

Prioritizing an Integrated Approach to Educator Shortages and Workforce Diversity, Part 1

An Effective Workforce Is a Diverse Workforce

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A Note on Terminology

This report includes a number of terms that may be challenging to the reader. In general, we are navigating the complexity of language by using the terms “racially marginalized and minoritized” to refer to educators, teachers, students, and other populations of focus here (1) to call into question the inaccurate assignment of the inferior social status associated with group-specific characteristics or so-called “deficiencies” linked to certain individuals and groups; and (2) to push against the [mis]use of the term “minority” as something other than an indication of numerical representation or something that attempts to normalize the collective stigmatization and subjugation of particular individuals and groups. We further recognize the limitations of this language and would like to highlight that specific racialized groups and the individuals therein are rich in history, culture, and pride and have been racially marginalized and minoritized by White supremacy.

In some circumstances, we use the language of the research community as defined within their studies. For example, the National Center for Education Statistics uses the term “students of color” and we use this terminology in this report when referring to their data sets. That said, we recognize that “educators/teachers of color” and “students of color” both have value and are also inappropriate for reasons noted by a number of leading scholars.^{1,2} The authors recognize, with their apologies, that these terms may be offensive to some due to the lack of centering around the systemic racism that continues to oppress, invalidate, and deeply affect the lives of Black and Indigenous people in ways that other people who are racially marginalized and minoritized may experience differently. Furthermore, we would like to note that the language herein is problematic for federally recognized tribes (i.e., those of American Indian and Alaska Native descent) who possess a distinct, legal political status from other groups who are racialized in the United States. As the language evolves, we will continue to pursue better options.

Contents

Acknowledgments	ii
Introduction: The Need for an Integrated Approach to Educator Shortages and Workforce Diversity	1
Reality #1: Shortages Disproportionately Affect Students Who Are Racially Marginalized and Minoritized.	3
Reality #2: Educator Recruitment and Retention Are Influenced by Systemic Racism and Racial Disparities in Education.	5
Reality #3: Educators Who Are Ethn racially Diverse Are Critical to Addressing the Needs of Today’s Classrooms	9
Endnotes	13

List of Exhibits

Exhibit 1. The GTL Center’s Talent Development Framework	3
Exhibit 2. Percentage of Schools Having Difficulty Filling Teaching Vacancies by Field of Teaching and School Concentrations of Students of Color.	4
Exhibit 3. Percentage of Schools Having Difficulty Filling Teaching Vacancies by Field of Teaching and School Concentrations of Economic (Dis)advantage	5
Exhibit 4. Number of Public School Teachers and Percentage Distribution of Public School Teachers by Race/Ethnicity Over Time	6
Exhibit 5. Percentage Distribution of Public School Teachers by School Concentrations of Race/Ethnicity	7

Introduction: The Need for an Integrated Approach to Educator Shortages and Workforce Diversity

Within the education workforce, two significant challenges are receiving national attention: teacher shortages and the need for diversity among educators.^{3,4} These issues are widely discussed in the news,^{5,6,7,8} prioritized in district and state strategic plans, and debated by researchers generally as separate topics addressing separate needs.^{9,10,11,12,13} Yet approaching educator shortages without a commitment to educator diversity overlooks multiple realities that disproportionately impact students and educators who are marginalized and minoritized.

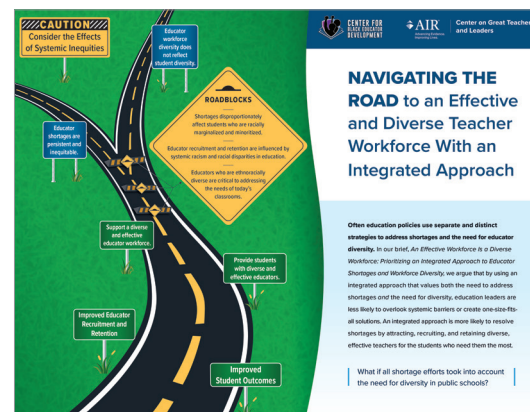
An unintegrated approach ignores the fact that shortages are influenced by systemic inequities. These inequities come in many forms: inequitable access to an effective education, inequitable hiring practices, lack of income potential, unwelcoming induction programs, poor working conditions, and inequitable promotions.^{14,15,16,17,18,19,20,21,22} Further, the experience of vacant classrooms that result from shortages and the limited access to same-race teachers may, in turn, influence student outcomes and subsequent interest in the pursuit of teaching.^{23,24,25,26,27} Despite years of policies, programs, and practices targeted at shortages or diversity, these two issues continue to pervade the education system. They are propelled by and inextricably linked through systemic inequities.

Recruitment and retention of teachers who have been racially marginalized and minoritized should be a central component of all efforts to address educator shortages. Such integrated efforts are more likely to examine systemic barriers, avoid one-size-fits-all solutions, and prioritize the value of underrepresented teachers (e.g., by increasing academic outcomes, promoting a shared understanding of cultural differences, and expanding students' critical thinking skills and social and emotional intelligence). Integrated efforts are more likely to achieve the desired impact—resolving shortages by attracting, recruiting, and retaining effective and underrepresented educators for the students who need them the most.^{28,29}

Innovative Strategies and Examples Across the Talent Development Continuum

This brief is the first in a two-part series. Part 2 can be found here: [Prioritizing an Integrated Approach to Educator Shortages and Workforce Diversity, Part 2: Innovative Strategies and Examples Across the Talent Development Continuum](#).

For a quick visual of the content covered here, check out the related infographic by clicking [here](#).



This report begins with a discussion of the research base related to three critical realities affecting our current educator workforce:

- **Reality #1** | Shortages disproportionately affect students who are racially marginalized and minoritized.
- **Reality #2** | Educator recruitment and retention are influenced by systemic racism and racial disparities in education.
- **Reality #3** | Educators who are ethnoracially diverse are critical to addressing the needs of today's classrooms.

EFFECTIVENESS AND DIVERSITY: BENEFITS TO STUDENTS AND SCHOOL COMMUNITIES

Education leaders may benefit from more holistic definitions of educator “effectiveness” that consider connections to educator diversity. Educator effectiveness has often been defined narrowly, with emphasis placed on educator qualifications or student performance on standardized tests. In this report, we consider connections between the concept of educator effectiveness and educator diversity, taking into account the evidence base illustrating the benefits of employing underrepresented educators, particularly for students who are racially marginalized and minoritized. These benefits include the following:

- Improved outcomes for Black and Latinx students on standardized tests as well as increased attendance, enrollment in advanced-level courses, graduation rates, and college attendance rates.^{24,28,30,31,32,33}
- Greater teacher understanding of students’ cultural experiences and increased use of instructional practices that are responsive to students’ cultural strengths.²⁸
- Greater satisfaction among Black and Latinx and White students. Students note that interactions with underrepresented teachers often made students feel both cared for and academically challenged.³⁴
- Increased student exposure to different perspectives and promotion of a shared understanding of cultural differences among students.³⁵
- Increased problem-solving and critical thinking skills and increased social and emotional learning.³⁵
- Greater likelihood of addressing concepts such as racism and bias in the classroom.^{36,37}

After discussing the research base for these realities, we highlight integrated approaches that states, education preparation programs (EPP), districts, and other education organizations are implementing to address both teacher shortages and the need for racial diversity in the teacher workforce. These strategies, outlined in Part 2, can serve as models for other education entities seeking guidance on how to better address these challenges simultaneously. Because research indicates the benefit to school systems that improve how well they attract and serve prospective teachers (and specifically underrepresented educators) at every point in the educator pipeline,^{38,39} the discussion is informed by the major steps in the

educator career continuum—attract; prepare; and develop, support, and retain—as shown in the [Talent Development Framework](#) (see Exhibit 1) from the Center on Great Teachers and Leaders (GTL Center). For each stage of the framework, in [Part 2](#), we offer strategies and accompanying examples that use an integrated approach. Additional tools and resources are outlined in the Next Steps section, which aims to guide readers toward building programs that simultaneously address these issues.

