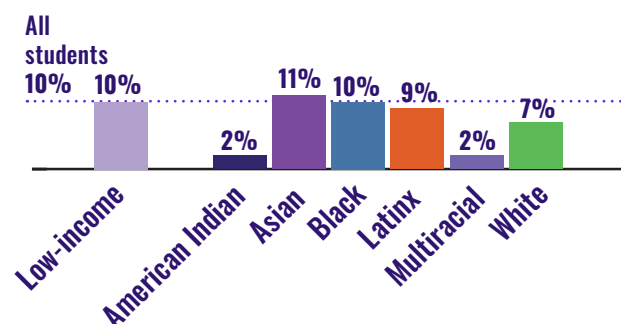
Grades 9-12 **calculus** enrollment rate by student demographics



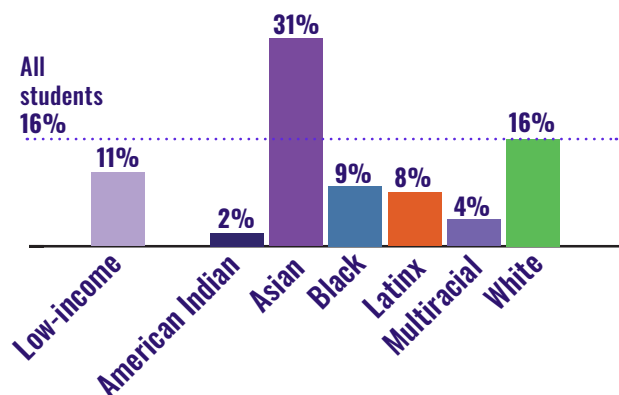
Grades 9-12 **physics** enrollment rate by student demographics



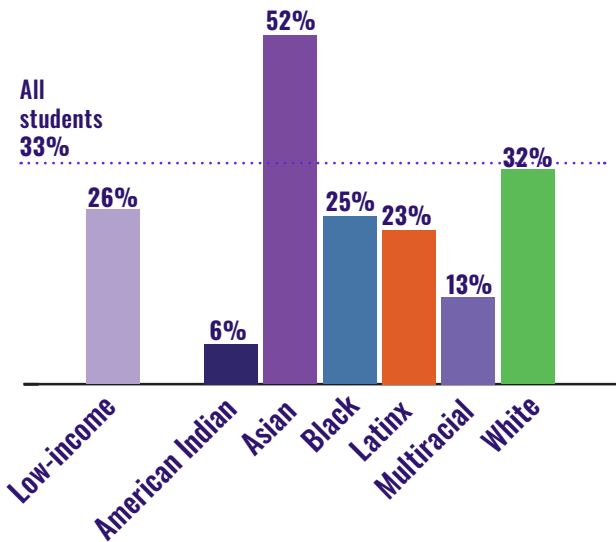
Grades 9-12 **computer science** enrollment rate by student demographics



Grades 9-12 **AP/IB math or science** enrollment rate by student demographics



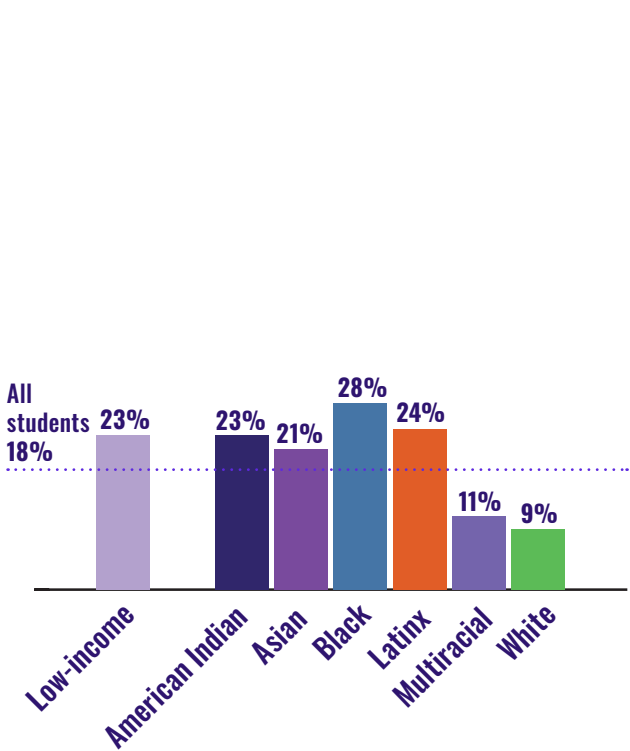
Grades 9-12 **other AP/IB** enrollment rate by student demographics



