



Inequitable Opportunity to Learn

Student Access to Certified and Experienced Teachers

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Executive Summary

Decades of research show that fully certified and experienced teachers matter for student achievement. Yet, providing all students with equitable access to such teachers has long been a struggle in U.S. schools. Recent teacher shortages have exacerbated these inequities in access because shortages can lead to the hiring of underprepared teachers. These teachers are typically disproportionately represented in schools serving students of color in many states. These inequities in student access are especially concerning, since achievement gaps between students of color and white students are substantially explained by the inequitable access to high-quality teachers. Therefore, understanding the extent of the inequities in student access to high-quality teachers and targeting resources to address those inequities are critical to closing achievement gaps.

Inequitable Opportunity to Learn: Student Access to Certified and Experienced Teachers is the first in a series of reports analyzing data from the U.S. Department of Education’s two most recent years of the biannual Civil Rights Data Collection (CRDC)—2014 and 2016. The CRDC includes data on a variety of information pertaining to school resources and student experiences, including student access to certified and experienced teachers. These data are reported overall and disaggregated, including by race/ethnicity. These data shed light on the extent to which inequities in opportunities to learn exist at the state and national levels, and they can inform the appropriate remedies.

While not all teacher characteristics have the same impact and not all of the characteristics that matter are represented in national datasets, two important teacher characteristics—certification and experience—are represented in the CRDC. To examine historically underserved students’ access to certified and experienced teachers, this report divides schools within the CRDC into five groups based on the percentage of students of color enrolled. Our analysis looks at two groups: schools serving the highest proportion of students of color and schools serving the lowest proportion of students of color. Ultimately, this report analyzes the extent to which schools with high and low enrollment of students of color have certified and experienced teachers. This analysis, which includes national and state information, demonstrates that students of color consistently have less access to certified and experienced teachers than their white peers.

Specifically, this report finds:

- **Students in schools with a high proportion of students of color have less access to certified teachers than those in schools with a low proportion of students of color.** While schools serving a low proportion of students of color have seen a slight increase in their percentage of uncertified teachers from 2014 to 2016, the problem is more acute in schools with high enrollment of students of color, which in 2016 were four times as likely to employ uncertified teachers as were schools with low enrollment of students of color. Further, the percentage of uncertified teachers increased from 2014 to 2016 in schools with high percentages of students of color.
- **Students in schools with high enrollment of students of color have less access to certified teachers than their white peers regardless of locale.** In rural and town areas, the percentage of uncertified teachers in schools with high enrollment of students of color is more than four times higher than schools with low enrollment of students of color. The

same lack of access is true in suburban and urban areas, where the percentage of uncertified teachers in schools with high enrollment of students of color is also higher than in schools with low enrollment of students of color.

- **Students in schools with high student of color enrollment have less access to experienced teachers.** In these schools, nearly one in every six teachers is just beginning his or her career, compared to one in every ten teachers in schools with low enrollment of students of color. Further, regardless of whether the school is located in a rural, suburban, or urban area, schools with high enrollment of students of color have a greater percentage of inexperienced teachers, compared to schools with low enrollment of students of color.

The report concludes with key policy strategies for supporting teachers and increasing student access to certified and experienced teachers. **State-level data are included in Appendix A.**

Introduction

Decades of research show that fully certified and experienced teachers matter for student achievement.¹ Yet, providing all students with equitable access to such teachers has long been a struggle in U.S. schools.² Recent teacher shortages have exacerbated these inequities in access because shortages can lead to the hiring of underprepared teachers, and these teachers are typically disproportionately represented in schools serving students from low-income families and students of color in many states.³ These inequities in student access are especially concerning, since achievement gaps between students of color and white students are substantially explained by the inequitable access to high-quality teachers.⁴ Therefore, understanding the extent of the inequities in student access to high-quality teachers and targeting resources to address those inequities are critical to closing achievement gaps.

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To shed light on the extent to which inequities in opportunities to learn exist at the state and local levels, and to inform the appropriate remedies, the U.S. Department of Education's Office for Civil Rights collects data on a variety of information pertaining to teacher qualifications, school resources, and student experiences, such as access to advanced coursework and inclusive discipline practices. This dataset has been collected every 2 years from all public schools and school districts in the United States since 1968. The Civil Rights Data Collection (CRDC) measures a wide range of opportunities to learn relative to educational equity for students across schools.

These measures include information about teachers' years of experience and certifications—data that are particularly important in identifying the extent to which students have access to high-quality teachers. These data are reported at the school level overall. School demographic information is also included in the dataset.

This report examines the 2014 and 2016 CRDCs, the most recent data collected, to assess the degree to which students of color (including African American, Asian, Latino/a, Native American, Pacific Islander, and students of two or more races), compared to their white peers, have access to certified and experienced teachers—two elements of teacher quality collected by the CRDC. This report examines the extent of disparities between schools serving predominantly white students and schools serving predominantly students of color across rural, urban, and suburban communities, because of the historic prevalence of these disparities.⁵

The CRDC defines a “certified” teacher as a teacher who has met all applicable state teacher certification requirements for a standard certificate, license, or endorsement issued by the state. The CRDC defines an “experienced” teacher as a teacher who has 3 or more years of teaching experience. (See “Definitions for This Report.”)

Definitions for This Report

Certified teachers⁶—Teachers are considered “certified” if they have met all applicable state teacher certification requirements for a standard certificate, license, or endorsement issued by the state as listed in the CRDC.

Uncertified teachers—Teachers are considered “uncertified” if they have not met all applicable state teacher certification requirements for a standard certificate, license, or endorsement issued by the state as listed in the CRDC.

Experienced teachers—Teachers are considered “experienced” if they have 3 or more years of teaching experience.

New/inexperienced teachers—Teachers are considered “inexperienced” if they are in their first or second year in the profession. The CRDC uses the same definition.