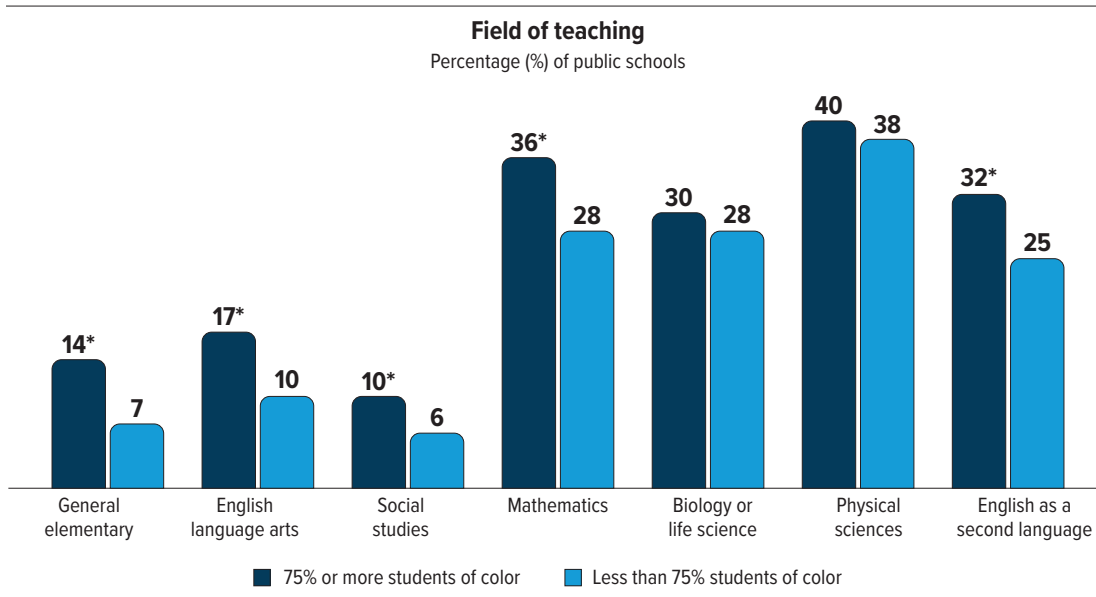
Exhibit 1. The GTL Center’s Talent Development Framework



Reality #1: Shortages Disproportionately Affect Students Who Are Racially Marginalized and Minoritized

Over the last two decades, studies have shown that retention rates vary across locales, and, in turn, schools within the same district have higher attrition rates where there are larger populations of students who are economically disadvantaged, minoritized, and marginalized.^{40,41,42,43,44} Recent data from multiple studies indicate that schools with a high concentration of underserved students, particularly higher concentrations of Black students, are more likely to experience classrooms with teaching vacancies and other acute staffing challenges.⁴⁵ This is particularly true in classrooms in elementary school and in English language arts, social studies, mathematics, and English as a second language courses (Exhibit 2).

Exhibit 2. Percentage of Schools Having Difficulty Filling Teaching Vacancies by Field of Teaching and School Concentrations of Students of Color

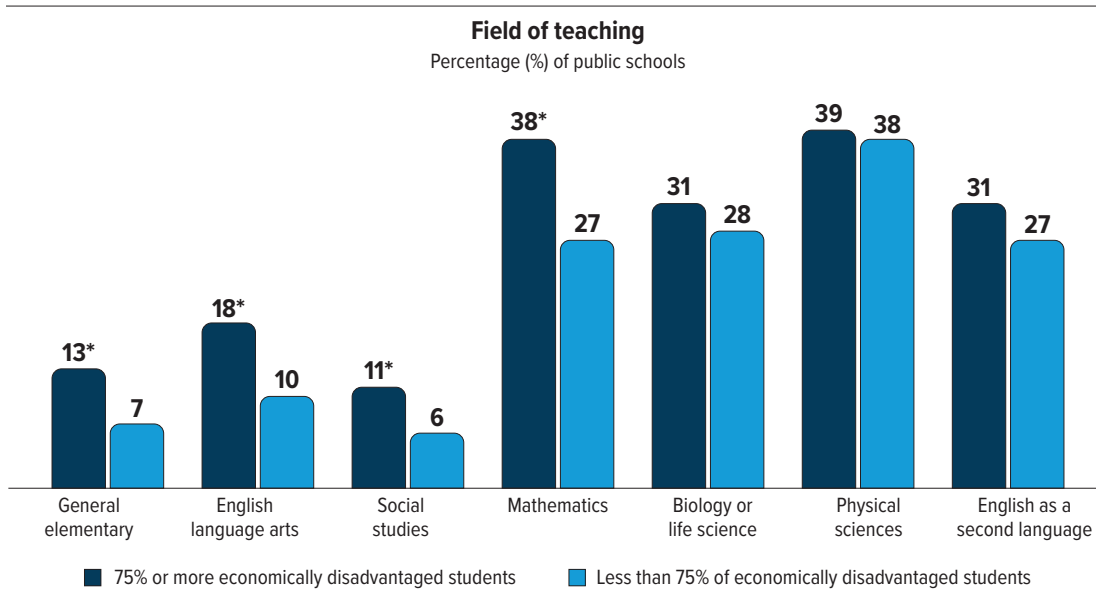


Note. The y-axis here refers to the percentage (%) of public schools reporting that filling teaching vacancies was very difficult or that they could not fill the position. The x-axis refers to the field of teaching and the percentage of students of color in schools. The dark blue shading represents schools with concentrations of students of color of 75% or more and the light blue shading represents schools with concentrations of students of color of less than 75%. Students of color include those who are Black, Hispanic, Asian, Pacific Islander, American Indian/Alaska Native, and of two or more races. English as a Second Language (ESL) also includes English for Speakers of Other Languages (ESOL) and/or bilingual education. Each field has a different denominator because two response options—"This position is not offered in this school" and "No vacancy in this field this school year"—are excluded from the base. Although rounded numbers are displayed, the figures are based on unrounded data. Source: U.S. Department of Education, National Center for Education Statistics, National Teacher and Principal Survey (NTPS), Public School Data File, 2015–16.

* Significantly different ($p < .05$) from schools with concentrations of students of color of less than 75%.