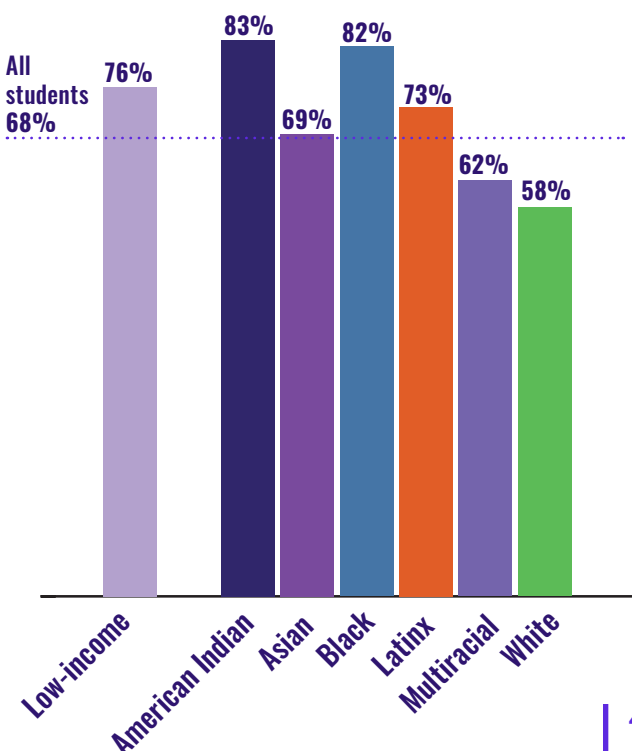
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Share of students who attend schools where important advanced courses are not offered

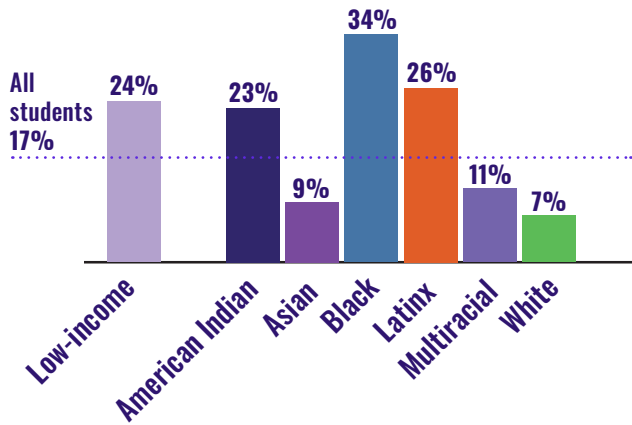
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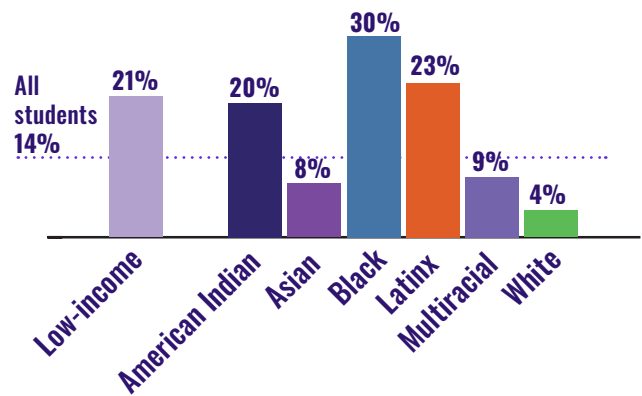
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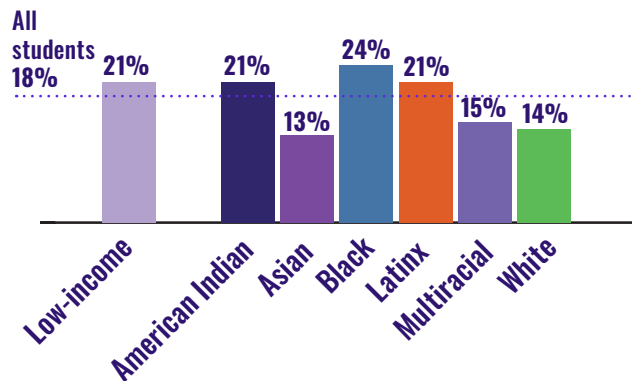
Grades 9-12 **calculus**