Students of color—For this analysis, we define “students of color” as those who are African American, Asian, Latino/a, Native American, Pacific Islander, and students of two or more races. These students are referred to as students of color in the analyses.

High/low student of color school enrollment—This classification is based on a calculation of the percentage of students of color enrolled for each school. This percentage is then used to divide schools into quintiles. The top quintile consists of the 20% of schools with the highest enrollment of students of color, and the bottom quintile consists of the 20% of schools with the lowest enrollment of students of color.⁷

School locale—The National Center for Education Statistics uses locale codes for general description, analysis, sampling, and other statistical purposes. School locale is categorized into four primary classifications (city, suburban, town, and rural). In our analyses, we combine rural and town⁸ and use the term “urban” to indicate city locations. Locale assignments for schools are based on the estimated location of a school building.⁹

Because CRDC data are collected at the school level, these data can illuminate important disparities across schools. These data cannot, however, identify disparities at the student level within each school. More information about methodology is included in Appendix B.

This report begins by discussing the research that shows that student access to certified and experienced teachers matters for student outcomes and then addresses the following questions:

- Do schools enrolling a high proportion of students of color on average offer the same access to certified teachers compared to schools with a low proportion of students of color?
- Do schools enrolling a high proportion of students of color on average offer the same access to experienced teachers compared to schools with a low proportion of students of color?
- Are there variations in the extent to which schools enrolling a high proportion of students of color on average offer access to experienced and certified teachers based on whether the school is in a rural, suburban, or urban area?

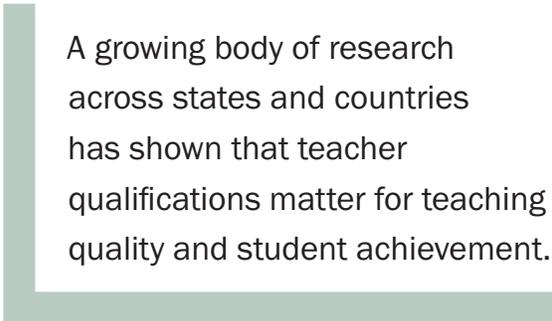
The report concludes with policy recommendations for closing gaps in student access to certified and experienced teachers. This report is the first in a series of reports using data from the CRDC to understand the extent to which historically underserved students experience inequities in their opportunity to learn—from who teaches them, to what they are taught, to how they are treated.

Why Student Access to Certified and Experienced Teachers Matters

Teachers are the school-based staff who spend the most time with students, and research shows that their qualifications and experience matter for the opportunities students have to learn, their well-being, and their academic outcomes.¹⁰ Not all teacher characteristics have the same impact, and not all of the characteristics that matter are represented in national datasets. However, two important teacher characteristics—certification and experience—are represented in the CRDC, and the extent to which students of color are taught by certified and experienced teachers compared to their white peers is the topic of this report.

Certification

A growing body of research across states and countries has shown that teacher qualifications matter for teaching quality and student achievement.¹¹ For example, a large-scale study of teachers in New York City found that growth in student achievement in elementary and middle school mathematics was most enhanced by having a fully certified teacher who had graduated from a university-based preservice teacher education program, who had a strong academic background in mathematics, and who had more than 2 years of experience.¹² The same study showed that students' achievement was hurt most by having an inexperienced teacher on a temporary license—a teaching profile most common in schools serving a high percentage of students of color and students from low-income families.



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A similar large-scale study in North Carolina found that students' achievement growth was significantly higher if they were taught by a teacher who was certified in his or her teaching field, fully prepared upon entry (rather than entering through the state's alternative "lateral entry" route), had higher scores on the teacher licensing test, graduated from a competitive college, had taught for more than 2 years, or was National Board Certified. These qualifications were extremely inequitably distributed, and the researchers found that the combined influence on achievement growth of having a teacher with most of these qualifications as compared to one with few of them was larger than the effects of race and parent education combined.¹³

A recent study in California examined the factors most strongly associated with student achievement in school districts, taking into account students' race/ethnicity, family income, and family education levels. The study found that teacher qualifications were the most important school-related predictors of student achievement, with the percentage of teachers holding substandard credentials significantly and negatively associated with student achievement for all students.¹⁴

Experience

A teacher's years of experience in the classroom also have an impact on student success. A synthesis of 30 studies analyzing the effect of teaching experience on student outcomes found that teaching experience is positively associated with student achievement gains throughout a teacher's career.¹⁵ Studies have provided clear evidence that teachers with more experience are on average more effective than those with only 1 or 2 years of experience.¹⁶

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Multiple studies also show that novice teachers with fewer than 3 years of experience are concentrated in high-poverty schools¹⁷—many of which also serve high concentrations of students of color.¹⁸ One study noted that teacher effectiveness for those with 3 or more years of experience may be the result of improvement over time that can occur as teachers “gain familiarity and fluency both with the act of teaching itself, as well as the interpersonal demands of the profession.”¹⁹ It is also worth noting that the extent to which teachers are initially effective can be tied to the quality of their preparation and pathway into the profession.²⁰ This has implications for schools with high concentrations of early-career teachers who have entered the profession through low-quality pathways and who need additional support to be provided.