Multiple studies suggest that students from racially marginalized and minoritized backgrounds experience more ineffective, out-of-field, or inexperienced teachers.^{43,46,47,48} Students who are poor, Black, or Hispanic are 50% more likely to be exposed to at least one novice teacher during elementary school compared to their more affluent White peers.⁴⁹ Another study by Mehrotra et al. found that Black students across the country have more novice teachers and more first-year teachers in particular.⁵⁰ Furthermore, Black students are more likely to be assigned to an uncertified teacher.⁵⁰ The National Teacher and Principal Survey documented similar inequalities for students from economically disadvantaged backgrounds, many of whom are students who are racially marginalized and minoritized. Given that novice teachers have a higher attrition rate compared with veteran teachers and that teacher experience is associated with effectiveness,⁵¹ these students may be persistently assigned teachers who are not fully prepared, experienced, or effective at leading classes.

Exhibit 3. Percentage of Schools Having Difficulty Filling Teaching Vacancies by Field of Teaching and School Concentrations of Economic (Dis)advantage



Note. The y-axis here refers to the percentage (%) of public schools reporting that filling teaching vacancies was very difficult or that they could not fill the position. The x-axis refers to the field of teaching and the percentage of economically disadvantaged students, who were approved for free or reduced-price lunch, in schools. The dark blue shading represents schools with concentrations of economically disadvantaged students of 75% or more and the light blue shading represents schools with concentrations of economically disadvantaged students of less than 75%. English as a Second Language (ESL) also includes English for Speakers of Other Languages (ESOL) and/or bilingual education. Each field has a different denominator because two response options—"This position is not offered in this school" and "No vacancy in this field this school year"—are excluded from the base. Although rounded numbers are displayed, the figures are based on unrounded data. Source: U.S. Department of Education, National Center for Education Statistics, National Teacher and Principal Survey (NTPS), Public School Data File, 2015–16.

* Significantly different ($p < .05$) from schools with concentrations of economically disadvantaged students of less than 75%.



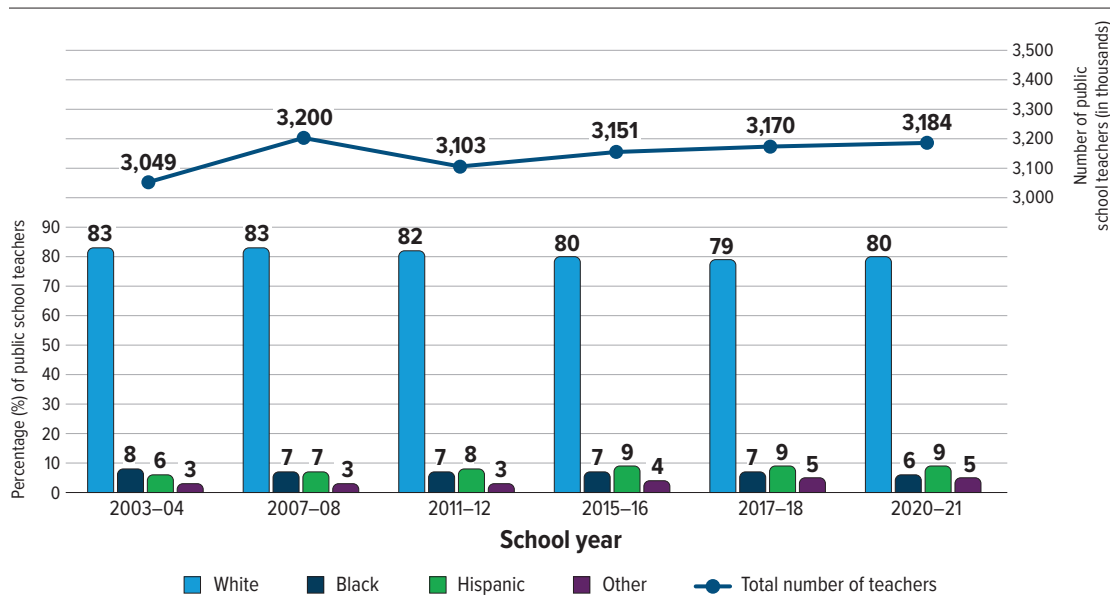
Reality #2: Educator Recruitment and Retention Are Influenced by Systemic Racism and Racial Disparities in Education

From an early age, underserved students may be dissuaded or prevented from building an interest in teaching by the education system. Some scholars note that, “[w]ith few exceptions, whiteness is how we do education in the United States.”⁵² (p. 21) Through curricula, codes, rules of communication and conduct, and nods of respect, whiteness is “normalized and authorized.”⁵² (p. 15) For example, for White students, school culture is often better aligned to their home culture while for students who are racially marginalized and minoritized, school culture may require an adjustment to “fit in” or to feel a sense of belonging.^{53,54} This is particularly damaging to Black students who may see their cultures marginalized and their bodies policed by a system that actively creates and enforces policies that privilege one culture and target another. This comes in

many forms from school dress codes to rates of discipline, suspension, and arrest.⁵⁵ The system often places blackness in opposition to whiteness and deprives some students and schools of educational resources, culturally relevant pedagogy, and culturally affirming school discipline.^{52,56}

As many state and district strategic plans acknowledge,^a the teaching workforce is predominantly White and has been for years. During the 2020–21 school year, four-fifths of the workforce was White. This has not changed much over the last two decades.⁵⁰

Exhibit 4. Number of Public School Teachers and Percentage Distribution of Public School Teachers by Race/Ethnicity Over Time