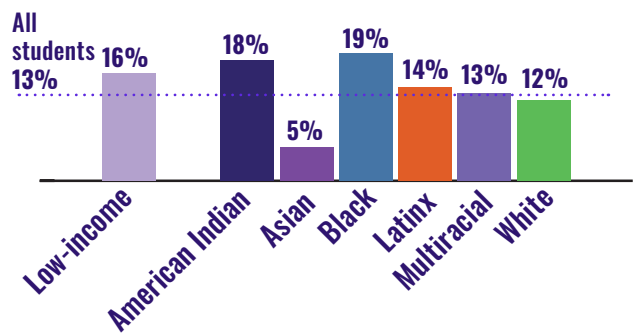
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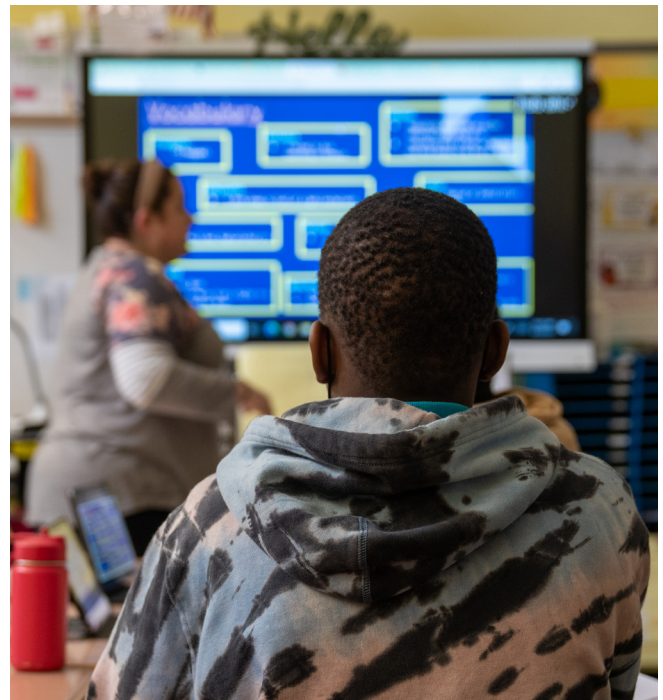
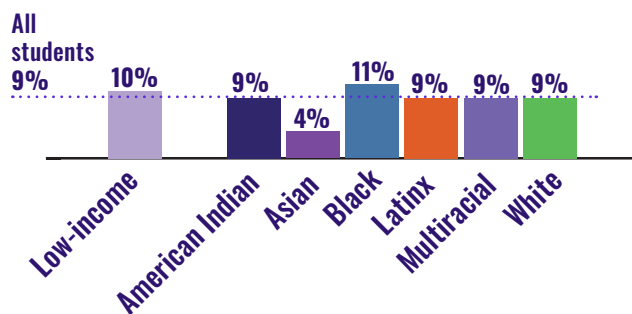
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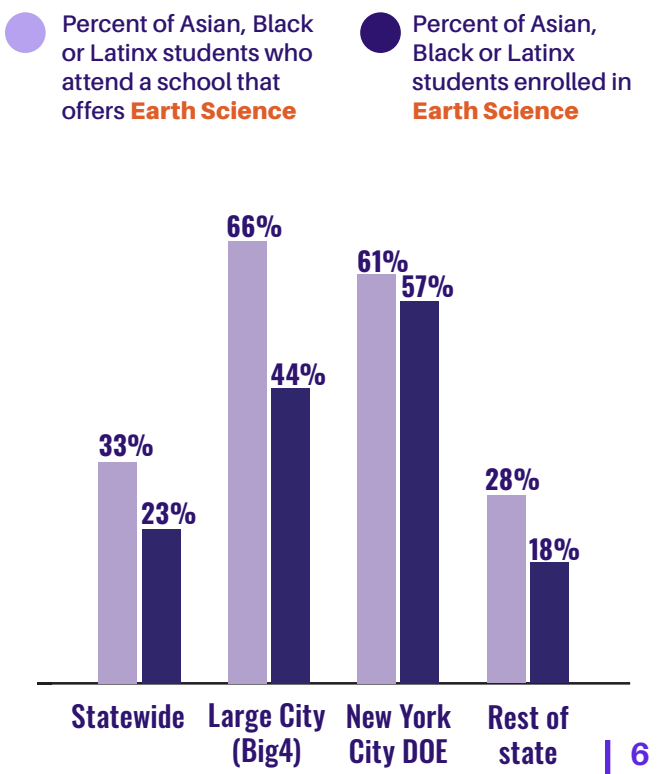
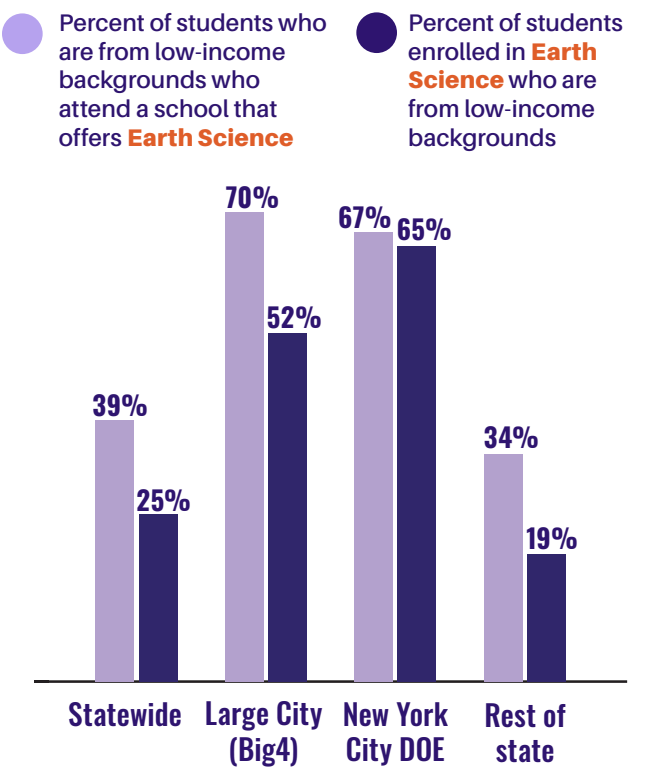
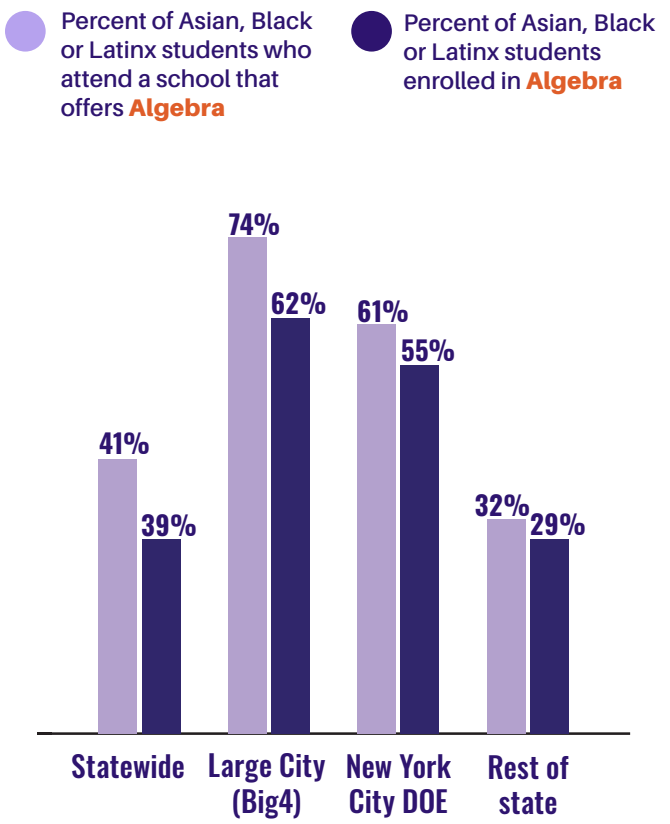
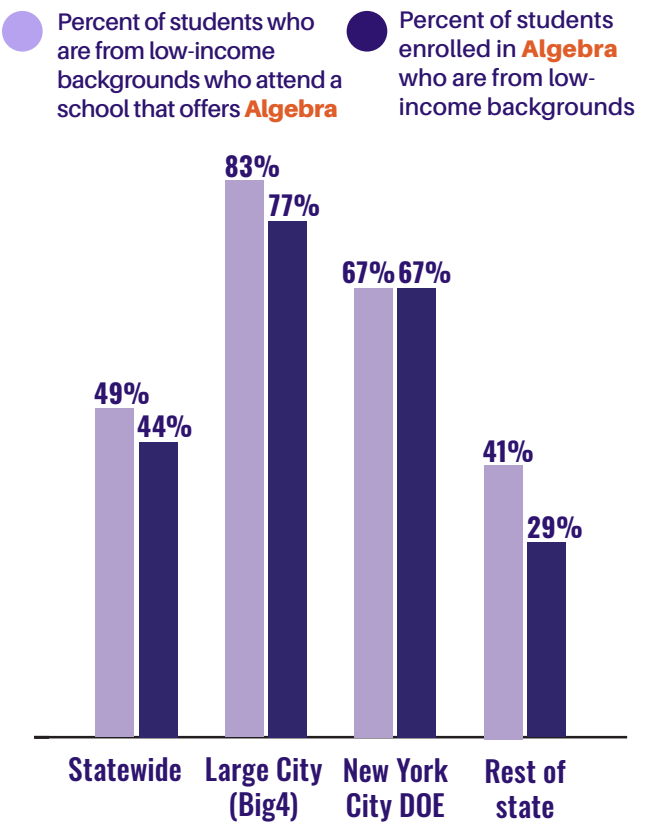
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Grades 9-12 **other AP/IB**