There are additional benefits to teacher experience beyond student achievement. Students benefit from being taught by experienced teachers not only on academic performance, measured by test scores, but also on other measures of success, such as school attendance.²¹ Experienced teachers also confer benefits to other teachers in their schools. Teachers whose colleagues are more experienced are more effective than those whose colleagues are less experienced, suggesting that more experienced teachers provide important additional benefits to their school community beyond increased learning for the students they teach.²² Schools with large proportions of inexperienced teachers therefore often also have limited numbers of experienced mentor teachers to support the development of new teachers.²³

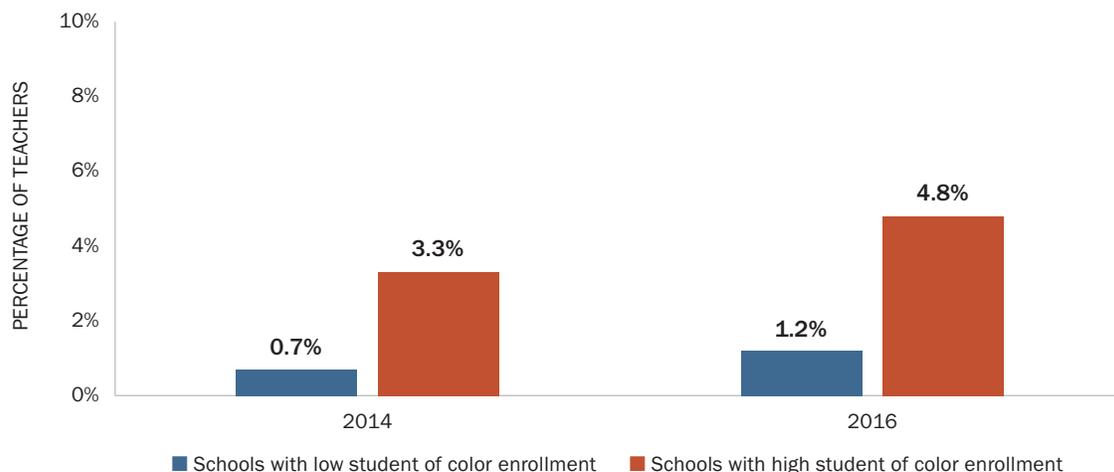
Who Has Access to Certified and Experienced Teachers?

Despite the critical importance of student access to certified and experienced teachers, our analysis of the 2015–16 CRDC data finds that schools with high student of color enrollment face challenges when it comes to ensuring that students are taught by certified and experienced teachers. These schools have a greater percentage of inexperienced teachers compared to schools with low student of color enrollment (i.e., those schools that enroll predominantly white students). Further, percentages of uncertified and inexperienced teachers have increased in schools with high student of color enrollment from 2013–14 to 2015–16.

Student Access to Certified Teachers

Students in schools enrolling a high proportion of students of color have less access to certified teachers than students in schools enrolling a low proportion of students of color. (See Figure 1.) Further, from 2014 to 2016, the percentage of uncertified teachers has increased more in schools with high enrollment of students of color than in schools with low enrollment of students of color. While schools serving a low proportion of students of color have seen a slight increase in their percentage of uncertified teachers during this time period, the problem is more acute in schools with high enrollment of students of color, which in 2016 were four times as likely to employ uncertified teachers as were schools with low enrollment of students of color.

Figure 1
Percentage of Uncertified Teachers in Schools With Low and High Student of Color Enrollment, 2014 and 2016



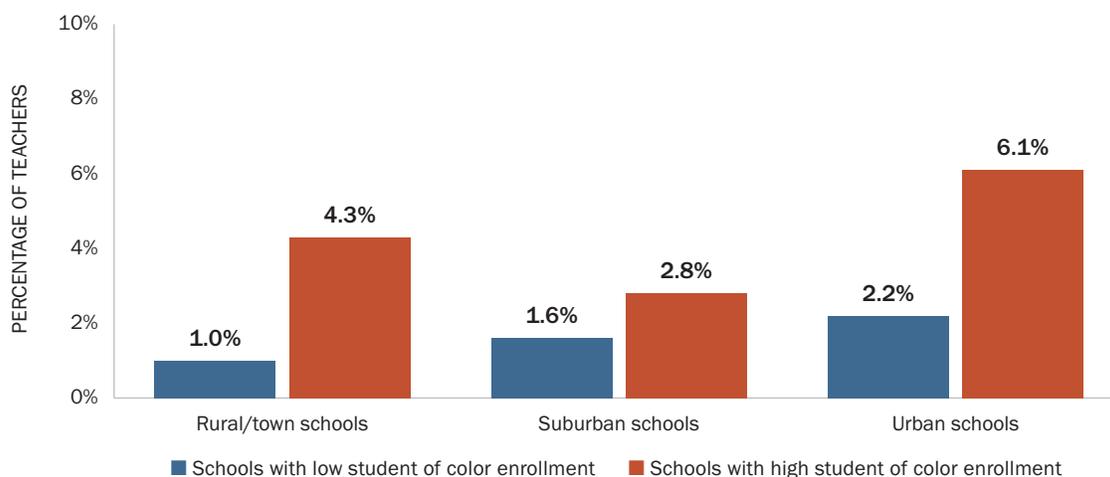
Note: “Schools with low enrollment of students of color” are schools in the bottom quintile nationally, in which 0% to 13% of students enrolled are students of color. “Schools with high enrollment of students of color” are schools in the top quintile nationally, in which 86% to 100% of students enrolled are students of color.

Data source: U.S. Department of Education, Office of Civil Rights. (n.d.). Civil Rights Data Collection (public-use data files for 2014 and 2016). <https://ocrdata.ed.gov/>.

Table A1 in Appendix A shows percentages of uncertified teachers in schools with low and high enrollment of students of color by state. States vary greatly in the extent to which they allow the hiring of uncertified teachers, with Iowa having almost no teachers uncertified in any kind of school, whereas Arizona and Colorado have high proportions of uncertified teachers in every kind of school.²⁴ Within many states, there are substantial differentials in the allocation of teachers, with large proportions of uncredentialed teachers in schools serving large enrollments of students of color, but few in largely white schools. Georgia, Louisiana, Maryland, Massachusetts, Mississippi, Nevada, New York, and Tennessee stand out in this regard.

