



Black Girl Brilliance: Using Data to Catalyze Change for California's Black Girls

AUTHORS:

Faheemah N. Mustafaa, Assistant Professor, School of Education, University of California, Davis

Tadria Cardenas, Doctoral Candidate, School of Education, University of California, Davis

Kiara M. Jones, Assistant Case Manager, ADR Services, Inc.

A resource connected to EdTrust-West's Black Minds Matter 2025 Initiative.

Visit BlackMindsMatter.org for additional resources.



Executive Summary

When it comes to Black youth, narratives about educational outcome gaps are often deficit-focused and incomplete, reifying notions of immovable racial inequities rather than uplifting evidence of students excelling when afforded the opportunities they deserve. Families, educators, school and district leaders, and state policymakers all need access to data that tells a fuller and more nuanced story of students' experiences across intersections of identity, like race and gender, to tailor school improvement efforts effectively.

In our research, we utilize school-level data to examine the relative representation of Black girls across various opportunities that have been proven to promote academic success and college-going, known as “promotive opportunities,” in the over 8,000 public schools serving Black students in California. By doing so, we hope to: (1) shift deficit narratives that often stem from extrapolations of state-level aggregate data and (2) identify precisely where targeted, school-level interventions may have significant potential to improve access to promotive opportunities for Black girls.

Our findings show that Black girls are proportionately represented or better on several promotive opportunities like AP course enrollment and advanced math classes in just a quarter of California's public schools, demonstrating that there are schools successfully breaking from historical trends and creating

conditions that nurture rather than stifle Black girls' brilliance. Results like this evoke opportunities to acknowledge, explore, and scale the many ways that Black girls, their families, community members, and some schools engage in practices that make room for Black girls to reach their fullest potential.

Unfortunately, the data also reveals that these schools are still the exception rather than the rule— islands of progress in a sea of entrenched opportunity gaps. For this reason, alongside using data to amplify the existence of too-often invisible bright spots, we simultaneously call for aggressive efforts to accelerate Black girls' success within the vast majority of schools (around 75%) where Black girls remain underrepresented in promotive opportunities.



PURPOSE | Data Can Help Illuminate Untold Stories

“Stories matter. Many stories matter. Stories have been used to dispossess and to malign. But stories can also be used to empower and to humanize. Stories can break the dignity of a people. But stories can also repair that broken dignity.”¹

—Chimamanda Ngozi Adichie

In a viral 2009 TED talk, acclaimed author Chimamanda Ngozi Adichie warns of “the danger of a single story”—the detrimental impact of our tendencies to draw conclusions about groups of people based on limited, deficit-focused information. Such is often the case for Black youth; aggregate statistics present “single stories” that, absent grounding in the context of systemic racism, perpetuate false narratives that Black youth are less intelligent, less motivated, academically underperforming, and lacking in behavioral control relative to other racial groups.

For example, it is not uncommon to hear statistics such as: “Among girls, Black girls [are] the only group across all races/ethnicities who disproportionately received suspensions and expulsions”² with in-school suspensions among Black girls nationwide being about 1.5 times their 7.4% enrollment rate; expulsions at about 1.6 times their enrollment rate; and out-of-school suspensions at almost twice their national enrollment rate.³ On their own, these data points about discipline might suggest to some that Black girls behave differently or worse than their peers when in reality, extensive research has shown that adults view Black girls through the lens of bias as needing less nurturing, support, protection, and comfort than white girls the same age,⁴ and Black girls routinely receive harsher punishment for the same infraction compared to girls from other racial backgrounds.⁵

Whether intentional or not, persistent reporting of such statistics in isolation from reporting on the successes of Black girls, their families, their communities, and even the successes of some schools, feeds “single story” narratives. These narratives then become barriers to identifying precisely *where* problems producing inequities lie in order to address them with full force. Repeating aggregate, negative statistics also masks the varied experiences of Black girls, failing to quantify and celebrate

their aspirations and contributions, and risks missing the chance to learn from schools that are delivering on their promise of providing all students with a high-quality education.