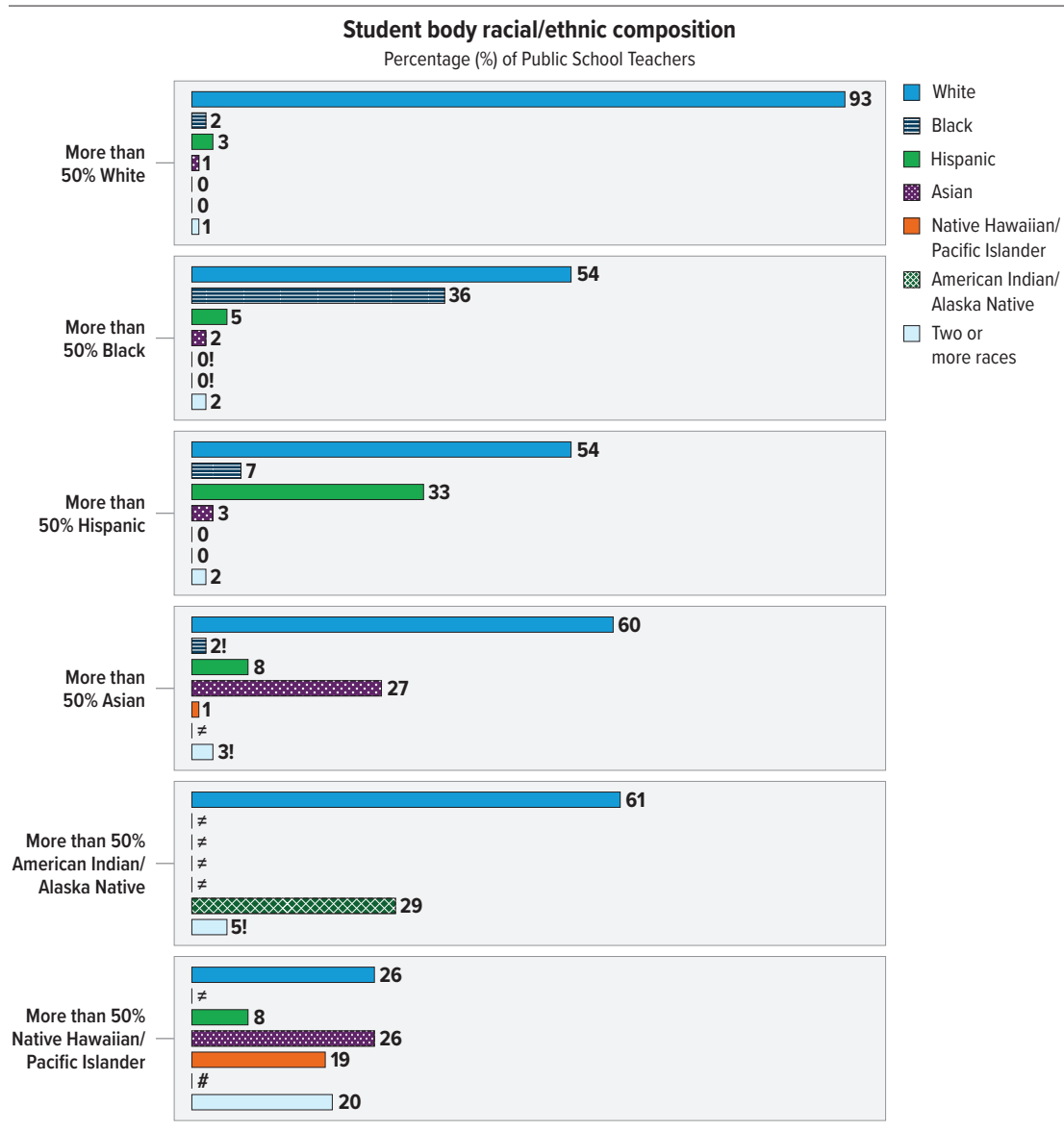


Note. The top line graph refers to the number of public school teachers in U.S. public schools over time. The bar graph represents the percentages of teachers in the U.S. workforce from different racial/ethnic backgrounds over time. The total number of public school teachers in the first year (e.g., 2015) was retrieved for a given school year (e.g., 2015–2016). Race categories exclude persons of Hispanic ethnicity. Other include students who are identified as Asian, Pacific Islander, American Indian/Alaska Native, or those of two or more races. The total number of teachers in 2020 was a projected estimate. Source: U.S. Department of Education, National Center for Education Statistics, National Teacher and Principal Survey (NTPS) 2015–16 through 2020–21; National Center for Education Statistics, Table 209.10 from 2017 *Digest of Education Statistics*; and Table 208.20, from 2020 *Digest of Education Statistics*.

States and districts can benefit from considering student and teacher parity in their efforts to address shortages and to create a balanced culture in the education system.

^a For examples, see the following links: [Denver, Colorado](#); [Jefferson County, Kentucky](#); [Massachusetts](#); [California](#); and [Ohio](#).

Exhibit 5. Percentage Distribution of Public School Teachers by School Concentrations of Race/Ethnicity



Note. Race categories exclude persons of Hispanic ethnicity. Black refers to Black or African American persons. Hispanic includes Latino persons. Teachers include both full-time and part-time teachers. Detail may not sum to totals because of rounding and because some data are not shown. There were no schools in which students who were two or more races were a majority of the student body. Source: National Center for Education Statistics. (2020). *Race and ethnicity of public school teachers and their students*. (NCES 2020-103). U.S. Department of Education. <https://nces.ed.gov/pubs2020/2020103.pdf>

Rounds to zero.

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30% and 50% (i.e., the standard error is at least 30% and less than 50% of the estimate).

± Reporting standards not met. The CV for this estimate is 50% or greater (i.e., the standard error is 50% or more of the estimate).

The limited racial diversity of the educator workforce in schools can be attributed in part to existing systemic barriers, racism, and inequities that have influenced the current composition of the educator workforce. Reflecting honestly on our collective history highlights some sobering truths. For example, the history of education in the United States includes the denial of education to racial and ethnic groups,^{14,15,16,17} the forced or coercive education of racial and ethnic groups,^{57,58} and the termination of more than 38,000 Black educators from their posts as a result of *Brown v. Board of Education*.⁵⁹ These barriers and inequities may have led to fewer students who are racially marginalized and minoritized entering college or engaging in pathways to teaching.^{60,61,62}

Beyond these historical contexts, students and teacher candidates may have limited exposure to teachers and principals who are culturally, racially, and linguistically diverse. This lack of diversity within the teacher and principal workforce, coupled with associated biases^{63,64,65} and persistent barriers^{26,66} can lead to an unwelcoming experience in education overall. Racial biases (implicit or explicit) create an environment where racially underrepresented students and teachers may experience psychological threats (e.g., fear of being seen in a negative light or treated negatively because of their race/ethnicity; negative stereotypes of their racial/ethnic group) and encounter negative attitudes, beliefs, and treatment in schools where most of the teachers and leadership are White.⁶⁷ Implicit biases among teachers vary by teacher race: Teachers who are racially marginalized and minoritized tend to exhibit lower levels of pro-White and anti-Black bias than White teachers. White teachers tend to have higher levels of pro-White and anti-Black bias. Black teachers tend to have the lowest levels of anti-Black bias.⁵⁷

Barriers to serving and persisting in the education profession occur throughout the education continuum, from K–12 preparation to salaries and promotions. Barriers include racialized disparities in K–12 bias in standardized test scores, exclusionary discipline policies, representation in special education, gifted and talented placements, gatekeeper courses (e.g., Algebra I), Advanced Placement and International Baccalaureate courses, access to college admission supports,^{68,69,70} and supportive college environments,^{71,72} lack of culturally responsive pedagogy in teacher preparation,⁷³ invalid testing requirements for certification/licensure,⁷⁴ hiring biases,¹⁹ disparities in student loan debt,⁷⁵ unwelcoming induction programs,^{76,77} poor working environments,^{78,79} and inequitable promotions.⁸⁰ For example, teachers who are racially marginalized and minoritized are often asked to take on additional roles (beyond what is generally asked of their White counterparts) such as serving on diversity committees, mentoring students or new teachers, serving as a liaison to families who are racially marginalized or minoritized, or serving in disciplinary roles.^{81,82} These additional responsibilities rarely come with additional pay or promotions to administrative leadership positions or recognition for their academic contributions.^{75,81,83} Many racially underrepresented educators leave the field due to unsupportive work environments and the heightened sense of responsibility and increased difficulties noted earlier.^{82,84}

Policies, programs, and practices that acknowledge and take into account systemic barriers, systemic racism, and inequities for racially marginalized and minoritized students and educators are needed to make meaningful improvements in educator diversity. Awareness and acknowledgment of racial bias, systemic racism, and the resulting barriers can bring a valuable perspective to reforming existing policies and practices and to creating more positive experiences for students and educators who are racially marginalized and minoritized.