Nationally, urban schools have the largest percentages of uncertified teachers.²⁵ However, CRDC data show that in all kinds of schools—rural, suburban, and urban—students in schools with high enrollment of students of color have less access to certified teachers than do their white peers. In rural and town areas, the percentage of uncertified teachers in schools with high enrollment of students of color is more than four times higher than in schools with low enrollment of students of color. (See Figure 2.) The same lack of access occurs in suburban and urban areas.

Figure 2
Percentage of Uncertified Teachers by Student of Color Enrollment and School Location, 2016



Note: “Schools with low enrollment of students of color” are schools in the bottom quintile nationally, in which 0% to 13% of students enrolled are students of color. “Schools with high enrollment of students of color” are schools in the top quintile nationally, in which 86% to 100% of students enrolled are students of color.

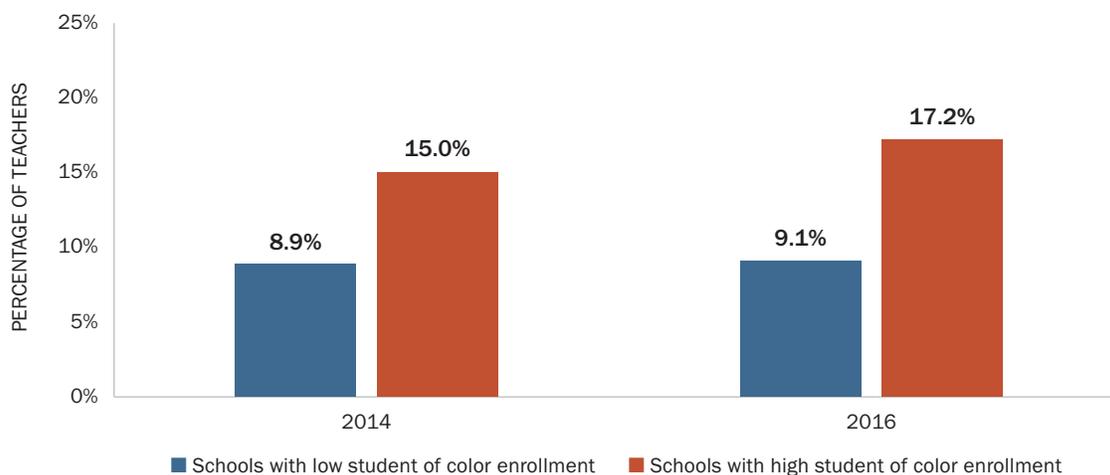
Data source: U.S. Department of Education, Office of Civil Rights. (n.d.). Civil Rights Data Collection (public-use data files for 2016). <https://ocrdata.ed.gov/>; National Center for Education Statistics. (n.d.). Common Core of Data (2016). <https://nces.ed.gov/ccd/ccddata.asp>.

Student Access to Experienced Teachers

When we examined teacher experience, we found similar patterns. Students in schools with high student of color enrollment have less access to experienced teachers. In these schools in 2016, 17.2% of teachers were just beginning their careers compared to 9.1% of teachers in schools with low enrollment of students of color. Figure 3 shows that from 2014 to 2016, inexperienced first- and second-year teachers comprised a greater share of the teaching staff in schools with high student of

color enrollment than in schools with low student of color enrollment. In addition, the proportion of new teachers in the profession grew from 15.0% to 17.2% for schools with high percentages of students of color, while it remained fairly stable at about 9% for schools with low percentages of students of color.

Figure 3
Percentage of Inexperienced (First- or Second-Year) Teachers in Schools With Low and High Student of Color Enrollment, 2014 and 2016



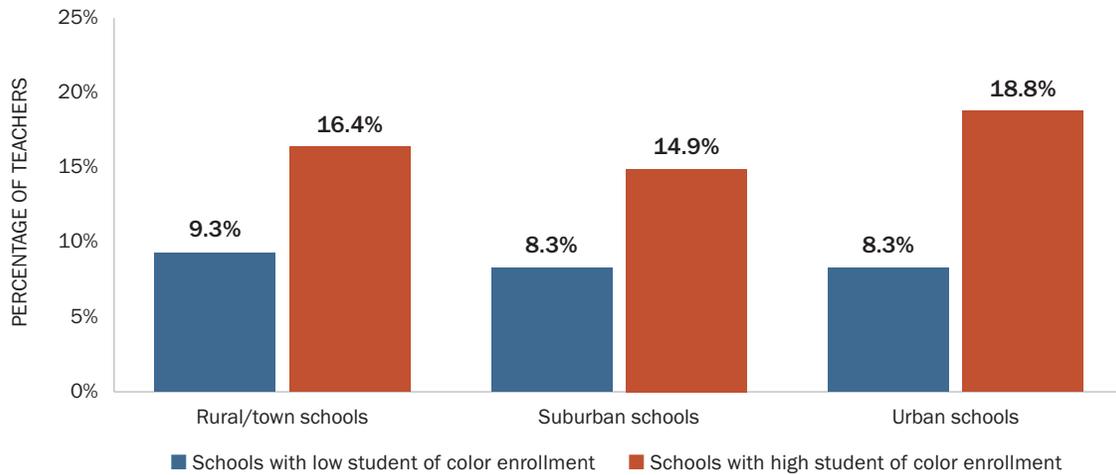
Note: “Schools with low enrollment of students of color” are schools in the bottom quintile nationally, in which 0% to 13% of students enrolled are students of color. “Schools with high enrollment of students of color” are schools in the top quintile nationally, in which 86% to 100% of students enrolled are students of color.

Data source: U.S. Department of Education, Office of Civil Rights. (n.d.). Civil Rights Data Collection (public-use data files for 2014 and 2016). <https://ocrdata.ed.gov/>.

Table A1 in Appendix A shows percentages of inexperienced teachers in schools with low and high enrollment of students of color by state. In 13 states (Alaska, Connecticut, Delaware, Kansas, Massachusetts, Mississippi, Nevada, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, and Washington), there are about twice as many inexperienced teachers in schools with high enrollment of students of color compared to the share of inexperienced teachers in schools with low student of color enrollment. In five states (Georgia, Indiana, Maryland, Rhode Island, and Tennessee), there are at least three times as many inexperienced teachers in schools serving high proportions of students of color.

