

# Prevalence of Teachers Without Full State Certification and Variation Across Schools and States 

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Prepared by:
Policy and Program Studies Service
Office of Planning, Evaluation and Policy Development
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## Executive Summary

Across the nation, uncertified teachers represent a very small percentage of the teaching workforce in public elementary and secondary schools. However, research has shown that student access to certified teachers varies across districts within states, across schools within districts, or across classrooms within schools and that teachers who are not fully certified are sometimes disproportionately assigned to teach students with greater needs.

In order to better understand this issue, Congress directed the Department (in the Managers' Statement accompanying the fiscal year 2016 education appropriations bill) to provide information on the extent to which certain students are taught by teachers who are not fully certified, including students with disabilities, English learners (ELs), students in rural areas, students from low-income families, and students of color.

Because national data on the extent to which individual students' teachers are fully certified (and the characteristics of those students) are not currently available in comparable specifications or across all states, this report uses school-level data from the Civil Rights Data Collection (CRDC) ${ }^{\text {i }}$ and the National Center for Education Statistics (NCES) Common Core of Data (CCD) to examine the extent to which schools with high proportions of certain types of students ${ }^{\mathrm{ii}}$ and schools located in rural and urban areas have teachers who are not fully certified; in addition, this report examines the proportion of students in certain subgroups who attend schools with varying percentages of teachers who are not fully certified. More specifically, the report uses CRDC data for the 2013-14 school year on the numbers of teachers overall and the numbers of teachers who are not certified, ii' total student enrollment, student enrollment by race/ethnicity, and enrollment of ELs and students with disabilities, combined with CCD data for the same year on numbers of students eligible for free or reduced-price lunch and enrollment in rural and urban schools.

Key findings based on these data include the following:

- Although all states employed some teachers who were not fully certified, these teachers made up a small proportion of all teachers, both overall as well as in schools with high percentages of students from the subgroups examined in this report, rural schools, and urban schools. However, uncertified teachers were more prevalent among high-poverty

[^0]schools, schools with high percentages of students of color, urban schools, and schools with high proportions of ELs, than among all schools.

0 Across 50 states and the District of Columbia, 1.7 percent of teachers were not fully certified.

0 The average percentage of teachers who were not fully certified was 3.1 percent for schools with high proportions of students of color, 2.9 percent for high-poverty schools, 2.9 percent for urban schools, 2.6 percent for schools with high proportions of ELs, 1.8 percent for schools with high proportions of students with disabilities, and 1.0 percent for rural schools.

- In a majority (35) of the states, less than 2 percent of all teachers were not fully certified. However, 14 states had at least one type of school (i.e. schools in urban or rural areas, or schools with high percentages of students from certain subgroups) in which at least 5 percent of teachers were not fully certified. The jurisdictions with the highest percentages of teachers who were not fully certified were Colorado (11 percent) and the District of Columbia (18 percent).
- For each type of school examined, the majority of schools had no teachers who were uncertified. The percentage of schools with no uncertified teachers ranged from 76 percent for schools with high proportions of students of color to 89 percent for rural schools. In the 15 percent of schools that did have uncertified teachers, teachers who were not fully certified usually accounted for less than 15 percent of all teachers.
- Over three-fourths of students, overall and for each subgroup examined, were enrolled in schools with no uncertified teachers. The distribution of students by school percentage of uncertified teachers was similar to the distribution of schools.
- High-poverty schools had a higher percentage, on average, of teachers who were not fully certified than schools with low poverty rates ( 2.9 percent compared with 1.1 percent).
- Schools with high proportions of students of color had a higher percentage of teachers who were not fully certified, compared with schools with low proportions of students of color (3.1 percent compared with 0.8 percent).
- Schools with high proportions of ELs had a higher percentage of teachers who were not fully certified ( 2.6 percent) than schools with lower percentages of ELs (1.3 percent for schools with low EL proportions and 1.8 percent for schools with medium EL proportions).
- Schools with high proportions of students with disabilities had a smaller percentage of teachers who were not fully certified than schools with low proportions of students with disabilities ( 1.8 percent compared with 2.5 percent).
- Schools in rural areas had a lower percentage of teachers who were not fully certified (1.0 percent) than schools in urban areas ( 2.9 percent) and comparable or higher percentages compared with schools in town and suburban areas ( 0.9 percent and 1.4 percent, respectively).


## Chapter 1. Introduction

When experiencing teacher shortages, states often rely on teachers who are not fully certified and who hold emergency, provisional, or temporary teaching certificates. Across the nation, teachers who are not fully certified represent a very small percentage of the teaching workforce in public elementary and secondary schools. However, research has shown that student access to certified teachers varies across districts within states, across schools within districts, or across classrooms within schools, and that teachers who are not fully certified are sometimes disproportionately assigned to teach students with greater needs.

In order to better understand students' equitable access to certified teachers, Congress directed the U.S. Department of Education to provide data on the extent to which students in certain subgroups are taught by teachers who have not yet obtained full state certification. Specifically, Congress requested that this data be provided for five student subgroups: (1) students with disabilities, (2) English learners, (3) students in rural areas, (4) students from low-income families, and (5) minority students (referred to in this report as students of color). ${ }^{1}$ Because these student-level data are not yet readily available across all states, this report analyzes school-level data from the 2013-14 Civil Rights Data Collection; see Chapter 2 for more information about the data and analyses used in this report.