Reality #3: Educators Who Are Ethn racially Diverse Are Critical to Addressing the Needs of Today's Classrooms

By integrating diversity into the shortages conversation, education leaders can tap into underutilized pools of potential teachers who bring professional strengths and cultural competencies that may serve as a potential antidote to the challenges seen in the field of education today.^{1,2,85,86,87} Aligned with the academic benefits listed on page 2, studies suggest that teachers who are the same race as their students are well suited to understand students' cultural experiences and, therefore, may be more likely to employ instructional practices that are responsive to students' cultural strengths.²⁸ Studies also suggest that ethn racially diverse teachers use culturally relevant instructional practices more frequently and have a greater likelihood of addressing racism and bias in their classrooms, which helps to prepare all students for a diverse world.^{36,88} A diverse educator workforce may benefit all students by exposing them to different perspectives and promoting a shared understanding of cultural differences among students while also expanding students' problem-solving and critical thinking skills and increasing their social and emotional intelligence.³⁵

The impact of a diverse teacher workforce extends beyond the walls of the classroom. Teachers who are racially marginalized and minoritized have important indirect effects that spill over into the classrooms of their colleagues in the same grade. In North Carolina for example, when Black students were taught by White teachers, but there was a Black teacher teaching elsewhere in the school, their math scores increased by 9% and their reading scores increased by 12% compared to students without a Black teacher in the school.⁸⁹

The diversity of school leadership also supports creating equitable and supportive environments that can recruit and retain teachers who are racially marginalized and minoritized.⁹⁰ For example, one study of Tennessee and Missouri schools found that the presence of a Black principal was associated with a 7% likelihood of hiring new Black teachers.⁹¹ Furthermore, the study also found that Black students were more likely to have higher math achievement gains under the leadership of a Black principal, even without Black teachers. Ethn racial diversity matters. Attracting, preparing, and retaining underrepresented educators can positively influence students as well as the school as a whole.³⁴

Conclusion

In sum, recognizing the inextricable link between shortages and diversity has great potential to change the equation in education—reducing negative impacts on students while enabling teachers who are racially marginalized and minoritized to share the valuable knowledge and perspectives they can offer. Integrating efforts to address educator shortages and teacher workforce diversity is a commonsense approach; it is not, however, a simple one. To assist your state or district team in taking the next steps that are right for your context, this report concludes with some suggested questions to guide movement from knowledge to action.

Thank you for investing your time and energy in this important topic. For additional support, questions, or comments, please reach out to us at the Center on Great Teachers and Leaders at gtlcenter@air.org or the Center for Black Educator Development at info@thecenterforblackened.org. We help teams to develop data metrics, tools, and visualizations. We also provide support to teams for data analysis and strategy selection, equity audits and diversity labs, culturally responsive mentoring and induction, and apprenticeship and grow your own programs. State education agencies, local education agencies, and EPPs that are interested in networking with colleagues can join our [National Collaborative on Accelerating Data-Driven Policy and Practice to Address Educator Shortages and Workforce Diversity](#).

NEXT STEPS

Using an integrated approach to address educator shortages and workforce diversity requires reflection and planning. Use these questions to guide your team as you take steps toward building programs that simultaneously address these issues.

Step 1: Engage those who are most likely to be adversely impacted by shortages and limited diversity in reflection and planning.

- How can you and your team build trust, share access and ownership, and embrace messiness, interruptions, and discomfort?
- How can your team work to avoid perpetuating existing norms and biases? Can you include the voices of students and educators who are marginalized and minoritized in the process of reflection and planning?^{92,93}
- Can group members reflect the diversity of the student population and larger community to enable a broader perspective and ensure adequate representation?
- Recognize that this work may take time to build trust and understanding and to prepare for challenging conversations around race and diversity. How will your team plan accordingly?

Step 2: Reflect on existing policies, programs, and practices together.

- What policies, programs, and practices does your team already have in place for recruiting and supporting teachers from racially marginalized and minoritized backgrounds?
- Do these policies, programs, and practices have a positive or negative impact? How do you know? How can your team build on or amplify the positive impacts? How can your team reduce or eliminate negative impacts?
- What policies, programs, and practices could be more effective for addressing educator shortages and workforce diversity in your context?

Step 3: Reflect on the context using available data and determine next steps together.

- What data would be useful to help make data-based decisions about next steps? Be sure to disaggregate your data as part of the analysis.
- What barriers exist for teachers from racially marginalized and minoritized backgrounds in your context?
- What kind of resistance might you face when promoting an integrated approach with other partners? What tools do you need to mitigate that resistance?

TAKING ACTION

- What will be your first steps toward addressing shortages and diversity using a more integrated approach (e.g., inviting new partners to the table, collecting data, building on current impactful strategies, finding funding)? Below are some resources that can help you take action:
 - Ensure that your process is grounded in data and informed by the expertise of multiple and diverse team members using the GTL Center’s [*Moving Toward Equity Stakeholder Engagement Guide*](#).
 - Promote a comprehensive, systematic vision to improve educator effectiveness using the GTL Center’s [*Talent Development Framework*](#).
 - Build content knowledge and start discussions with the GTL Center’s webinar series: [*Beyond Selection and Hiring: Diversifying the Educator Workforce by Eliminating Barriers and Creating Pathways Throughout the Pipeline*](#).
 - Examine current programs with an equity lens using the GTL Center’s [*READI Framework*](#).
- How will you articulate the benefits of tackling educator shortages and diversity simultaneously?
 - Use the GTL Center’s [*Communication Guidebook*](#) from the [*Equitable Access Implementation Playbook*](#) to get started.
- Who will you reach out to for support? What Historically Black Colleges and Universities (HBCUs), Tribal Colleges or Universities (TCUs), or Minority Serving Institutions (MSIs) could you partner with in this work?
 - Consider using the GTL Center’s [*Insights on Diversifying the Educator Workforce: A Data Tool for Practitioners*](#) or the [*Equitable Access Playbook*](#), or contacting the GTL Center at gtlcenter@air.org.

Endnotes

- ¹ Starr, P. (2022, June 13). The re-emergence of “people of color.” *Du Bois Review: Social Science Research on Race*, 20(1).
- ² American Psychological Association. (2021). *Equity, diversity, and inclusion: Inclusive language guidelines*. <https://www.apa.org/about/apa/equity-diversity-inclusion/language-guidelines.pdf>
- ³ Ward, M. (2022, August 15). The teacher shortage problem is bad. Really bad. *Politico*. <https://www.politico.com/newsletters/politico-nightly/2022/08/15/the-teacher-shortage-problem-is-bad-really-bad-00052053>
- ⁴ Partnership for the Future of Learning. (2021). *The Teaching Profession Playbook*. <https://learningpolicyinstitute.org/product/teaching-profession-playbook>
- ⁵ Natanson, H. (2022, August 4). “Never seen it this bad”: America faces catastrophic teacher shortage. *The Washington Post*. <https://www.washingtonpost.com/education/2022/08/03/school-teacher-shortage/>
- ⁶ Yu, Y. G. (2022, August 8). *How schools are trying to address the national teacher shortage*. Good Morning America. <https://www.goodmorningamerica.com/living/story/schools-address-national-teacher-shortage-88094136>
- ⁷ Rix, K. (2021, December 20). *Schools need teachers of color. This is how to retain them, educators say*. NBC News. <https://www.nbcnews.com/news/education/schools-need-teachers-color-retain-educators-say-rcna7732>
- ⁸ The Education Trust. (n.d.). *Is your state prioritizing teacher diversity & equity?* <https://edtrust.org/educator-diversity/>
- ⁹ Barshay, J. (2022). Proof Points: Researchers say cries of teacher shortages are overblown: Schools are going on pandemic hiring sprees and overstaffing may be the new problem. *The Hechinger Report*. <https://hechingerreport.org/proof-points-researchers-say-cries-of-teacher-shortages-are-overblown/>
- ¹⁰ Greene, P. (2022). There is no teacher shortage. So why is everyone talking about it? *Forbes*. <https://www.forbes.com/sites/petergreene/2022/08/09/there-is-no-teacher-shortage-so-why-is-everyone-talking-about-it/?sh=6cb13841f1be>
- ¹¹ Edwards, D. S., Kraft, M. A., Christian, A., & Candelaria, C. A. (2022). *Teacher shortages: A unifying framework for understanding and predicting vacancies*. (EdWorkingPaper No. 22-684). Annenberg Institute at Brown University. <https://www.edworkingpapers.com/ai22-684>