We also examined the distribution of uncertified teachers by school location. Regardless of whether the school is in a rural, suburban, or urban location, schools with high enrollment of students of color have a greater percentage of inexperienced teachers compared to schools with a low enrollment of students of color, with urban schools most affected. (See Figure 4.)

Figure 4
Percentage of Inexperienced (First- or Second-Year) Teachers in Schools With Low and High Student of Color Enrollment by School Location, 2016



Note: “Schools with low enrollment of students of color” are schools in the bottom quintile nationally, in which 0% to 13% of students enrolled are students of color. “Schools with high enrollment of students of color” are schools in the top quintile nationally, in which 86% to 100% of students enrolled are students of color.

Data sources: U.S. Department of Education, Office of Civil Rights. (n.d.). Civil Rights Data Collection (public-use data files for 2016). <https://ocrdata.ed.gov/>; National Center for Education Statistics. (n.d.). Common Core of Data. <https://nces.ed.gov/ccd/ccddata.asp>.

In summary, as found in previous research, compared to their white peers, students of color continue to have less access to teachers who are certified and experienced. Any federal, state, or local efforts to increase student achievement and close gaps in student achievement will be limited in their effectiveness unless these inequities in access are addressed as part of those efforts.

Policy Recommendations

Analysis of the CRDC reveals that substantial inequities in student access to certified and experienced teachers still persist for students of color. The federal government, states, districts, and schools can use these data to identify these inequities. Further, federal, state, and local policies intended to address the inequities in student access to certified and experienced teachers must take a comprehensive approach to providing teachers with the preparation, resources, and supports they need to be successful.

Other research suggests that key policy strategies for supporting teachers and increasing student access to certified and experienced teachers could include:

1. **Strengthening federal policies to encourage the equitable distribution of more experienced, certified teachers and discourage the concentration of novice and uncertified teachers in high-need schools.** The Every Student Succeeds Act (ESSA) requires states to develop plans describing how the state will ensure that students of color and students from low-income families are not taught by ineffective, out-of-field, or inexperienced teachers at disproportionate rates, a concern that was also emphasized in the No Child Left Behind Act (NCLB). In addition, to track student access to high-quality teachers, under ESSA, states must report “actual personnel expenditures and actual nonpersonnel expenditures of federal, state, and local funds, disaggregated by source of funds, for each local educational agency and each school in the state for the preceding fiscal year.” However, despite widespread inequities, no state has been sanctioned for failure to deliver on the promise of equitable access to qualified and experienced teachers throughout the 14 years of NCLB or the 3 years of ESSA.²⁶

As states implement ESSA, the U.S. Department of Education should monitor state conditions and provide technical assistance to support state efforts at recruiting and retaining teachers for schools serving students of color and those from low-income families. The Department of Education should also enforce existing ESSA comparability provisions for ensuring equitable funding and well-qualified teachers to schools serving different populations of students.

2. **Strengthening educator pipelines by implementing and maintaining federal and state loan forgiveness and service scholarship programs that can recruit, prepare, and retain high-quality teachers in the academic fields and in the schools in which they are most needed.** Service scholarships and forgivable loan programs can be particularly effective in recruiting teachers to high-need subjects (mathematics, science, special education, English learners) and high-need schools.²⁷ For example, such programs might seek to recruit well-qualified teachers into schools with high teacher turnover rates and a history of hiring inexperienced and/or underqualified teachers. Large-scale investments in service scholarships for teachers who commit to working in high-need communities have played a key federal role in the past (and have continued to do so in medicine). In addition, at least 16 states have their own loan forgiveness or service scholarship programs.²⁸ Scaling up this practice across states and targeting districts predominantly serving historically underserved students can help to ensure that there is an adequate supply of trained and certified teachers for these schools.

State and local efforts can also be supported by federal programs, such as the TEACH Grant Program that provides scholarships of up to \$4,000 per year to undergraduate and graduate students who are preparing for a career in teaching and who commit to teaching in a high-need field in a high-poverty elementary or secondary school for 4 years.

3. **Creating more equitable state funding levels across school districts to allow for higher and more equitable teacher salaries and improved working conditions that can increase teacher retention.** The majority of states have unfair funding systems with “flat” or “regressive” funding distribution patterns that ignore the need for additional funding in high-poverty districts serving large percentages of students of color. In 2015, only 11 states had progressive funding systems, down from 17 in 2008.²⁹ These unfair funding systems can lead to lower teacher salaries and poorer working conditions in high-poverty districts, including those with large percentages of students of color. Research consistently shows how these funding differences play out within states to create the inequitable distribution of certified and experienced teachers.³⁰ Creating more equitable funding formulas allows for more equitable salaries and working conditions. This can serve to increase teacher retention and ensure that students in high-need districts have access to experienced, quality teachers.
4. **Supporting high-quality teacher residency programs through increases in state and federal funding that can prepare high-quality teachers well.** Evidence shows that well-designed residencies improve the preparation and retention of well-qualified teachers.³¹ In addition, these teacher residencies have been successful in recruiting talented candidates into high-need fields and locations. Teacher residency programs ensure that residents receive training under the mentorship of an accomplished master teacher while earning a credential and a master’s degree from a partnering university.³² These candidates work during their training period as paid apprentices to skilled expert teachers while completing credential requirements. In exchange, they commit to teaching 3–5 years in their sponsoring district.
5. **Providing novice teachers with mentoring, support, and other professional learning opportunities.** Research shows that federal, state, and local investments in high-quality mentoring and induction programs can lead teachers to stay in the profession longer, can accelerate professional growth among new teachers, and can lead to improved student learning.³³ Such programs can stem the high attrition rates that often lead to a revolving door of beginning teachers in high-need schools. The best-designed programs provide new teachers with a mentor teacher in the same subject and/or grade level, regularly scheduled collaboration time with colleagues, and released time for their mentor to provide individualized coaching and demonstration lessons in the classroom. However, the number of states supporting mentoring and induction programs decreased during the recent recession, and a 2016 review of state policies found that just 16 states provided dedicated funding to support teacher induction.³⁴ Investments to reinstate and scale up these types of supports for early-career teachers can support stronger retention for teachers in high-need schools.