## Findings from Previous Research

Numerous studies have shown that schools with higher proportions of at-risk students tend to have more teachers who do not have full state certification. For example, schools with higher percentages of students from low-income families are more likely to have teachers who are not fully credentialed than schools with more affluent students (Goldhaber et al. 2015; Clotfelter et al. 2007; Betts et al. 2003; latarola and Stiefel 2003; Lankford et al. 2002). In addition, studies indicate that students of color, especially black and Hispanic students, are more likely to have teachers who are not fully certified, and schools with higher proportions of students of color are more likely to have higher numbers of uncertified teachers (Goldhaber et al. 2015; Carroll et al. 2000). Furthermore, there is some evidence that the population of ELs is also highly correlated with the percentage of teachers lacking a credential (Rumberger and Gándara 2000).

[^1]Researchers have identified multiple potential causes for the unequal distribution of certified teachers. These include district recruitment processes and policies, within-district teacher and student migration, teacher assignment within districts and schools, and teacher attrition (Goldhaber et al. 2015; Roda and Wells 2013; Kalogrides and Loeb 2012; Boyd et al. 2005; Scafidi et al. 2005; Clotfelter et al. 2004; Hanushek et al. 2004; Lankford et al. 2002; Carroll et al. 2000).

Research on the effects of teacher certification on student achievement has found mixed results, with either small positive effects or no statistically significant effects. Some studies have shown that students who are taught by fully certified teachers show achievement gains when compared with those who are taught by teachers who are not fully certified (Palardy and Rumberger 2008; Clotfelter et al. 2007; Goldhaber and Brewer 2000). Yet, according to another study, easily observed and quantifiable teacher attributes, such as credentials and test scores, only weakly correlate with student achievement (Aaronson et al. 2007). ${ }^{2}$

[^2]
## Chapter 2. Study Design and Study Questions

In order to respond to the congressional request, this report relies primarily on data from the 2013-14 Civil Rights Data Collection (CRDC). Two factors limited the Department's ability to use student-level data as requested by Congress. In order to provide data on the characteristics of students' teachers (e.g., the number of students with disabilities or ELs who are taught by teachers with certain credentials), states and/or schools would need to have data systems that link teachers' certification status with their individual students. However, these data are not currently available in all states (or, where they are available, they do not always use comparable specifications). After a review of information collected from states through the Statewide Longitudinal Data Systems grant program, the Department concluded that few states and districts had data systems that link teacher certification data to specific courses and students. Some data collections such as the National Assessment of Educational Progress (NAEP) have collected such data for a representative sample of students; however, these data sources cover a small percentage of the nation's students and schools and cannot be reported by school district as specified in the congressional request.

Because national data on the extent to which students' teachers are certified (and the characteristics of those students) are not currently available, this report uses school-level data from the CRDC ${ }^{3}$ and the National Center for Education Statistics (NCES) Common Core of Data (CCD) to examine the extent to which schools with high proportions of certain types of students and schools located in rural areas have teachers who are not fully certified. ${ }^{4}$ More specifically, the report uses CRDC data for the 2013-14 school year on the numbers of teachers overall and the number who are not certified, total student enrollment (overall and by race/ethnicity), and enrollments of ELs and students with disabilities, combined with CCD data for the same year on numbers of students eligible for free or reduced-price lunch and school urbanicity.

Using these data, this report examines the following study questions:

- What percentage of teachers is not fully certified - overall, in urban and rural schools, and in schools with high proportions of students of color, students from low-income families, English learners, and students with disabilities?
- How does the percentage of teachers who are not fully certified vary across schools and states? Are they more prevalent in high-poverty schools; rural schools; urban schools; or schools with high proportions of students, English learners, or students with disabilities?
- What proportion of schools has teachers who are not fully certified? How many have relatively high percentages of such teachers? What proportion of students attends such schools?

[^3]
## Data Sources

The CRDC is a biennial survey conducted for the U.S. Department of Education's Office for Civil Rights (OCR); in 2013-14, data were collected from the universe of all public schools in the 50 states and the District of Columbia. Among other key indicators related to the educational opportunities of students, the 2013-14 CRDC collected information on the numbers of teachers who are fully certified and who are not certified, as well as total student enrollment, student enrollment by race/ethnicity, enrollment of ELs, and enrollment of students with disabilities.

In the 2013-14 CRDC, the term "certified teacher" is defined as follows:
"A certified teacher is a teacher who has met all applicable state teacher certification requirements for a standard certificate. A certified teacher has a regular/standard certificate/license/endorsement issued by the state. A beginning teacher who has met the standard teacher education requirements is considered to have met state requirements even if he or she has not completed a state-required probationary period. A teacher working towards certification by way of alternative routes, or a teacher with an emergency, temporary, or provisional credential is not considered to have met state requirements."

In order to examine the extent to which students in rural, urban, and schools with high proportions of low-income students were taught by teachers who were not fully certified, we used demographic data from the 2013-14 CCD compiled annually by the NCES, which were merged with the CRDC data on teacher and student enrollment.

## Data Quality

In order to be included in the analyses conducted for this report, schools needed complete and plausible data on the number of students and full-time equivalent total and uncertified teachers. ${ }^{5} \mathrm{~A}$ small proportion of schools were missing data on these variables. A total of 1,381 schools were missing or had zero counts for the total number of students or full-time equivalent (FTE) teachers. These schools were excluded from further analyses.