In our research, we call for greater attention to schools and communities where Black girls are “justly represented” in promotive opportunities. By “just representation,”⁶ we mean contexts where Black girls access and succeed in promotive opportunities at rates **greater than** their share of a school’s enrollment. We suggest that for groups such as Black girls, who at-large are underrepresented in most promotive opportunities and who are affected by systematic educational inequities, being “overrepresented” in promotive opportunities at single school sites is a form of justice, hence “just representation.” For instance, we suggest that proportional or **just representation** of Black girls in college-preparatory courses at a school site represents a relatively more “promotive” school environment for Black girls.⁷ By “promotive opportunities,” we mean educational opportunities that have the potential to **promote** Black girls’ well-being and self-actualization, countering Black girls’ systematic, inequitable exclusion from educational opportunities like gifted education and advanced STEM courses.⁸

To be clear, by focusing on promotive opportunities, we are not suggesting turning a blind eye to longstanding systemic ills such as racism and misogynoir,⁹ and the ways in which consequent discriminatory actions lead to over-policing and over-punishment of Black girls.^{10,11} Rather, we are asserting a need for a new story in California that acknowledges these tragedies while also celebrating the extraordinary counterstories Black girls and their supportive families, communities, and educators are creating despite systemic barriers.

FINDINGS | How Many Schools Are Creating Opportunities for Black Girls to Thrive?

Roughly a quarter of schools have at least proportional representation of Black girls in promotive opportunities such as STEM courses, advanced coursework, and college preparatory opportunities.

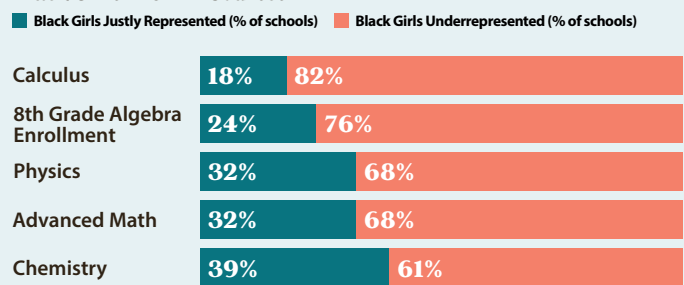
Black girls are at least proportionally represented in Chemistry and Physics courses in nearly 40% and more than 30% of California's high schools that enroll at least one Black girl, respectively (Figure 1). These spaces of just representation exemplify a tremendous opportunity for supporting Black girls' interests, thriving, and retention in the sciences.

Each of the figures on the right shows the proportions of schools where Black girls are justly represented or underrepresented in promotive opportunities. Of particular note is chemistry, where Black girls are justly represented in 39% of schools (Figure 1), and college preparation, where Black girls are justly represented among girls in 37% of California's schools where ACT/SAT exam-taking is reported (Figure 3). We can also learn much by attending to what's happening on the ground in the 17% of California schools where Black girls are justly represented in gifted/talented education; 26% where they are justly represented in International Baccalaureate (IB) diploma programs; and the 32% of schools where Black girls are justly represented in advanced math courses.

Roughly three-quarters of schools still create conditions where Black girls are underrepresented in promotive opportunities.

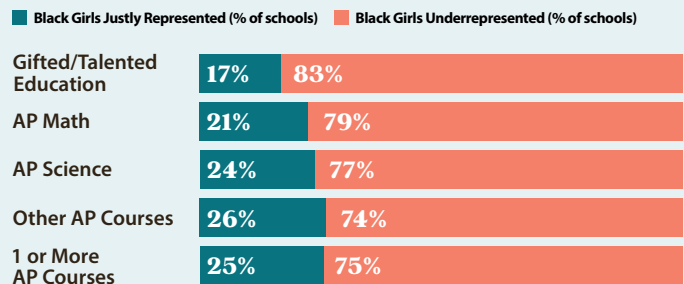
On average, Black girls are underrepresented in promotive opportunities at 74% of schools. The most concerning disparities are for calculus, multiple AP exam-taking, and gifted/talented education, where Black girls are underrepresented in more than 80% of schools offering these opportunities (Figures 1, 2, 3). These promotive factors have important implications for college access (and especially STEM access), and therefore, such high levels of underrepresentation should cause alarm.^{12,13}

Figure 1. Share of CA Schools with Just Representation for Black Girls in STEM Courses



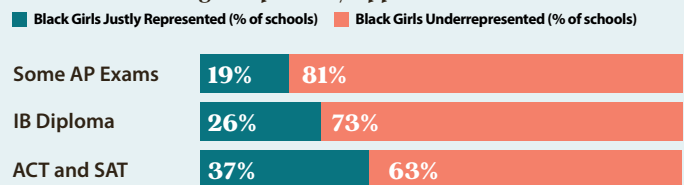
Note: Estimates are based on data from schools that both enroll at least one Black girl and offer each relevant promotive outcome. Sample sizes for this figure are as follows: Calculus (N=1,066 schools); 8th Grade Algebra Enrollment (N=1,092 schools); Physics (N=1,178 schools); Advanced Math (N=1,252 schools); Chemistry (N=1,337 schools).