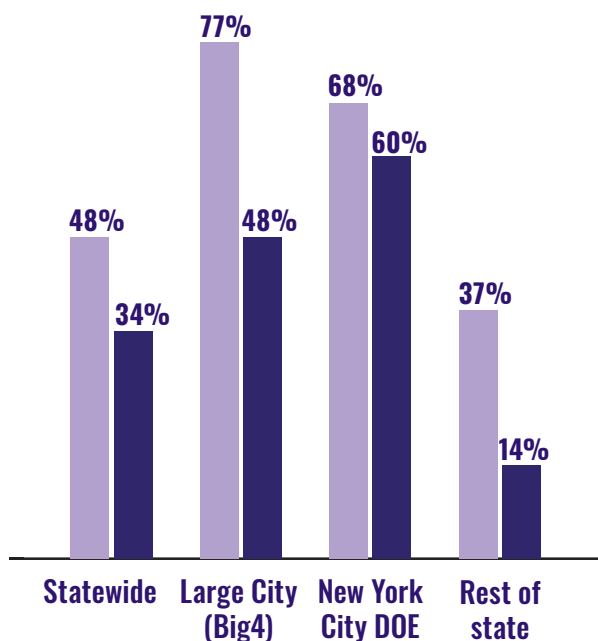
FINDING 3: Even in schools that offer advanced courses, students who are from low-income backgrounds and Black and Latinx students are disproportionately under-enrolled in these courses.