A small percentage of the remaining schools had implausible values for uncertified teachers; that is, the total number of certified and uncertified teachers for a school did not add up to the total number of teachers reported. There were 169 schools in which the totals differed by more than 0.1 FTE teacher, and the difference was greater than 1 percent of the reported total FTE teachers. Seven of these schools were special education schools, 14 were alternative education schools, and 21 were charter schools. Because this was a relatively small number compared to the total number of schools in the CRDC dataset, these schools are also excluded from the analyses. These exclusions disproportionately impact the data reported for Connecticut and Utah - 14 of the 41 schools in Bridgeport Public Schools (Connecticut), 18 of the 27 schools in Cache District (Utah), and 18 of the 24 schools Provo District (Utah) were excluded from the analyses because of this implausibility.

[^4]One school was missing data for enrollment of ELs. Finally, some schools did not have a unique match in the CCD data or were missing the relevant data in the CCD and therefore do not have data on the number of students who were eligible for free or reduced-price lunch ( $n=2,823$ ) or school urbanicity ( $n=1,625$ ). In order to maintain the maximum number of schools in each analysis, these schools were excluded only from those analyses which required the missing data; for example, the one school that was missing EL enrollment data was excluded only from the analyses based on the percentage of ELs enrolled in the school.

## Non-response

The CRDC dataset included 99 percent of all school districts across the 50 states and the District of Columbia and more than 99 percent of all schools. A total of 134 school districts did not report data to the 2013-14 CRDC; the largest among those districts were St. Louis, Missouri; Newark, New Jersey; and Fall River, Massachusetts. Based on data from the CCD, the school districts that did not report to the CRDC tended to be located in urban areas ( 36 percent compared with 16 percent) and to be composed entirely of charter schools ( 33 percent compared with 16 percent). On average these districts enrolled fewer students (1,000 students compared with 2,900 students) and had higher percentages of students of color ( 67 percent compared with 50 percent) than all districts.

## Suppressed Data

In order to protect student privacy, the publicly-available CRDC dataset include counts to which suppression rules have been applied such that enrollment data for students with disabilities are suppressed if the value is less than or equal to two. Of the schools that remained in the dataset after the exclusions noted earlier, about 5 percent had suppressed values for IDEA enrollment for female students, and 3 percent had suppressed values for IDEA enrollment for male students. All of these suppressed values were treated as zeroes in the analyses; this may overstate the proportion of schools that have no students with disabilities.

## Data Analysis Procedures

The analyses in this report compare the percentage of teachers who are not fully certified in rural and urban schools and in schools with high percentages of students of color ${ }^{6}$ ( 75 percent or more), students eligible for free or reduced-price lunch ( 75 percent or more) (referred to in this report as "high-poverty schools"), ELs (20 percent or more), and students with disabilities ( 20 percent or more), as well as rural and urban schools (Exhibit 1). ${ }^{7}$ The schools with high proportions of students in certain subgroups generally enroll high proportions of all students in that subgroup (Exhibit 2). This report also includes more detailed analyses of the percentages of uncertified teachers based on the school composition of student subgroups of interest (students eligible for free or reduced-price lunch, students of color, ELs,

[^5]and students with disabilities), as shown in Exhibit 1. In addition, we examine the distribution of schools by the percentage of uncertified teachers.

Exhibit 1. Number and percentage of schools and students in analytic dataset, by school characteristics: 2013-14

|  | Number <br> of schools | Percentage <br> distribution <br> of schools | Number <br> of students | Percentage <br> distribution <br> of students |
| :--- | ---: | ---: | ---: | ---: |
| Achool characteristic | 93,323 | $100 \%$ | $49,669,368$ | $100 \%$ |
| By percentage of students eligible for |  |  |  |  |
| $\quad$ free or reduced-price lunch |  |  |  |  |
| High (75\% or more) | 23,632 | 25 | $12,185,604$ |  |
| Medium-high (50\% to <75\%) | 26,106 | 13 | $13,402,050$ | 25 |
| Medium-low (35\% to <50\%) | 15,711 | $8,406,611$ | 27 |  |
| Low (less than <35\%) | 25,051 | 27 | $15,152,047$ | 17 |
| Missing | 2,823 | 3 | 523,056 | 31 |
| By percentage of students of color |  |  |  | 1 |
| High (75\% or more) | 24,427 | 26 | $14,366,150$ |  |
| Medium (25\% to <75\%) | 34,416 | 37 | $20,150,423$ | 29 |
| Low (less than $25 \%)$ | 34,480 | 37 | $15,152,795$ | 41 |
| By percentage of English learners |  |  |  | 31 |
| High (20\% or more) | 14,005 | 15 | $8,030,653$ |  |
| Medium (5\% to <20\%) | 21,793 | 23 | $13,271,393$ | 16 |
| Low (more than 0 to <5\%) | 36,494 | 39 | $22,949,148$ | 27 |
| No ELs | 21,030 | 23 | $5,417,992$ | 46 |
| Missing | 1 | $\#$ |  | 182 |


| By percentage of students with <br> disabilities |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| High (20\% or more) | 15,646 | 17 | $5,770,075$ | 12 |
| Medium (10\% to <20\%) | 53,804 | 58 | $32,241,786$ | 65 |
| Low (less than 10\%) | 23,873 | 26 | $11,657,507$ | 23 |
| By percentage of uncertified teachers |  |  |  |  |
| No uncertified teachers | 78,902 | 85 | $39,958,511$ | 80 |
| More than 0 to <5\% | 6,687 | 7 | $5,757,331$ | 12 |
| $5 \%$ to $<10 \%$ | 3,296 | 4 | $2,032,436$ | 4 |
| $10 \%$ to $<15 \%$ | 1,540 | 2 | 784,638 | 2 |
| $15 \%$ or more | 2,898 | 3 | $1,136,452$ | 2 |