6. **Compensating National Board Certified teachers who work in high-need schools.** National Board Certified teachers (NBCTs) are accomplished teachers who have met a high bar that is similar to board certification in medicine. Research shows that NBCTs are more effective on average than other teachers and that NBCTs increase the effectiveness of the new teachers that they mentor.³⁵ Over half of states offer stipends to teachers who have earned National Board Certification as a strategy to retain effective teachers and reward them for their expertise.³⁶ The federal government and states could subsidize the cost of National Board Certification for teachers in underserved communities through programs under ESSA and the Higher Education Act.

7. **Supporting principal training at the state and local levels that enables strong collegial relationships among school staff and a positive and professional working environment.** Among the most common reasons teachers give for leaving the classroom is a lack of support from their principals.³⁷ Teachers who have chosen to stay in the profession cite the quality of relationships among staff, a supportive principal who shares decision-making, and opportunities to collaborate as among their most important reasons for continuing to teach.³⁸ Collegiality is hard to legislate, yet there are concrete steps that policymakers can take. Federal and state policymakers can invest in high-quality principal preparation for which talented educators are proactively recruited and through which they learn how to create productive school environments.

Conclusion

Research shows that certified and experienced teachers, in addition to meaningful and relevant curricula and safe and inclusive learning environments, are necessary to make schooling accountable for all students, especially those who are historically underserved and in need of high-quality education.⁵⁹ This analysis shows that many students of color do not have equitable access to such teachers compared to their white peers. Policymakers can look to the CRDC and other data to identify where these inequities exist and target the necessary resources, such as supporting high-quality pathways into the profession that include extensive clinical experience; creating incentives to teach in high-need schools, such as through loan forgiveness and service scholarship programs; and providing ongoing support for teacher development, such as mentoring and induction programs. Without making significant investments in educator quality, gaps in student achievement will never be fully addressed, and providing each and every child the opportunity to reach their full potential will remain that much more difficult.

Appendix A: State-by-State Analysis

In addition to reviewing the nationwide data, our analysis compares percentages by state of uncertified and inexperienced teachers (i.e., those in their first or second year of teaching) in schools with high and low percentages of students of color. To do this, we calculate the percentage of students of color enrolled for each school in the state and use these percentages to group schools into state-level quintiles. Table A1 shows each state’s percentage of uncertified and inexperienced teachers in schools with high student of color enrollment (highest quintile) and in schools with low student of color enrollment (lowest quintile). Table A1 also includes the number of schools in each quintile in each state to provide greater understanding of how many schools are providing less access to certified and experienced teachers.

Table A1
Percentage of Uncertified and Inexperienced Teachers by State in Schools With High Student of Color Enrollment Compared to Schools With Low Student of Color Enrollment

State ^{a,b}	Percentages of Uncertified Teachers		Percentages of Inexperienced Teachers	
	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)
ALABAMA Highest quintile = 86% to 100% students of color; lowest quintile = 0% to 16% students of color	2.1% (268)	0.4% (272)	14.5% (268)	8.0% (272)
ALASKA Highest quintile = 98% to 100% students of color; lowest quintile = 0% to 29% students of color	5.3% (99)	0.1% (99)	25.7% (99)	10.7% (99)
ARIZONA Highest quintile = 93% to 100% students of color; lowest quintile = 0% to 33% students of color	8.1% (386)	8.8% (387)	18.7% (386)	14.9% (387)
ARKANSAS Highest quintile = 64% to 100% students of color; lowest quintile = 0% to 9% students of color	4.6% (208)	1.8% (210)	15.2% (208)	9.8% (210)

State ^{a,b}	Percentages of Uncertified Teachers		Percentages of Inexperienced Teachers	
	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)
CALIFORNIA Highest quintile = 97% to 100% students of color; lowest quintile = 0% to 49% students of color	2.5% (1,888)	1.1% (1,884)	11.3% (1,888)	9.8% (1,884)
COLORADO Highest quintile = 74% to 100% students of color; lowest quintile = 0% to 20% students of color	11.9% (369)	8.1% (370)	22.5% (369)	15.3% (370)
CONNECTICUT Highest quintile = 77% to 100% students of color; lowest quintile = 0% to 15% students of color	3.7% (234)	0.5% (234)	15.8% (234)	7.1% (234)
DELAWARE Highest quintile = 74% to 100% students of color; lowest quintile = 12% to 38% students of color	4.3% (41)	1.4% (43)	13.7% (41)	6.9% (43)
FLORIDA Highest quintile = 91% to 100% students of color; lowest quintile = 0% to 35% students of color	3.9% (599)	2.6% (678)	12.8% (599)	10.4% (678)
GEORGIA Highest quintile = 94% to 100% students of color; lowest quintile = 2% to 30% students of color	7.0% (457)	1.4% (458)	16.1% (457)	5.5% (458)
HAWAII Highest quintile = 97% to 100% students of color; lowest quintile = 25% to 79% students of color	3.8% (58)	5.1% (58)	12.8% (58)	13.5% (58)
IDAHO Highest quintile = 38% to 100% students of color; lowest quintile = 0% to 11% students of color	1.6% (140)	0.7% (141)	15.9% (140)	10.4% (141)