- ¹² Goldhaber, D., Kreig, J., Theobald, R., and Liddle, S. (2021). *Lost to the system? A descriptive exploration of where teacher candidates find employment and how much they earn* (CALDER Working Paper No. 251-0421). Center for Analysis of Longitudinal Data in Education Research. <https://caldercenter.org/publications/lost-system-descriptive-exploration-where-teacher-candidates-find-employment-and-how>.
- ¹³ Nguyen, T. D., Lam, C. B., & Bruno, P. (2022). *Is there a national teacher shortage? A systematic examination of reports of teacher shortages in the United States*. (EdWorkingPaper No. 22-631). Annenberg Institute at Brown University. <https://edworkingpapers.com/sites/default/files/ai22-631.pdf>
- ¹⁴ Kuo, J. (1998). Excluded, segregated and forgotten: A historical view of the discrimination of Chinese Americans in public schools. *Asian American Law Journal*, 5(1), 181–212.
- ¹⁵ Wormser, R. (2004). *The rise and fall of Jim Crow*. St. Martin's Griffin.
- ¹⁶ MacDonald, V. (n.d.). *Demanding their rights: The Latino struggle for educational access and equity*. National Park Service. <https://www.nps.gov/articles/latinothemeeducation.htm>
- ¹⁷ Pitti, S. J. (n.d.). *American Latinos and the making of the United States: A theme study*. National Park System Advisory Board, National Park Service. https://www.nps.gov/nr/travel/american_latino_heritage/american_latinos_and_the_making_of_the_united_states_%20a_theme_study.html
- ¹⁸ D'Amico, D., Pawlewicz, R. J., Earley, P. M., & McGeehan, A. P. (2017). Where are all the Black teachers? Discrimination in the teacher labor market. *Harvard Educational Review*, 87(1), 26–49.
- ¹⁹ Goings, R. B., Walker, L. J., & Wade, K. L. (2021). The influence of intuition on human resource officers' perspectives on hiring teachers of color. *Journal of School Leadership*, 31(3), 189–208.
- ²⁰ El-Mekki, S. (2023, April 25). 'Never get into teaching': The message we need to stop sending students. *EducationWeek*. <https://www.edweek.org/leadership/opinion-never-get-into-teaching-the-message-we-need-to-stop-sending-students/2023/04>
- ²¹ Song Richardson, L., & Ralston B., (2021, September 20). It's time for us to fix America's shortage of Black teachers. *District Administration*. <https://districtadministration.com/its-time-for-us-to-fix-americas-shortage-of-black-teachers/>
- ²² Moss, J. (2016, May 14). Where are all the teachers of color? *Harvard Ed*. <https://www.gse.harvard.edu/ideas/ed-magazine/16/05/where-are-all-teachers-color>
- ²³ Egalite, A. J., Kisida, B., & Winters, M. A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review*, 45, 44–52.
- ²⁴ Gershenson, S., Hart, C. M. D., Hyman, J., Lindsay, C., & Papageorge, N. W. (2019). *The long-run impacts of same-race teachers* (EdWorkingPaper: 19-43). Annenberg Institute at Brown University. <https://www.edworkingpapers.com/ai19-43>

- ²⁵ Goldhaber, D., Theobald, R., & Tien, C. (2019, January 21). Why we need a diverse teacher workforce. *Phi Delta Kappan*, 100(5), 25–30.
- ²⁶ Hart, C. M. D. (2020). An honors teacher like me: Effects of access to same-race teachers on black students' advanced-track enrollment and performance. *Educational Evaluation and Policy Analysis*, 42(2), 163–187.
- ²⁷ Holt, S. B., & Gershenson, S. (2019). The impact of demographic representation on absences and suspensions. *Policy Studies Journal*, 47(4), 1069–1099.
- ²⁸ Villegas, A. M., & Irvine, J. J. (2010). Diversifying the teaching force: An examination of major arguments. *The Urban Review*, 42, 175–192.
- ²⁹ Learning Policy Institute, Center on Great Teachers & Leaders, and CEEDAR Center. (n.d.). Solutions toolkit: Teacher shortage.
- ³⁰ Dee, T. S. (2004). Teachers, race, and student achievement in a randomized experiment. *The Review of Economics and Statistics*, 86(1), 195–210
- ³¹ Villegas, A.M., & Davis, D. (2008). Preparing teachers of color to confront racial/ethnic disparities in educational outcomes. In M. Cochran-Smith, S. Feiman-Nemser, & J. McIntyre (Eds.), *Handbook of research on teacher education: Enduring issues in changing contexts* (pp. 583–605). Routledge.
- ³² *The difference: How the power of diversity creates better groups, firms, schools, and societies* (New Edition). (2007). Princeton University Press. <https://doi.org/10.2307/j.ctt7sp9c>
- ³³ Phillips, K. W. (2014, October 1). How diversity makes us smarter. *Scientific American*. <https://www.scientificamerican.com/article/how-diversity-makes-us-smarter/>
- ³⁴ Carver-Thomas, D. (2018, April 19). *Diversifying the teaching profession: How to recruit and retain teachers of color*. Learning Policy Institute. <https://learningpolicyinstitute.org/product/diversifying-teaching-profession>
- ³⁵ Williams, C. (2020, August 17). *Why do schools need to hire a racially diverse teaching staff?* Center for Student Achievement Solutions. <https://www.studentachievementsolutions.com/why-do-schools-need-to-hire-a-racially-diverse-teaching-staff/>
- ³⁶ Grissom, J. A., & Redding, C. (2016). Discretion and disproportionality: Explaining the underrepresentation of high-achieving students of color in gifted programs. *AERA Open*, 2(1). <https://doi.org/10.1177/2332858415622175>
- ³⁷ Rogers-Ard, R., Knaus, C., Bianco, M., Brandehoff, R., & Gist, C. D. (2019). The grow your own collective: A critical race movement to transform education. *Teacher Education Quarterly*, 46(1), 23–34.