Exhibit reads: The analytic dataset used for this report included 93,323 schools and nearly 50 million students.
\# Rounds to zero
Note: Detail may not sum to 100 percent due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit 2. Percentage of students in relevant subgroups enrolled in schools with high percentages of students in that subgroup, by school characteristics: 2013-14

| Schools with high percentage of students in certain <br> subgroups | Percentage of students in <br> subgroup enrolled in schools |
| :--- | ---: |
| Students eligible for free or reduced-price lunch $(75 \%+)$ | 42 |
| Students of color ( $75 \%+$ ) | 53 |
| English learners $(20 \%+)$ | 63 |
| Students with disabilities $(20 \%+)$ | 22 |

Exhibit reads: Forty-two percent of all students eligible for free or reduced-price lunch attended schools with 75 percent or more students eligible for free or reduced-price lunch.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and
National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

This report also includes an analysis of charter schools because these schools sometimes operate with exemptions from some state or local laws or regulations, including requirements regarding teacher certification. For example, according to the Education Commission for the States, 28 states and the District of Columbia (of 44 states and jurisdictions with charter school laws at the time) allow some flexibility regarding teacher certification in their charter schools. ${ }^{8}$ In order to explore whether high percentages of uncertified teachers in charter schools may be driving high percentages of uncertified teachers across states, this report also examines the extent to which charter schools have teachers who are not certified.

## Study Limitations

Although the congressional requestors had envisioned a study of the extent to which certain subgroups of students are being taught by teachers without full state certification, this report cannot directly address that question because it is based on school-level, rather than student-level, data. The national datasets used in this study do not currently include student-level data on teacher certification; therefore, this report provides information on the prevalence of teachers who are not fully certified and are teaching in schools with high proportions of students in certain subgroups, rather than the extent to which students in certain subgroups are taught by such teachers.

In addition, the available national data on uncertified teachers do not include more specific data on types of teaching credentials that might allow or permit teachers to provide specialized instruction to special populations of students (e.g., ELs or students with disabilities). In addition, teachers who are currently enrolled in programs that provide alternative routes to certification are not considered to be certified according to the CRDC definition of a certified teacher, despite the fact that rigorous evidence does not indicate that these teachers are less effective than fully certified teachers.

Finally, research on the relationship between teacher certification and student achievement has shown mixed results, with small positive or statistically insignificant effects. Findings that suggest differences in students' access to certified teachers may not mean that student achievement is affected by these

[^6]differences. Readers should not draw conclusions from this report about the quality of teaching or student achievement in the various types of schools examined in this study.

## Chapter 3. Findings

This chapter summarizes findings on the extent to which teachers are not fully certified and how this varies across urban and rural schools, and across schools with high proportions of students of color, students from low-income families, ELs, and students with disabilities. The chapter also examines the proportion of schools that have uncertified teachers and the proportion of students that attend such schools. As noted previously, these analyses do not consider student achievement and readers should not draw conclusions about school quality based on the percentages of teachers who are not fully certified.

Teachers who were not fully-certified made up a small proportion of all teachers, overall as well as for schools with high percentages of students from certain subgroups and schools in rural and urban areas.

Uncertified teachers were more prevalent among high-poverty schools, schools with high percentages of students of color, urban schools, and schools with high proportions of ELs, than among all schools.

Across the 50 states and the District of Columbia, 1.7 percent of all teachers were not fully certified. The average percentage of teachers who were not fully certified was 3.1 percent for schools with high proportions of students of color, 2.9 percent for high-poverty schools, 2.9 percent for urban schools, 2.6 percent for schools with high proportions of ELs, 1.8 percent for schools with high proportions of students with disabilities, and 1.0 percent for rural schools (Exhibit 3).

Exhibit 3. Percentage of teachers who were not fully certified, overall and by type of school: 2013-14


Exhibit reads: Across all schools, 1.7 percent of teachers were not fully certified.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC) 2013-14, and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

## Although all states and the District of Columbia employed some teachers who were not

 fully certified, in a majority of states, such teachers represented less than 2 percent of all teachers.In 35 out of the 51 jurisdictions, less than 2 percent of all teachers were not fully certified. Similarly, in a majority of states, less than 2 percent of teachers were not fully certified in rural schools ( 41 states), schools with high proportions of students with disabilities ( 36 states), schools with high proportions of ELs (30 states), and high poverty schools (29 states). The same was not true for states' urban schools (24 states) or schools with high proportions of students of color (22 states) (Exhibit 4).

Exhibit 4. Number of states by percentage of teachers who were not fully certified, overall and by type of school: 2013-14


Exhibit reads: Twenty-three of the 51 states and jurisdictions had a percentage of uncertified teachers that was greater than zero but less than 1 percent.

Notes: New Hampshire and Vermont did not have schools with high percentages of students of color. West Virginia did not have schools with high percentages of English learners (ELs). The District of Columbia did not have rural schools.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC) 2013-14, and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

## In 14 states and jurisdictions, teachers who were not fully certified represented 5 percent or more of all teachers in at least one category of school examined in this report.

Teachers who were not fully certified represented 5 percent or more of all teachers in three states (Arizona, Colorado, and Montana) and the District of Columbia. The same was true in four states (Colorado, Louisiana, Maryland, and South Carolina) and the District of Columbia for high-poverty schools, one state for rural schools (Hawaii), nine jurisdictions for urban schools, eight jurisdictions for schools with high proportions of students of color, six jurisdictions for schools with high proportions of ELs, and seven jurisdictions for schools with high proportions of students with disabilities. In two states (Arizona and Montana), uncertified teachers made up between 5 and 10 percent of all teachers. Uncertified teachers made up more than 10 percent of all teachers in Colorado (11 percent) and the

District of Columbia (18 percent) - these were the jurisdictions with the highest percentages of teachers who were not fully certified (Exhibit 5).