Figure 2. Share of CA Schools with Just Representation for Black Girls in Gifted/Talented and Advanced Placement Courses



Note: Estimates are based on data from schools that both enroll at least one Black girl and offer each relevant promotive outcome. Sample sizes for this figure are as follows: Gifted/Talented (N=4,731 schools); AP Math (N=1,058 schools); AP Science (N=954 schools); Other AP Courses (N=1,140 schools); 1 or More AP Courses (N=1,165 schools).

Figure 3. Share of CA Schools with Just Representation for Black Girls in College Preparatory Opportunities



Note: Estimates are based on data from schools that both enroll at least one Black girl and offer each relevant promotive outcome. Sample sizes for this figure are as follows: Some AP Exams (N=1,112 schools); IB Diploma (N=96 schools); ACT and SAT (N=1,401 schools).

Figures 1-3 Source: Authors' analyses of the U.S. Department of Education's 2017-2018 Civil Rights Data Collection via the American Institutes for Research Covid-19 Longitudinal Database (AIR, 2024).

Next Steps

To build upon this initial research, we plan to:

- ▶ **Examine school-level patterns** of Black girls' *just representation* in promotive opportunities. We will explicitly identify and learn more about schools where Black girls are simultaneously justly represented within multiple promotive opportunities (e.g., AP courses *and* gifted education *and* IB diploma enrollment).
- ▶ **Analyze school-level representation data** based on school characteristics like concentrated poverty and funding levels to identify structural conditions that contribute to disparities in access to promotive opportunities.
- ▶ **Take a closer look at promotive opportunities** offered in California schools with a few versus many Black girls enrolled, knowing that participation is contingent on access.



Recommendations

Sharing data in a way that challenges single stories about Black youth is needed to address longstanding, systemic racial inequities that disproportionately impact Black youth in communities across California. Moreover, alongside a new narrative, there is a need for districts' Local Control and Accountability Plans (LCAP) to address inequities in access to promotive opportunities at the intersection of race, sex, ability, and income.

To shift deficit narratives about Black girls (and Black youth more broadly):

- ▶ **Counter the deficit “single story” on Black girls’ academics at the state level by leveraging data to identify and communicate about the diversity of promotive opportunities in which Black girls are thriving at the school, district, and county levels.**

The state's Cradle-to-Career longitudinal data system promises to provide a wealth of interconnected data that will allow researchers and community members to access. It will be critical as they do so to not only unearth opportunity gaps our systems create for Black girls, but also to pay close attention to those schools and districts that are promoting Black girls' success, to delve into deeper research on how they are doing so, and share those learnings broadly.



To address state-level educational inequities by race and gender:

- ▶ **School leaders should use tools like the LCAP to align resource use to maximize promotive opportunities for Black girls and similarly underserved groups.** Educators and school and district leaders can begin this work by systematically investigating and addressing local, historical root causes of inequities at specific school sites. Engage family and community members in the process of naming their truths about local problems that perpetuate educational inequities; these factors may differ by geography, even for members of the same racial group.
- ▶ **State leaders should invest adequately and equitably in schools and hold districts accountable for spending on evidence-based practices that have been shown to close gaps for Black students.** This includes bolstering systemic wraparound supports (i.e., health, career opportunities, youth recreation) for communities and schools with the most egregious disparities. It should also include targeted, strategic efforts to diversify the teaching profession with educators committed to supporting promotive opportunities among Black girls. While Black educators are not a monolith,¹⁴ promising research shows significant impacts of Black educators on Black youth's academic experiences and trajectories.¹⁵