- ³⁸ Center for Analysis of Longitudinal Data in Educational Research. (n.d.). *Understanding how diversity in the teacher preparation pipeline contributes to diversity gaps in the classroom*. American Institutes for Research. <https://caldercenter.org/data-visualizations/understanding-how-diversity-teacher-preparation-pipeline-contributes-diversity>
- ³⁹ Putman, H., Hansen, M., Walsh, K., & Quintero, D. (2016). *High hopes and harsh realities: The real challenges to building a diverse workforce*. Brookings Institution. <https://www.nctq.org/publications/High-Hopes-and-Harsh-Realities:-The-real-challenges-to-building-a-diverse-workforce>
- ⁴⁰ Cowen, J. M., Butler, J. S., Fowles, J., Streams, M. E., & Toma, E. F. (2012). Teacher retention in Appalachian schools: Evidence from Kentucky. *Economics of Education Review*, 31(4), 431–441.
- ⁴¹ Hanushek, E. A., Kain, J., & Rivkin, S. (2004). Why public schools lose teachers. *The Journal of Human Resources*, 39(2), 326–354. <https://doi.org/10.2307/3559017>
- ⁴² Jacob, B. A. (2007). The challenges of staffing urban schools with effective teachers. *Future of Children*, 17(1), 129–153. <https://files.eric.ed.gov/fulltext/EJ795883.pdf>
- ⁴³ Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher sorting and the plight of urban schools: A descriptive analysis. *Educational Evaluation and Policy Analysis*, 24(1), 37–62. <https://doi.org/10.3102/01623737024001037>
- ⁴⁴ Miller, A. (2013). Principal turnover and student achievement. *Economics of Education Review*, 36, 60–72. <https://doi.org/10.1016/j.econedurev.2013.05.004>
- ⁴⁵ Goldhaber, D., & Dee, T. (2017). *Understanding and addressing teacher shortages in the United States* (Policy proposal 2017-05). The Hamilton Project and Brookings Institution. https://www.hamiltonproject.org/assets/files/understanding_and_addressing_teacher_shortages_in_us_pp.pdf
- ⁴⁶ Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). The draw of home: How teachers' preferences for proximity disadvantage urban schools. *Journal of Policy Analysis and Management*, 24(1), 113–132.
- ⁴⁷ Clotfelter, C. T., Ladd, H. F., & Vigdor, J. (2005). Who teaches whom? Race and the distribution of novice teachers. *Economics of Education Review*, 24(4), 377–392. <https://doi.org/10.1016/j.econedurev.2004.06.008>
- ⁴⁸ Goldhaber, D., Lavery, L., & Theobald, R. (2015). Uneven playing field? Assessing the teacher quality gap between advantaged and disadvantaged students. *Educational Researcher*, 44(5), 293–307. <https://doi.org/10.3102/0013189X15592622>
- ⁴⁹ James, J., & Wyckoff, J. H. (2022). *School segregation, teacher sorting, and the distribution of teachers* (EdWorkingPaper No. 22-659). Annenberg Institute at Brown University. <https://doi.org/10.26300/tv5x-6t21>

- ⁵⁰ Mehrotra, S., Morgan, I., & Socol, A. R. (2021, December 14). *Getting Black students better access to non-novice teachers*. The Education Trust. <https://edtrust.org/resource/getting-black-students-better-access-to-non-novice-teachers/>
- ⁵¹ Kini, T., & Podolsky, A. (2016, June 3). *Does teaching experience increase teacher effectiveness? A review of the research*. Learning Policy Institute. <https://learningpolicyinstitute.org/product/does-teaching-experience-increase-teacher-effectiveness-review-research>
- ⁵² Caldera, A.L. (2020). Eradicating anti-Black racism in U.S. schools: A call-to-action for school leaders. *Diversity, Social Justice, and the Educational Leader* 4(1), Article 3. <https://scholarworks.uttyler.edu/dsjel/vol4/iss1/3>
- ⁵³ Montoro, J. P., Kilday, J. E., Rivas-Drake, D., Ryan, A. M., & Umaña-Taylor, A. J. (2021). Coping with discrimination from peers and adults: Implications for adolescents' school belonging. *Journal of Youth & Adolescence*, 50(1), 126–143. <https://doi.org/10.1007/s10964-020-01360-5>
- ⁵⁴ Gray, D. L., Hope, E. C., & Matthews, J. S. (2018). Black and belonging at school: A case for interpersonal, instructional, and institutional opportunity structures. *Educational Psychologist*, 53(2), 97–113. <https://doi.org/10.1080/00461520.2017.1421466>
- ⁵⁵ Whitaker, A., Torres-Guillen, S., Morton, M., Jordan, H., Coyle, S., Mann, A., and Wei-Ling, S. (2023). *Cops and no counselors: How the lack of school mental health staff is harming students*. <https://www.aclu.org/report/cops-and-no-counselors>
- ⁵⁶ Dumas, M. J., & Ross, K. M. (2016). “Be Real Black for me”: Imagining BlackCrit in education. *Urban Education*, 51(4), 415–442. <https://doi.org/10.1177/0042085916628611>
- ⁵⁷ Gregg, M. T. (2018). The long-term effects of American Indian boarding schools. *Journal of Development Economics*, 130, 17–32. <https://doi.org/10.1016/j.jdeveco.2017.09.003>
- ⁵⁸ San Miguel, Jr., G. (1999). Schooling of Mexicanos in the Southwest, 1848–1891. In J. F. Moreno (Ed.), *The elusive quest for equality: 150 years of Chicano education*. Harvard Educational Review.
- ⁵⁹ Tillman, L. C. (2004). (Un)intended consequences? The impact of the Brown v. Board of Education decision on the employment status of Black educators. *Education and Urban Society*, 36(3), 280–303. <https://doi.org/10.1177/0013124504264360>
- ⁶⁰ Goings, R. B., & Bianco, M. (2016). It's hard to be who you don't see: An exploration of black male high school students' perspectives on becoming teachers. *Urban Review: Issues and Ideas in Public Education*, 48(4), 628–646. <https://doi.org/10.1007/s11256-016-0371-z>
- ⁶¹ Marrun, N. A., Plachowski, T. J., Mauldin, D. A. R., & Clark, C. (2021). “Teachers don't really encourage it”: A critical race theory analysis of high school students' of color perceptions of the teaching profession. *Multicultural Education Review*, 13(1), 3–24. <https://doi.org/10.1080/2005615X.2021.1890313>