Exhibit 5. Percentage of teachers who were not fully certified in states with 5 percent or more teachers who were not fully certified for any type of school, overall and by type of school: 2013-14

| State | schools | Highpoverty schools | Schools with 75\%+ students of color | Schools with 20\%+ English learners | Schools with 20\%+ students with disabilities | Urban schools | Rural schools |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arizona | 5 | - | - | - | 5 | 5 | - |
| Colorado | 11 | 28 | 28 | 24 | 15 | 23 | - |
| Connecticut | - | - | 5 | - | - | - | - |
| District of Columbia | 18 | 18 | 20 | 14 | 17 | 18 | - |
| Florida | - | - | - | - | 7 | - | - |
| Hawaii | - | - | - | - | 11 | - | 6 |
| Louisiana | - | 5 | 9 | 7 | 9 | 8 | - |
| Maryland | - | 6 | 5 | - | 5 | 8 | - |
| Massachusetts | - | - | 6 | - | - | 5 | - |
| Mississippi | - | - | - | 5 | - | - | - |
| Montana | 8 | - | - | - | - | 30 | - |
| Oklahoma | - | - | 10 | 8 | - | 6 | - |
| South Carolina | - | 5 | 7 |  | - | 8 | - |
| Virginia | - | - | - | 8 | - | - | - |

Exhibit reads: Three states and the District of Columbia reported that at least 5 percent of teachers, across all schools, were uncertified.

- Not applicable (state reported that less than 5 percent of teachers in this category were not fully certified). Note: The District of Columbia did not have rural schools. Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC) 2013-14, and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

> The majority of schools, for each category of school examined, had no teachers who were not fully certified. In the approximately 15 percent of schools that did have uncertified teachers, those teachers usually accounted for less than 15 percent of all teachers.

Approximately 85 percent of all schools had no uncertified teachers according to the district-reported data. Another 7 percent of schools had some but less than 5 percent of teachers who were not fully certified; 4 percent of schools had between 5 and 10 percent, 2 percent of schools had between 10 and 15 percent, and 3 percent of schools had more than 15 percent of teachers who were not fully certified (Exhibit 6).

There were similar distributions of uncertified teachers across high-poverty schools, schools with high percentages of students of color, and urban schools. The percentages of schools with no uncertified teachers were 78 percent, 76, percent, and 79 percent, respectively. Furthermore, there were similar percentages of schools with 10 percent or more uncertified teachers in each of the three school categories (8 percent of high-poverty or urban schools and 9 percent of schools with high proportions of students of color). These schools were also the least likely to have no uncertified teachers.

Eighty-two percent of schools with high proportions of ELs and 85 percent of schools with high proportions of students with disabilities had no uncertified teachers. In 6 percent of both types of schools, 10 percent or more of teachers were not fully certified.

Rural schools were least likely to have uncertified teachers - 89 percent of schools had no such teachers and 3 percent of schools had 10 percent or more teachers who were not fully certified.

High-poverty schools, schools with high percentages of students of color, and urban schools were more likely to have uncertified teachers than schools with high percentages of English learners or students with disabilities or rural schools.

Fifteen percent of all schools had uncertified teachers. Only among rural schools (11 percent) and schools with high percentages of students with disabilities ( 15 percent) were there comparable or smaller proportions of schools with any uncertified teachers. Some categories of schools had higher percentages of uncertified teachers, on average: schools with high proportions of students of color (24 percent), urban schools ( 21 percent), and high-poverty schools ( 22 percent).

High-poverty schools, schools with high percentages of students of color, and urban schools were more likely to have 5 percent or more uncertified teachers than the other types of schools examined.

Specifically, 9 percent of all schools had 5 percent or more uncertified teachers. Schools with high proportions of students of color ( 15 percent), high-poverty schools ( 13 percent), and urban schools (12 percent) were more likely to have higher proportions of uncertified teachers than schools with high proportions of ELs or students with disabilities, or rural schools.

Exhibit 6. Percentage distribution of schools, by percentage of teachers who were not fully certified, overall and by type of school: 2013-14


Exhibit reads: Across the 50 states and the District of Columbia, 85 percent of all schools had no uncertified teachers.

Note: Detail may not sum to 100 percent due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

The majority of students, overall and for each subgroup examined, were enrolled in schools with no uncertified teachers.

Approximately 80 percent of all students attended schools in which no teachers were uncertified. The percentage of the various subgroups of students who attended schools with no uncertified teachers was 79 percent of students eligible for free or reduced-price lunch (FRPL), 76 percent of students of color, 79 percent of ELs, 80 percent of students with disabilities, 77 percent of students in urban schools, and 85 percent of students in rural schools (Exhibit 7). In general, the distribution of students by school percentage of uncertified teachers was similar to the distribution of schools shown in Exhibit 6.

Exhibit 7. Percentage distribution of students, by school percentage of teachers who were not fully certified, overall and by student subgroup: 2013-14


Exhibit reads: Across the 50 states and the District of Columbia, 80 percent of all students attended schools with no uncertified teachers.

Note: Detail may not sum to 100 percent due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

## Charter Schools

## By most measures examined in this report, charter schools had higher percentages of uncertified teachers than all schools.