Source: New York State Education Department. Unpublished 2021-22 data

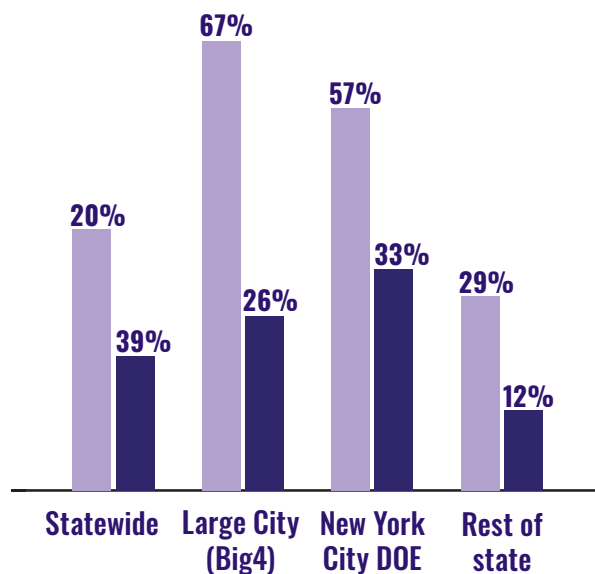
Percent of students who are from low-income backgrounds who attend a school that offers **Calculus**

Percent of students enrolled in **Calculus** who are from low-income backgrounds



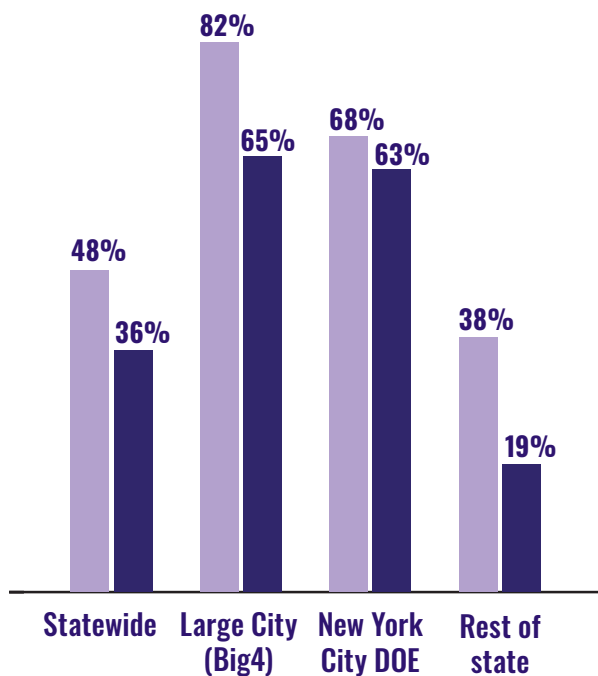
Percent of Asian, Black or Latinx students who attend a school that offers **Calculus**

Percent of Asian, Black or Latinx students enrolled in **Calculus**



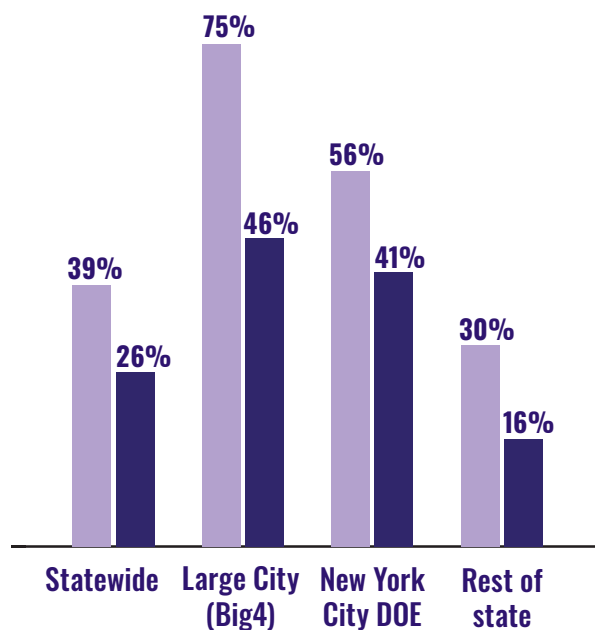
Percent of students who are from low-income backgrounds who attend a school that offers **Physics**