State ^{a,b}	Percentages of Uncertified Teachers		Percentages of Inexperienced Teachers	
	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)
ILLINOIS Highest quintile = 89% to 100% students of color; lowest quintile = 0% to 9% students of color	3.1% (806)	0.8% (806)	15.0% (806)	8.7% (806)
INDIANA Highest quintile = 52% to 100% students of color; lowest quintile = 0% to 7% students of color	1.7% (370)	0.7% (372)	27.7% (370)	8.8% (372)
IOWA Highest quintile = 29% to 96% students of color; lowest quintile = 0% to 6% students of color	0.0% (269)	0.1% (270)	13.1% (269)	9.9% (270)
KANSAS Highest quintile = 48% to 98% students of color; lowest quintile = 0% to 10% students of color	1.8% (263)	0.4% (261)	17.7% (263)	8.4% (261)
KENTUCKY Highest quintile = 39% to 100% students of color; lowest quintile = 0% to 5% students of color	0.7% (276)	0.6% (280)	13.9% (276)	9.4% (280)
LOUISIANA Highest quintile = 93% to 100% students of color; lowest quintile = 1% to 25% students of color	19.9% (268)	2.2% (270)	16.6% (268)	8.6% (270)
MAINE Highest quintile = 11% to 81% students of color; lowest quintile = 0% to 4% students of color	2.8% (115)	3.8% (118)	9.3% (115)	9.7% (118)
MARYLAND Highest quintile = 97% to 100% students of color; lowest quintile = 0% to 25% students of color	7.1% (281)	0.5% (281)	26.7% (281)	8.4% (281)

State ^{a,b}	Percentages of Uncertified Teachers		Percentages of Inexperienced Teachers	
	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)
MASSACHUSETTS Highest quintile = 69% to 100% students of color; lowest quintile = 0% to 11% students of color	13.9% (366)	3.8% (363)	18.9% (366)	8.4% (363)
MICHIGAN Highest quintile = 59% to 100% students of color; lowest quintile = 0% to 9% students of color	1.0% (679)	1.2% (674)	12.6% (679)	7.0% (674)
MINNESOTA Highest quintile = 55% to 100% students of color; lowest quintile = 0% to 9% students of color	2.4% (420)	0.5% (421)	16.4% (420)	12.1% (421)
MISSISSIPPI Highest quintile = 97% to 100% students of color; lowest quintile = 0% to 27% students of color	7.9% (192)	1.1% (193)	20.2% (192)	8.1% (193)
MISSOURI Highest quintile = 42% to 100% students of color; lowest quintile = 0% to 5% students of color	3.0% (464)	0.9% (465)	17.5% (464)	11.5% (465)
MONTANA Highest quintile = 24% to 100% students of color; lowest quintile = 0% students of color	1.1% (163)	0.9% (163)	15.9% (163)	17.1% (163)
NEBRASKA Highest quintile = 46% to 100% students of color; lowest quintile = 0% to 7% students of color	0.0% (208)	0.1% (208)	14.3% (208)	9.0% (208)
NEVADA Highest quintile = 89% to 100% students of color; lowest quintile = 0% to 38% students of color	15.5% (127)	1.9% (130)	16.4% (127)	8.4% (130)

State ^{a,b}	Percentages of Uncertified Teachers		Percentages of Inexperienced Teachers	
	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)
NEW HAMPSHIRE Highest quintile = 15% to 72% students of color; lowest quintile = 0% to 5% students of color	1.6% (95)	0.8% (96)	9.1% (95)	9.3% (96)
NEW JERSEY Highest quintile = 91% to 100% students of color; lowest quintile = 0% to 20% students of color	4.9% (507)	1.6% (508)	16.3% (507)	8.2% (508)
NEW MEXICO Highest quintile = 94% to 100% students of color; lowest quintile = 8% to 58% students of color	1.9% (166)	1.9% (165)	15.6% (166)	12.3% (165)
NEW YORK Highest quintile = 74% to 100% students of color; lowest quintile = 0% to 8% students of color	7.9% (627)	0.3% (630)	16.8% (627)	7.5% (630)
NORTH CAROLINA Highest quintile = 78% to 100% students of color; lowest quintile = 2% to 23% students of color	4.4% (514)	1.9% (515)	10.3% (514)	6.6% (515)
NORTH DAKOTA Highest quintile = 28% to 100% students of color; lowest quintile = 0% to 5% students of color	0.2% (95)	0.3% (96)	12.3% (95)	12.6% (96)
OHIO Highest quintile = 58% to 100% students of color; lowest quintile = 0% to 6% students of color	3.4% (711)	0.3% (708)	21.3% (711)	9.6% (708)
OKLAHOMA Highest quintile = 65% to 100% students of color; lowest quintile = 3% to 31% students of color	2.1% (354)	0.6% (355)	21.4% (354)	8.6% (355)

State ^{a,b}	Percentages of Uncertified Teachers		Percentages of Inexperienced Teachers	
	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)
OREGON Highest quintile = 50% to 99% students of color; lowest quintile = 0% to 17% students of color	0.2% (243)	1.2% (243)	15.4% (243)	11.2% (243)
PENNSYLVANIA Highest quintile = 59% to 100% students of color; lowest quintile = 0% to 6% students of color	3.4% (590)	0.2% (591)	17.2% (590)	6.9% (591)
RHODE ISLAND Highest quintile = 80% to 98% students of color; lowest quintile = 2% to 12% students of color	0.7% (60)	23.6% (61)	11.8% (60)	3.5% (61)
SOUTH CAROLINA Highest quintile = 78% to 100% students of color; lowest quintile = 0% to 27% students of color	1.7% (240)	0.6% (242)	16.0% (240)	8.5% (242)
SOUTH DAKOTA Highest quintile = 32% to 100% students of color; lowest quintile = 0% to 4% students of color	1.5% (135)	0.4% (135)	12.7% (135)	10.6% (135)
TENNESSEE^c Highest quintile = 74% to 100% students of color; lowest quintile = 0% to 7% students of color	14.0% (360)	0.6% (361)	61.0% (360)	7.6% (361)
TEXAS Highest quintile = 97% to 100% students of color; lowest quintile = 0% to 40% students of color	3.8% (1,654)	0.9% (1,694)	18.4% (1,654)	10.4% (1,694)
UTAH Highest quintile = 36% to 100% students of color; lowest quintile = 0% to 11% students of color	6.3% (200)	2.1% (200)	17.3% (200)	14.4% (200)