For example, 9.4 percent of teachers in charter schools were not fully certified compared with 1.7 percent in all schools. In addition, 40 percent of charter schools had uncertified teachers, compared with 15 percent of all schools. Similarly, 45 percent of students in charter schools attended schools with uncertified teachers, compared with 20 percent of all students (Exhibit 8).

Exhibit 8. Percentage distribution of schools and students, by school percentage of teachers who were not fully certified, overall and for charter schools: 2013-14


Exhibit reads: In 60 percent of charter schools, there were no uncertified teachers.
Notes: Alabama, Kentucky, Mississippi, Nebraska, South Dakota, and West Virginia had no charter schools. Detail may not sum to 100 percent due to rounding.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

According to the CRDC data, in eight states (of the 45 states that have charter schools), no teachers in charter schools were uncertified. However, in 22 states, 5 percent or more of teachers in charter schools were uncertified. In comparison, as noted previously, all states had some uncertified teachers, whereas only four states had 5 percent or more uncertified teachers (Exhibit 9).

Exhibit 9. Number of states by percentage of teachers who were not fully certified, overall and for charter schools: 2013-14


Exhibit reads: In eight states and jurisdictions, there were no uncertified teachers in charter schools.
Note: Alabama, Kentucky, Mississippi, Nebraska, South Dakota, and West Virginia had no charter schools.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

## By Poverty Level

High-poverty schools had higher percentages, on average, of teachers who were not fully certified than schools with lower poverty rates.

The average percentage of teachers who were not fully certified was 2.9 percent in high-poverty schools, compared with 1.1 percent in low-poverty schools (Exhibit 10).

Exhibit 10. Percentage of teachers who were not fully certified, by school percentage of students eligible for free or reduced-price lunch: 2013-14

| School percentage of students eligible for free or <br> reduced-price lunch | Percentage uncertified |
| :--- | :---: |
| High (75\% or more) | 2.9 |
| Medium-high (50\% to less than 75\%) | 1.5 |
| Medium-low (35\% to less than 50\%) | 1.2 |
| Low (0 to less than 35\%) | 1.1 |

Exhibit reads: In high-poverty schools (those with 75 percent or more students eligible for free or reduced-price lunch), 2.9 percent of teachers were uncertified.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

## A higher proportion of high-poverty schools had uncertified teachers than schools with lower poverty rates.

About three-quarters of high-poverty schools had no uncertified teachers; schools with lower poverty levels were even more likely to have no uncertified teachers. Among schools with all poverty levels examined, the percentage of schools with more than zero but less than 5 percent of uncertified teachers ranged from 7 to 8 percent. A higher proportion of high-poverty schools had 15 percent or more uncertified teachers ( 5 percent in high-poverty schools, compared with 2 percent in other schools) (Exhibit 11).

Exhibit 11. Percentage distribution of schools, by percentage of teachers who were not fully certified and percentage of students eligible for free or reduced-price lunch: 2013-14

| School percentage of students eligible for <br> free or reduced-price lunch | Zero | $>\mathbf{0}$ to $\mathbf{< 5 \%}$ | $\mathbf{5 \%}$ to <br> $\boldsymbol{<} \mathbf{1 0 \%}$ | $\mathbf{1 0 \%}$ to <br> $<\mathbf{1 5 \%}$ | $\mathbf{1 5 \%}$ or <br> more |
| :--- | ---: | ---: | ---: | ---: | ---: |
| High (75\% or more) | 78 | 8 | 5 | 3 | 5 |
| Medium-high (50\% to less than 75\%) | 85 | 8 | 3 | 2 | 2 |
| Medium-low (35\% to less than 50\%) | 88 | 7 | 3 | 1 | 2 |
| Low (0 to less than 35\%) | 88 | 7 | 2 | 1 | 2 |

Exhibit reads: Across all schools with 75 percent or more students eligible for free or reduced-price lunch, 78 percent had no uncertified teachers.
Note: Detail may not sum to 100 percent due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

## By Enrollment of Students of Color

Schools with high proportions of students of color had higher percentages of teachers who were not fully certified, compared with schools with lower proportions of students of color.

The average percentage of teachers who were not fully certified was 3.1 percent in the schools with the highest proportions of students of color, compared with 0.8 percent in schools with lower proportions (Exhibit 12).

Exhibit 12. Percentage of teachers who were not fully certified, by school percentage of students of color: 2013-14

| School percentage of students of color | Percentage uncertified |
| :--- | :---: |
| High (75\% or more) | 3.1 |
| Medium (25\% to less than $75 \%$ ) | 1.5 |
| Low (0 to less than 25\%) | 0.8 |

Exhibit reads: Across all schools with 75 percent or more students of color, 3.1 percent of teachers were uncertified.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC),
2013-14.

More schools with high percentages of students of color had uncertified teachers than schools with lower percentages of such students.

About three-quarters of schools with the highest percentages of students of color had no uncertified teachers; schools with lower percentages of students of color were even more likely to have no uncertified teachers. In addition, schools with the highest percentages of students of color were more likely to have very high percentages ( 15 percent or more) of uncertified teachers than schools with lower percentages of students of color (Exhibit 13).