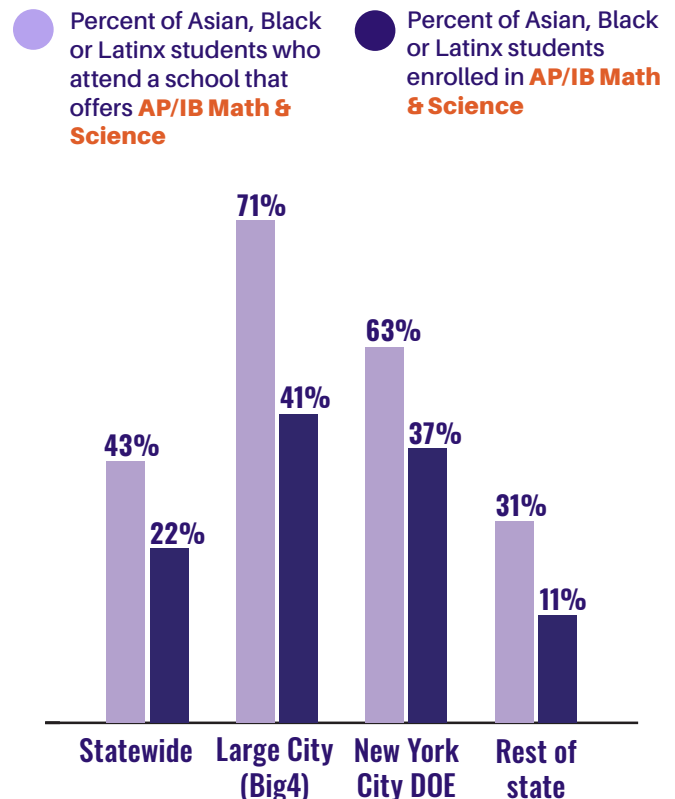
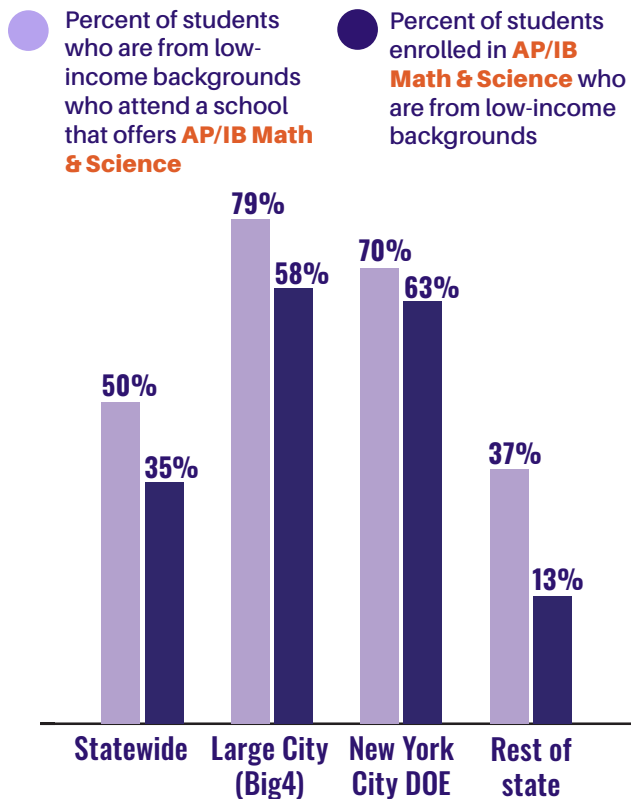
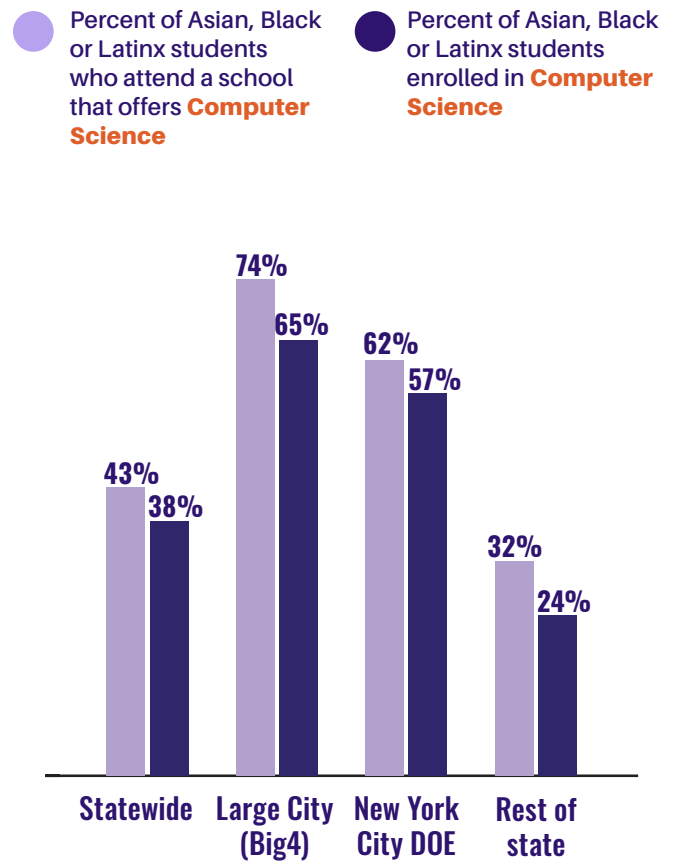
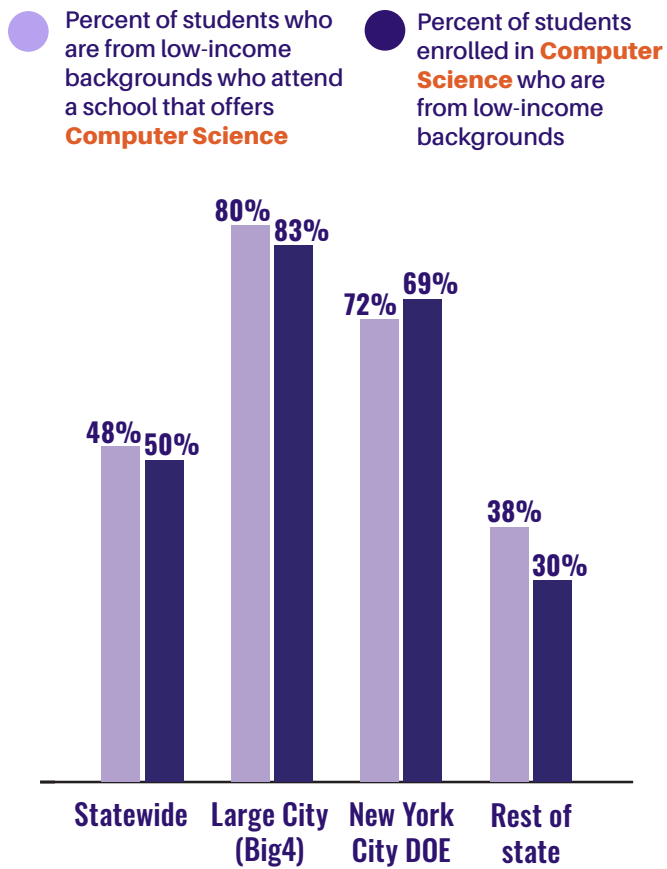
Percent of students enrolled in **Physics** who are from low-income backgrounds