State ^{a,b}	Percentages of Uncertified Teachers		Percentages of Inexperienced Teachers	
	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)	Schools With High Student of Color Enrollment (n = number of schools)	Schools With Low Student of Color Enrollment (n = number of schools)
VERMONT Highest quintile = 12% to 100% students of color; lowest quintile = 0% to 4% students of color	1.4% (59)	1.5% (61)	8.5% (59)	9.4% (61)
VIRGINIA Highest quintile = 75% to 100% students of color; lowest quintile = 0% to 19% students of color	5.2% (389)	2.1% (392)	16.7% (389)	9.5% (392)
WASHINGTON Highest quintile = 63% to 100% students of color; lowest quintile = 0% to 22% students of color	0.2% (430)	0.4% (441)	14.6% (430)	6.8% (441)
WEST VIRGINIA Highest quintile = 14% to 66% students of color; lowest quintile = 0% to 2% students of color	3.2% (142)	4.7% (142)	11.3% (142)	11.3% (142)
WISCONSIN Highest quintile = 40% to 100% students of color; lowest quintile = 0% to 8% students of color	3.9% (441)	0.6% (443)	14.6% (441)	11.4% (443)
WYOMING Highest quintile = 30% to 100% students of color; lowest quintile = 0% to 8% students of color	0.7% (72)	0.6% (73)	15.4% (72)	9.8% (73)

^a Quintiles were generated based on the state population.

^b In Washington, DC, due to the small number of schools (220), as well as the large and unevenly distributed percentage of students of color, schools cannot be divided evenly into quintiles; therefore, we excluded DC in this table. On average in Washington, DC, 90% of students are students of color, 21.5% of teachers are uncertified, and 17.5% are inexperienced.

^c Estimates from Tennessee should be interpreted with caution—estimates vary considerably from 2013–14 estimates.

Data source: U.S. Department of Education, Office of Civil Rights. (n.d.). Civil Rights Data Collection (public-use data files 2016). <https://ocrdata.ed.gov/>.

Appendix B: Methodology

This report is based primarily on data from the 2013–14 and 2015–16 CRDCs. To supplement these data, we linked schools in the CRDC to the 2015–16 Common Core of Data from the National Center for Education Statistics (NCES), a national database of all public elementary and secondary schools and school districts. Linking these data allows us to retrieve information on school locale. Based on the estimated location of a school building, NCES categorizes school locale into four primary classifications (city, suburban, town, and rural).⁴⁰ In our analyses, we combine rural and town. We also use the term “urban” to indicate city locations. Schools that exist in both datasets were kept in the analyses for 2015–16, providing a total of 92,602 schools serving more than 49 million students across the country.⁴¹ In addition to analyzing the 2015–16 CRDC data, this report includes analyses using CRDC data for the 2013–14 school year to describe the proportion of fully certified and experienced teachers over time. Because the CRDC collects data from all schools nationally, comparisons across years and subgroups examine differences in these percentages without weighting or other adjustments.

This report also compares schools with low student of color enrollment to schools with high student of color enrollment. In the main body of this report, we examine these percentages nationally. To do this, we first calculate the percentage of students of color enrolled for each school and then use these percentages to group schools across the nation into quintiles. The top quintile consists of the 20% of schools with the highest enrollment of students of color, and the bottom quintile consists of the 20% of schools with the lowest enrollment of students of color.⁴² In the top quintile across the nation, 86% to 100% of students enrolled are students of color, and in the bottom quintile, 0% to 13% of students enrolled are students of color.

To calculate the percentage of certified teachers, we use a simple percentage (i.e., the number of certified full-time teachers in each quintile of schools divided by the total number of full-time teachers in that quintile of schools). We use the same approach to calculate the percentage of experienced teachers.

In Appendix A, we use a similar approach, instead analyzing state-level data. Due to the varying distribution of students of color among states, we re-create the quintile groups described above within each state in order to compare schools with low student of color enrollment to schools with high student of color enrollment within each state.

Endnotes

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6. Civil Rights Data Collection captures the number of FTE teachers in total, FTE teachers who are certified, and FTE teachers in their first or second year of teaching per school, and the percentages of uncertified teachers and new teachers at each school were calculated using those FTE teacher counts.
7. The bottom quintile includes a total of 18,514 schools in which students of color (African American, Latino/a, Asian, Pacific Islander, Native American, and students of two or more races) account for an average of 7% of total student enrollment (with a range of 0–13% students of color); and the top quintile includes a total of 18,470 schools in which students of color account for an average of 95% of total student enrollment (with a range of 86–100% students of color).
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40. More discussion of the locale criteria is available in the *Locale Boundaries User's Manual*, which can be accessed here: https://nces.ed.gov/programs/edge/docs/NCES_LOCALE_USERSMANUAL_2016012.pdf.
41. A total of 3,758 unmatched schools from the CRDC were excluded from our analytical sample. Despite these excluded schools, our study includes more than 96% of the nation's schools.
42. The bottom quintile includes a total of 18,514 schools in which students of color (African American, Latino/a, Asian, Pacific Islander, Native American, and students of two or more races) account for an average of 7% of total student enrollment (with a range of 0–13% students of color); and the top quintile includes a total of 18,470 schools in which students of color account for an average of 95% of total student enrollment (with a range of 86–100% students of color).

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