Exhibit 13. Percentage distribution of schools, by percentage of teachers who were not fully certified and percentage of students of color: 2013-14

| School percentage of students of color | Zero | $>0$ to $<\mathbf{5 \%}$ | $\mathbf{5 \%}$ to <br> $<\mathbf{5 0 \%}$ | $\mathbf{1 0 \%}$ to <br> $<\mathbf{1 5 \%}$ | $\mathbf{1 5 \%}$ or <br> more |
| :--- | ---: | ---: | ---: | ---: | ---: |
| High (75\% or more) | 76 | 9 | 6 | 3 | 6 |
| Medium (25\% to less than 75\%) | 84 | 8 | 4 | 2 | 2 |
| Low (0 to less than 25\%) | 91 | 5 | 2 | 1 | 1 |

Exhibit reads: Across all schools with 75 percent or more students of color, 76 percent had no uncertified teachers.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

## By Enrollment of English Learners

Schools with high proportions of ELs had higher percentages of teachers who were not fully certified than schools with lower percentages of ELs.

The average percentage of teachers who were not fully certified was 2.6 percent in schools with 20 percent or more ELs, which was higher than the average for schools with lower numbers of ELs ( 1.8 percent for schools with medium EL proportions, 1.3 percent for schools with low EL proportions, and 2.0 percent for schools with no ELs) (Exhibit 14).

Exhibit 14. Percentage of teachers who were not fully certified, by school percentage of English learners: 2013-14

| School percentage of English learners | Percentage uncertified |
| :--- | :---: |
| High (20\% or more) | 2.6 |
| Medium (5\% to less than 20\%) | 1.8 |
| Low (more than 0 to less than 5\%) | 1.3 |
| No ELs | 2.0 |
| Exhibit reads: Across all schools with 20 percent or more ELs, 2.6 percent of teachers |  |
| were uncertified. |  |
| Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), |  |
| 2013-14. |  |

> The distribution of schools by percentage of uncertified teachers was similar for schools with low, medium, and high percentages of ELs.

On average, 82 percent of schools with medium and high percentages of ELs had no uncertified teachers and 85 percent of schools with low percentages of ELs had no uncertified teachers. For each category of school (schools with low, medium, and high percentage of ELs), the distribution of schools with various percentages of uncertified teachers was similar. However, a higher proportion of schools with no ELs had no uncertified teachers, compared with schools that did have ELs (Exhibit 15).

Exhibit 15. Percentage distribution of schools, by percentage of teachers who were not fully certified and percentage of English learners: 2013-14

| School percentage of English learners | Zero | $>0$ to $<\mathbf{5 \%}$ | $\mathbf{5 \%}$ to <br> $<\mathbf{1 0 \%}$ | $\mathbf{1 0 \%}$ to <br> $<\mathbf{1 5 \%}$ | $\mathbf{1 5 \%}$ or <br> more |
| :--- | ---: | ---: | ---: | ---: | ---: |
| High (20\% or more) | 82 | 8 | 4 | 2 | 4 |
| Medium (5\% to less than 20\%) | 82 | 9 | 4 | 2 | 3 |
| Low (more than 0 to less than 5\%) | 85 | 9 | 3 | 1 | 2 |
| No ELs | 89 | 3 | 3 | 2 | 4 |

Exhibit reads: Across all schools with 20 percent or more ELs, 82 percent had no uncertified teachers.

[^7]
## By Enrollment of Students with Disabilities

Schools with high proportions of students with disabilities had a smaller percentage of teachers who were not fully certified than schools with low proportions of students with disabilities.

The average percentage of teachers who were not fully certified was 1.8 percent in schools with 20 percent or more students with disabilities, which was lower than the average for schools with less than 10 percent students with disabilities ( 2.5 percent). However, in special education schools, 4.5 percent of teachers were uncertified (Exhibit 16).

Exhibit 16. Percentage of teachers who were not fully certified, by school percentage of students with disabilities and for special education schools: 2013-14

| School percentage of students with disabilities | Percentage uncertified |
| :--- | :---: |
| High (20\% or more) | 1.8 |
| Medium (10\% to less than 20\%) | 1.4 |
| Low (less than 10\%) | 2.5 |
| Schools classified as special education schools | 4.5 |

Exhibit reads: Across all schools with 20 percent or more students with disabilities, 1.8 percent of teachers were uncertified.

Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

Schools with varying percentage of students with disabilities were equally likely to have no uncertified teachers, but special education schools were slightly more likely to have uncertified teachers.

The percentage of schools with no uncertified teachers was 85 percent for schools with high, medium, and low proportions of students with disabilities, compared with 83 percent in schools classified as special education schools. On average, the percentage of schools with 15 percent or more uncertified teachers was 4 percent for schools with high percentages of students with disabilities, 2 percent for schools with medium percentages of students with disabilities, 5 percent for schools with low percentages of students with disabilities, and 7 percent for special education schools (Exhibit 17).

Exhibit 17. Percentage distribution of schools, by percentage of teachers who were not fully certified and percentage of students with disabilities and for special education schools: 2013-14

| School percentage of students with <br> disabilities | Zero | $\mathbf{> 0}$ to $\mathbf{< 5 \%}$ | $\mathbf{5 \%}$ to <br> $\mathbf{< 1 0 \%}$ | $\mathbf{1 0 \%}$ to <br> $<\mathbf{1 5 \%}$ | $\mathbf{1 5 \%}$ or <br> more |
| :--- | ---: | ---: | ---: | ---: | ---: |
| High (20\% or more) | 85 | 6 | 4 | 2 | 4 |
| Medium (10\% to less than 20\%) | 85 | 8 | 4 | 2 | 2 |
| Low (less than 10\%) | 85 | 6 | 3 | 2 | 5 |
| Schools classified as special education schools | 83 | 3 | 4 | 2 | 7 |

Exhibit reads: Across all schools with 20 percent or more students with disabilities, 85 percent had no uncertified teachers.