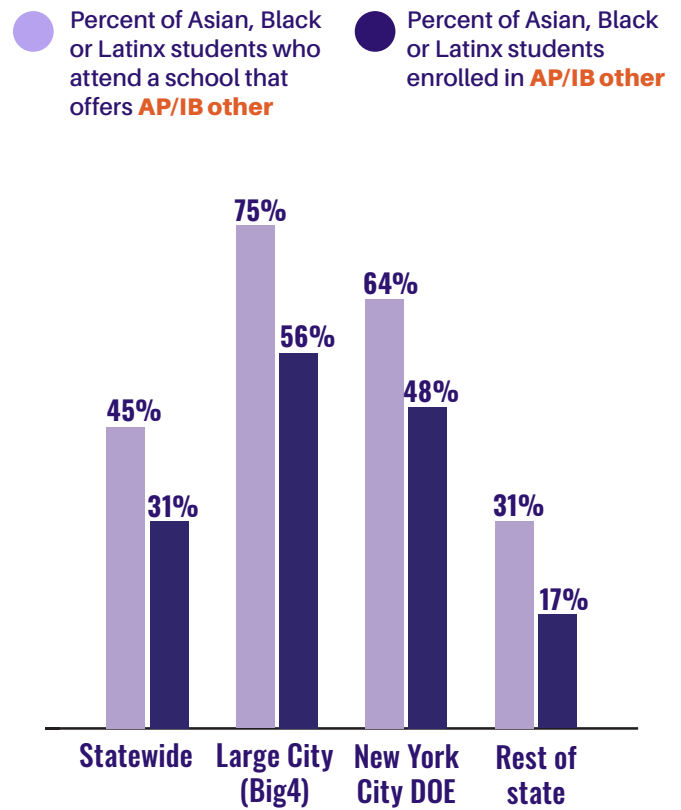
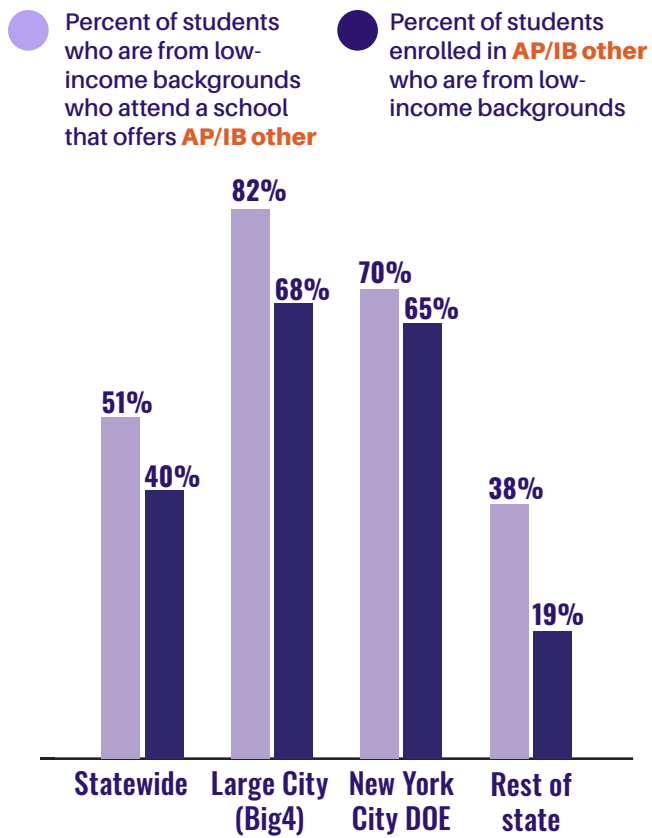