- ⁶² Neally, K. (2022). An analysis of the underrepresentation of minoritized groups in science, technology, engineering, and mathematics education. *School Science and Mathematics*, 122(5), 271–280. <https://doi.org/10.1111/ssm.12542>
- ⁶³ Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52(6), 613–629. <https://doi.org/10.1037//0003-066x.52.6.613>
- ⁶⁴ Starck, J. G., Riddle, T., Sinclair, S., & Warikoo, N. (2020). Teachers are people too: Examining the racial bias of teachers compared to other American adults. *Educational Researcher*, 49(4), 273–284. <https://doi.org/10.3102/0013189X20912758>
- ⁶⁵ Chin, M. J., Quinn, D. M., Dhaliwal, T. K., & Lovison, V. S. (2020). Bias in the air: A nationwide exploration of teachers' implicit racial attitudes, aggregate bias, and student outcomes. *Educational Researcher*, 49(8), 566–578. <https://doi.org/10.3102/0013189X20937240>
- ⁶⁶ Riddle, T., & Sinclair, S. (2019). Racial disparities in school-based disciplinary actions are associated with county-level rates of racial bias. *Proceedings of the National Academy of Sciences*, 116(17), 8255–8260. <https://doi.org/10.1073/pnas.1808307116>
- ⁶⁷ Shafer, L. (2018, June 12). *The experiences of teachers of color*. Harvard Graduate School of Education. <https://www.gse.harvard.edu/news/uk/18/06/experiences-teachers-color>
- ⁶⁸ Baker, R., Klasik, D., & Reardon, S. F. (2018). Race and stratification in college enrollment over time. *AERA Open*, 4(1), 1–28. <https://doi.org/10.1177/2332858417751896>
- ⁶⁹ Hinrichs, P. (2015). *An empirical analysis of racial segregation in higher education* (Working Paper 21831). National Bureau of Economic Research.
- ⁷⁰ Posselt, J. R., Jaquette, O., Bielby, R., & Bastedo, M. N. (2012). Access without equity: Longitudinal analyses of institutional stratification by race and ethnicity, 1972–2004. *American Educational Research Journal*, 49(6), 1074–1111. <https://doi.org/10.3102/0002831212439456>
- ⁷¹ Shapiro, D., Dundar, A., Huie, F., Wakhungu, P., Yuan, X., Nathan, A & Hwang, Y., A. (2017, April). *A national view of student attainment rates by race and ethnicity—Fall 2010 cohort* (Signature Report No. 12b). National Student Clearinghouse Research Center. <https://nscresearchcenter.org/wp-content/uploads/Signature12-RaceEthnicity.pdf>
- ⁷² Nichols, A., & Evans-Bell, D. (2017, March 1). *A look at black student success: Identifying top- and bottom-performing institutions*. The Education Trust. <https://edtrust.org/resource/blackstudentsuccess/>
- ⁷³ Achinstein, B., & Ogawa, R. T. (2011). *Change(d) agents: New teachers of color in urban schools* (2nd ed). Teachers College Press.

- ⁷⁴ Petchauer, E. (2012). Teacher licensure exams and Black teacher candidates: Toward new theory and promising practice. *The Journal of Negro Education*, 81(3), 252–267. <https://doi.org/10.7709/jnegroeducation.81.3.0252>
- ⁷⁵ Scott-Clayton, J., & Li, J. (2016). *Black-white disparity in student loan debt more than triples after graduation*. Brookings Institution. <https://www.brookings.edu/research/black-white-disparity-in-student-loan-debt-more-than-triples-after-graduation>
- ⁷⁶ Brown, E. (2022). Is racial congruence between teachers and students enough? Skewed workplace compositions and early career African American teachers' perception of institutional culture. In C. D. Gist & T. J. Bristol (Eds.), *Handbook of research on teachers of color and Indigenous teachers*. American Educational Research Association.
- ⁷⁷ Fránquiz, M. E., & Salinas, C. S. (2022). Latinx teachers: Pláticas and possibilities. In C. D. Gist & T. J. Bristol (Eds.), *Handbook of research on teachers of color and Indigenous teachers*. American Educational Research Association.
- ⁷⁸ King, J., & Darling-Hammond, L. (2018, May 28). We're not doing enough to support teachers of color. *The Hechinger Report*. hechingerreport.org/opinion-we-arent-doing-enough-to-support-teachers-of-color/
- ⁷⁹ Center for Black Educator Development. (2022). *2022 program report: Teaching Academy pilot*. <https://static1.squarespace.com/static/5df3f23a2e878f341fa14f7a/t/63b8684b1120421615f0291c/1673029710792/CBED-22-TeachingAcademy-005.pdf>
- ⁸⁰ Griffin, A., & Tackie, H. (2016). *Through our eyes: Perspectives and reflections from Black teachers*. The Education Trust. edtrust.org/wp-content/uploads/2014/09/ThroughOurEyes.pdf
- ⁸¹ DonorsChoose. (2022). *Unique impact, unique burdens: Insights into the black male educator experience*. <https://www.donorschoose.org/black-male-educator-insights>
- ⁸² Dixon, D., Griffin, A., & Teoh, M. (2019). *If you listen, we will stay: Why teachers of color leave and how to disrupt teacher turnover*. The Education Trust and Teach Plus. https://teachplus.org/wp-content/uploads/files/downloads/teachers_of_color_retention_.pdf
- ⁸³ Fuller, E. J., Hollingworth, L., & An, B. (2016). The impact of personal and program characteristics on the placement of school leadership preparation program graduates in school leader positions. *Educational Administration Quarterly*, 52(4), 643–674. <https://doi.org/10.1177/0013161X16656039>
- ⁸⁴ Ingersoll, R., May, H., & Collins, G. (2017). *Minority teacher recruitment, employment, and retention: 1987 to 2013* [Research brief]. Learning Policy Institute. https://learningpolicyinstitute.org/media/173/download?inline&file=Minority_Teacher_Recruitment_REPORT.pdf
- ⁸⁵ Gershenson, S., Hansen, M., and Lindsay, C. A. (2021, April 19). *Teacher diversity and student success: Why racial representation matters in the classroom* [Webinar]. The Brookings Institution. <https://www.brookings.edu/events/teacher-diversity-and-student-success-why-racial-representation-matters-in-the-classroom/>

- ⁸⁶ Gist, C. & Bristol, T. (Eds.) (2021). *Building a more ethnoracially diverse teaching force: New directions in research, policy, and practice*. A Kappan Special Report.
- ⁸⁷ Viano, S., & Baker, D. J. (2020). How administrative data collection and analysis can better reflect racial and ethnic identities. *Review of Research in Education*, 44(1), 301–331. <https://doi.org/10.3102/0091732X20903321>
- ⁸⁸ Easton-Brooks, D. (2019). *Ethnic matching: Academic success for students of color*. Rowman & Littlefield Publishers.
- ⁸⁹ Gershenson, S., Lindsay, C., Papageorge, N. W., Campbell, R., & Rendon, J. (2023). *Spillover effects of Black teachers on White teachers' racial competency: Mixed methods evidence from North Carolina* (IZA DP No. 16258). IZA Institute of Labor Economics. <https://www.iza.org/en/publications/dp/16258/spillover-effects-of-black-teachers-on-white-teachers-racial-competency-mixed-methods-evidence-from-north-carolina>
- ⁹⁰ Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How principals affect students and schools: A systematic synthesis of two decades of research*. The Wallace Foundation. <http://www.wallacefoundation.org/principalsynthesis>
- ⁹¹ Bartanen, B., & Grissom, J. A. (2019). *School principal race and the hiring and retention of racially diverse teachers* (EdWorkingPaper No. 19-59). Annenberg Institute at Brown University.
- ⁹² Chicago Beyond. (2018). *Why am I always being researched? A guidebook for community organizations, researchers, and funders to help us get from insufficient understanding to more authentic truth*. Chicago Beyond Equity Series, Volume One. https://chicagobeyond.org/wp-content/uploads/2019/05/ChicagoBeyond_2019Guidebook.pdf
- ⁹³ Safir, S., and Dugan, J. (2021). *Street data: A next-generation model for equity, pedagogy, and school transformation*. Corwin Press.



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