Endnotes

- 1 Adichie, C.N. (2009, July). *The danger of a single story* [Video]. YouTube. <https://www.youtube.com/watch?v=D9lHs241zeg>
- 2 U.S. Department of Education, Office for Civil Rights (2022, August). Suspensions and expulsions in public schools. <https://www2.ed.gov/about/offices/list/ocr/docs/suspensions-and-expulsion-part-2.pdf>
- 3 American Institutes for Research. (2024). COVID-19 longitudinal database. Retrieved from <https://cee.airprojects.org/>
- 4 Epstein, R., Blake, J., González, T. (2017). *Girlhood Interrupted: The Erasure of Black Girls' Childhood*. Center on Poverty and Inequality, Georgetown Law. <https://genderjusticeandopportunity.georgetown.edu/wp-content/uploads/2020/06/girlhood-interrupted.pdf>
- 5 Government Accountability Office. (2024, September 19). Nationally, Black Girls Receive More Frequent and More Severe Discipline in School than Other Girls. <https://www.gao.gov/products/gao-24-106787>
- 6 Bright, C. F., Foster, K. N., Joyner, A., & Tanny, O. (2021). Heritage tourism, historic roadside markers and “just representation” in Tennessee, USA. In *Justice and Tourism* (pp. 295-314). Routledge. Note: We acknowledge that the term “just representation” has been used elsewhere (e.g., Bright et al., 2021); however, we are unaware of any sources that use the term with the same meaning in-context.
- 7 Edosomwan, K., Young, J. L., & Young, J. R. (2024). The Relationship between Middle Grades Algebra and Advanced Carnegie Credits: A QuantCrit Analysis. *Middle Grades Review*, 10(1), 1-10.
- 8 Apugo, D., Castro, A. J., & Dougherty, S. A. (2023). Taught in the matrix: A review of Black girls' experiences in US schools. *Review of Educational Research*, 93(4), 559-593.
- 9 Bailey, M. (2021). *Misogynoir transformed: Black women's digital resistance*. In *Misogynoir Transformed*. New York University Press.
- 10 Epstein, R., Blake, J., González, T. (2017). *Girlhood Interrupted: The Erasure of Black Girls' Childhood*. Center on Poverty and Inequality, Georgetown Law. <https://genderjusticeandopportunity.georgetown.edu/wp-content/uploads/2020/06/girlhood-interrupted.pdf>
- 11 Morris, M. W. (2016). *Pushout: The criminalization of Black girls in schools*. New York, The New Press.
- 12 Gentry, M., Whiting, G., & Gray, A. M. (2024). Systemic inequities in identification and representation of Black youth with gifts and talents: Access, equity, and missingness in urban and other school locales. *Urban Education*, 59(6), 1730-1773.
- 13 Patrick, K., Davis, J. C., & Socol, A. R. (2022). Shut Out: Why Black and Latino Students Are Under-Enrolled in AP STEM Courses. *Education Trust*.
- 14 Mustafaa, F. N. (2023). Black educators' racial identity attitudes and culturally relevant pedagogy: A psychological framework and survey of within-race diversity. *American Educational Research Journal*, 60(5), 847-881.
- 15 Hart, C. M., & Lindsay, C. A. (2024). Teacher-student race match and identification for discretionary educational services. *American Educational Research Journal*, 1-34.
- 16 Due to average differences in the educational experiences of students covered under the Individuals with Disabilities Education Act (IDEA) in comparison to students who are not designated as protected by IDEA, these analyses only focus on girls who are **not** identified as protected under IDEA.

Acknowledgments

The researchers' work featured herein was funded by the Bill & Melinda Gates Foundation and the AIR Equity Initiative.

- EdTrust-West's **Research in Brief** series provides academic researchers the opportunity to highlight findings from their work related to education equity issues in California and is intended to inform policy and practice by providing actionable recommendations for advocates, educators, and decision-makers. Any errors or omissions contained herein are the sole responsibility of the authors. If you are interested in partnering with EdTrust-West to release a Research in Brief, click [here](#).

METHODS | Analyzing School-Level Civil Rights Data from an Intersectional Lens

Ultimately, we aim to identify exemplary schools, districts, and counties in California with encouraging data that can point to promising practices and counter dismal narratives on academic opportunities and school discipline among Black girls.

To conduct this research, the authors employed the [American Institutes for Research Covid-19 Longitudinal Database](#) (AIR, 2024) to extract California school-level data from the 2017-2018 Civil Rights Data Collection (CRDC). The CRDC is a U.S. Department of Education biennial survey related to civil rights issues in K-12 public schools in the U.S. While 2020-2021 CRDC data are available, data for the year 2017-2018 were analyzed because these data were not impacted by the COVID-19 pandemic.

To examine school-level opportunities for Black girls, the authors contextualize their work to the 8,234 K-12 California public schools (81.4% of 10,121 schools) that enrolled at least one Black girl. Overall, Black girls in California are about 5.5% of all girls enrolled across these 8,234 schools.¹⁶