Percent of Asian, Black or Latinx students who attend a school that offers **Physics**

Percent of Asian, Black or Latinx students enrolled in **Physics**







Policy Recommendations

Success in an Algebra I course for an eighth-grade student can catalyze immeasurable postsecondary opportunity. Yet all too often students — especially students of color and those from low-income backgrounds — are excluded from such meaningful coursework. The gap in access to advanced coursework for students of color and students from low-income backgrounds has significant implications for both educational equity and college and career readiness. As a result, state and local leaders must not only improve access to advanced coursework for all students, but also ensure that students have rigorous instruction and supports that provide a foundation for success.

As districts across the state consider how to [invest billions in additional federal and state funding](#), it is crucial that some of these resources are used to provide more students with increased access to advanced courses that prepare them for success in college and career, including:



Prioritize Dual Enrollment, Advanced Placement (AP), and International Baccalaureate (IB) programs in high-need school districts across the state. Research indicates that students from low-income backgrounds and other underrepresented groups experience the greatest positive impacts of these programs. Districts should invest in strategies and resources that support more access to Dual Enrollment, Advanced Placement (AP), and International Baccalaureate (IB) programs in high-need school districts, including equity driven enrollment policies and access to school counselors who can help students navigate course selection.



Require school districts to provide every family with information about course offerings, enrollment criteria and supports in multiple languages. Historically underserved families are often left out of critical communications about course availability and advanced academic programming. Beginning in the late elementary grades, families should receive information about the courses their child can take in middle and high school that will prepare them for success in college or career.



Enable automatic enrollment in the next available advanced course for students that demonstrate readiness using multiple measures, with the option for families to decline enrollment if they do not want their child to participate.



Invest in a cradle to career data system. New York is in desperate need of a comprehensive system that connects statewide data from early childhood through K-12, postsecondary education, and the workforce. We support adoption of a P-20 data system that would help leaders answer policy challenges, target resources, and better support students on their educational journey. NYSED has also prioritized this in its upcoming information upgrades.

This work should include strengthening NYSED's 2019 guidance on equitable access to advanced coursework by tracking whether districts have implemented any policy changes

since the guidance was released. It should also include a significant expansion of the data our state collects on dual enrollment. New York should require local school districts to report higher education partnerships and disaggregated data on student uptake of dual enrollment programs. The state and NYSED should also set clear, measurable goals for advancing access to and success in advanced coursework with a commitment to publicly measuring state and district progress toward those goals. It will be crucial for our state to make all this data publicly available as part of a statewide longitudinal data system.



Incentivize collaboration between local school districts and institutions of higher education.

Districts that ensure underserved populations are enrolled in advanced coursework should be eligible for grants and technical assistance to support students and the educator professional learning.



Invest in evidence-based K-12 literacy and math curriculum. Evidence based curriculum will help to ensure all students have an opportunity to master the academic standards that will lead to improved preparedness for advanced academic opportunities. Current trends in the New York's 3-8 math and ELA assessments indicate a need for better instructional materials for early literacy and mathematics. NYSED should publish a set of evidence-based curriculum that fits the context and diversity of the state and districts should leverage unused ESSER resources and increased foundation aid to invest in high quality instructional materials and ongoing professional learning for educators at all levels.



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