

Introduction

This research brief provides an overview of the racial gaps in college preparation and acceleration programs in secondary schools, and discusses the enabling factors and potential interventions for bridging these equity gaps. The research suggests that when the most underprivileged students have the least access and resources to college preparation and acceleration programs offered in secondary schools, they are much less likely to succeed in school, and be college and/or career ready.

Advanced Placement (AP), International Baccalaureate (IB), and dual enrollment (DE) are the three most popular college preparation and acceleration programs that allow students to earn college credits while in high school. Research has shown that college acceleration programs have positive impacts on students' postsecondary outcomes. They tend to increase students' competitiveness in college application, reduce the cost and time it takes to earn a postsecondary degree, and better prepare students for the rigor of college coursework, which makes the transition from high school to college more smoothly (Xu et al., 2020). These benefits are even more notable for underrepresented students, with the reduced financial burden for postsecondary education (Xu et al., 2021).

Racial Gaps in College Preparation and Acceleration Programs

AP, taught by high school teachers, offers more than 30 courses to high school students, giving them the potential to earn college credits after achieving a minimum score on a course-specific program. 1.2 million US public high school graduating seniors took the AP exams in 2020 (College Board, 2020). Similarly, the IB Diploma Programme is an academically challenging and balanced program of education with final examinations that prepare students, age 16 to 19, for success at university and life beyond. Compared to AP, IB is smaller in scale in the U.S., with close to 90,000 students who participated in the IB Diploma Programme in the 2019-20 school year (International Baccalaureate Program, 2019). Different from the AP and IB programs, DE is a broad category that includes a variety of different types of college course-taking arrangements. DE courses are taught by either college instructors or college-approved high school teachers at colleges, in high schools, and online. It is promoted as a way to help students prepare and demonstrate their readiness for the rigorous college coursework, as well as potentially save on the costs of college tuition. According to the National Center for Education Statistics report (Tale & Lewis, 2020), 82% of U.S. public high schools offered dual or concurrent enrollment opportunities for students in 2017-18.

However, there are persistent racial disparities in student participation in these college preparation and acceleration programs. In a study using a combination of several national databases including the Civil Rights Data Collection (CRDC), the researchers found that majority of the public school districts across the nation have racial equity gaps in AP and DE participation (Xu et al., 2021). In particular, 21.7% of the White students took at least one AP course; as compared to 12.7% of the Black students; similarly, the number of White students enrolled in DE courses was twice as many as that of Black students (Xu et al., 2021). Likewise, in a report using the High School Longitudinal Study data —a nationally representative sample of students in Grades 9-12, 44% of White high school students took either an AP course or an IB course, and yet, only 30.2% of the African American and Black students enrolled in these courses. Additionally, 13% of White secondary school students participated in DE programs, as compared to 6.5% of Black high school students (Burns & Leu, 2019).

Additionally, studies have shown that low participation rates among students of color in college acceleration programs is not necessarily the result of academic readiness. According to the College Board (2013)

study of 690,000 high school graduates in 2012, 75% of American-Indian students, 72% of Black students, and 66% of Hispanic students whose PSAT scores suggested they had the academic potential to be successful in an AP math course did not participate in the AP program. Similarly, 72% of American-Indian students, 69% of Black students, and 65% of Hispanic students whose PSAT scores suggested they would be successful in an AP science course were were not scheduled for one (College Board, 2013). Additionally, AP course participation can help reduce the negative impacts of below-average achievement and economic disadvantage in high school on students' post-secondary success (Klepfer & Hull, 2012). Therefore, finding these "missing" students and expanding AP access may dramatically increase these underrepresented minority students' participation in college acceleration programs.

Enabling Factors and Best Practices for Bridging the Equity Gaps

This section reviews some of the enabling factors and best practices for bridging the racial gaps in the participation of college acceleration programs. The following are some of the enabling factors: being closer to local postsecondary institutions, smaller family income gaps between schools, more AP course offerings, higher per-pupil instructional spending in elementary and middle schools, more academic acceleration opportunities before high school (Xu et al., 2021), and reducing within-school access barriers (Theokas & Saaris, 2013). It is also worth noting that districts with these best practices may not necessarily be better resourced than the national average (Xu et al., 2021). However, more AP course offerings alone, which contribute to the increase in overall AP participation may not necessarily be associated with narrower racial gaps for Black and Hispanic students, if no adequate efforts are made to provide equitable program access to these minority students (Xu et al., 2021). Without appropriate measures to maintain academic rigor, simply expanding access without raising expectations could easily lead to the watered-down version of these advanced courses (Flores & Gomez, 2011; Xu et al., 2021).

Since some of the factors are not necessarily within the control of school and district administrators, the focus should shift to actionable recommendations for the schools. Some of the best practices to address the racial inequity in participating in college acceleration and preparation programs at the school and district levels can be categorized into the following two broad areas: administrative and policy-related actions and teaching practices.

Administrative and policy-related actions:

- Work towards an equity-based framework for expanding underrepresented minority students' access to AP/IB/DE programs and raise expectations for all students in the sense that access and success need to be worked on at the same time (Roegman & Hatch, 2016);
- Review current district and school policies for referring students to AP classes to examine potential barriers to expanding access (Cisneros et al., 2014);
- Reduce structural barriers and expand access to AP/IB/DE programs by changing course requirements (Roegman & Hatch, 2016);
- Require all high schools to offer a minimum number of AP/IB classes. To the extent possible, offer a
 "complete" AP program with a minimum of one course in each of the core content areas, English,
 Mathematics, Science and Social Studies (Theokas & Sarris, 2013);
- Better prepare students in the years leading up to high school with both rigorous course offerings and instructional funding support (Xu et al., 2021);
- Provide needed infrastructure and additional academic support to prepare underrepresented students for AP rigor (Cisneros et al., 2014; Flores & Gomez, 2011);
- Provide professional development for teachers to improve the quality of teaching and/or for guidance

- counselors to improve their advising capabilities (Roegman & Hatch, 2016);
- Improve communication with families regarding the course offerings necessary for college and career readiness and options to access these courses (ExcelInEd, 2018);
- Ensure grant programs that fund AP/IB programs have a focus on equitable participation and program expansion (Theokas & Sarris, 2013);
- Build more science labs so that science-related AP/IB/DE courses can be taught with all lab requirements met (Roegman & Hatch, 2016);

• Use data to inform programming decisions:

- Identify "missing" students within each school by comparing the racial makeup of the school's AP/ IB/DE enrollment with their overall enrollment as well as enrollment in other advanced coursework such as honors class (See Theokas & Sarris, 2013);
- Increase transparency by reporting participation and success rates of college acceleration programs for all groups of students (Theokas & Sarris, 2013);
- Redefine AP coordinator role to be more proactive with collecting and sharing data and organizing interventions for students (Flores & Gomez, 2011).

Teaching practices:

- Ask students to be honest and open about their struggles with academic contents, which helps the
 teacher normalize challenges; and present academic struggles in these college acceleration programs
 as challenges that everyone needs to face and deal with (Godley et al., 2015);
- Ask students to consistently self-monitor and self-regulate their learning through the teachers' arousal
 of students' metacognitive awareness (Godley et al., 2015);
- Provide explicit instruction on academic writing (Godley et al., 2015);
- Allow students to have multiple points of entry into the AP curriculum by scaffolding through engaged contents that are culturally relevant in subjects such as AP English and AP Language and Composition and so on (Godley et al., 2015).

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