Note: Detail may not sum to 100 percent due to rounding.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

## By Urbanicity

Rural schools had a lower percentage of teachers who were not certified than urban schools and comparable or higher percentages compared with schools in town and suburban areas.

On average, 1.0 percent of teachers in rural schools were not fully certified, compared with 2.9 percent in urban schools, 0.9 percent in schools in towns, and 1.4 percent in suburban schools (Exhibit 18).

Exhibit 18. Percentage of teachers who were not fully certified, by school urbanicity: 2013-14

| School urbanicity | Percentage uncertified |
| :--- | :---: |
| Urban | 2.9 |
| Suburban | 1.4 |
| Town | 0.9 |
| Rural | 1.0 |

Exhibit reads: Across all urban schools, 2.9 percent of teachers were uncertified.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Schools in urban areas had higher percentages of teachers who were not certified than suburban, town, and rural schools.

The percentage of schools with no uncertified teachers was 79 percent in urban schools, compared with 89 percent in rural schools. Schools in urban areas were more likely to have 15 percent or more uncertified teachers than other schools ( 6 percent compared with 2 percent for schools in suburban, town, and rural areas) (Exhibit 19).

Exhibit 19. Percentage distribution of schools, by percentage of teachers who were not fully certified and school urbanicity: 2013-14

| School urbanicity | Zero | $>\mathbf{0}$ to $\mathbf{< 5 \%}$ | $\mathbf{5 \%}$ to <br> $\mathbf{< 1 0 \%}$ | $\mathbf{1 0 \%}$ to <br> $<\mathbf{1 5 \%}$ | $\mathbf{1 5 \%}$ or <br> more |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Urban | 79 | 9 | 4 | 2 | 6 |
| Suburban | 84 | 9 | 4 | 2 | 2 |
| Town | 89 | 5 | 3 | 1 | 2 |
| Rural | 89 | 5 | 3 | 1 | 2 |

Exhibit reads: Across all urban schools, 79 percent had no uncertified teachers.
Note: Detail may not sum to 100 percent due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

## By School Enrollment Size

The percentage of teachers who were not fully certified tended to increase as school size decreased.

The average percentage of teachers who were not fully certified was highest ( 3.1 percent) in the smallest schools, defined as those with fewer than 200 students; the percentage of uncertified teachers varied between 1.6 percent and 1.9 percent in larger schools (Exhibit 20).

Exhibit 20. Percentage of teachers who were not fully certified, by school size: 2013-14

| School enrollment size | Percentage uncertified |
| :--- | :---: |
| Very large (more than 600 students) | 1.6 |
| Medium-large (401 to 600 students) | 1.6 |
| Medium-small (201 to 400 students) | 1.9 |
| Small (200 or fewer students) | 3.1 |

Exhibit reads: Across all very large schools (those with more than 600 students), 1.6 percent of teachers were not fully certified.

Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

Very large schools were more likely to have uncertified teachers than schools of smaller sizes, but were equally or less likely to have very high percentages of uncertified teachers.

About three-quarters (78 percent) of very large schools had no uncertified teachers; in contrast about 90 percent of smaller schools had no uncertified teachers. Very large schools were more likely to have a small percentage of uncertified teachers. Fourteen percent of very large schools and between 1 and 6 percent of smaller schools had some, but less than 5 percent of uncertified teachers. This pattern changes when looking at schools with very high percentages of uncertified teachers. Small schools were more likely than large schools to have 15 percent or more uncertified teachers ( 6 percent in small schools, compared with 2 to 4 percent in larger schools) (Exhibit 21).

Exhibit 21. Percentage distribution of schools, by percentage of teachers who were not fully certified and school size: 2013-14

| School enrollment size | Zero | $>\mathbf{0}$ to $<\mathbf{5 \%}$ | $\mathbf{5 \%}$ to <br> $\mathbf{< 1 0 \%}$ | $\mathbf{1 0 \%}$ to <br> $<\mathbf{1 5 \%}$ | $\mathbf{1 5 \%}$ or <br> more |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Very large (more than 600 students) | 78 | 14 | 5 | 2 | 2 |
| Medium-Large (401 to 600 students) | 87 | 6 | 3 | 1 | 2 |
| Medium-small (201 to 400 students) | 87 | 4 | 4 | 2 | 4 |
| Small (200 or fewer students) | 89 | 1 | 2 | 2 | 6 |

Exhibit reads: Across very large schools (those with more than 600 students), 78 percent had no uncertified teachers.

Note: Detail may not sum to 100 percent due to rounding.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

## By School Grade Level

## Middle schools had lower percentages of uncertified teachers than did elementary or high schools.

Across all schools, middle schools had smaller proportions of uncertified teachers than elementary and high schools, and schools with other grade combinations had the highest proportions of uncertified teachers (Exhibit 22).

Exhibit 22. Percentage of teachers who were not fully certified, by school grade level: 2013-14

| School grade level | Percentage uncertified |
| :--- | :---: |
| Elementary schools | 1.6 |
| Middle schools | 1.3 |
| High schools | 1.7 |
| Other/Combined schools | 5.0 |

Exhibit reads: Across all elementary schools, 1.6 percent of teachers were uncertified.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

As the grade level of schools increased, the percentage of schools with uncertified teachers increased.

The average percentage of schools with no uncertified teachers was 87 percent in elementary schools, 85 percent in middle schools, and 81 percent in high schools. The percentage of schools with some, but less than 5 percent uncertified teachers ranged from 6 percent in elementary schools to 8 percent in middle schools to 10 percent in high schools. There was less variation across schools with higher percentages of uncertified teachers; between 8 and 10 percent of each type of school (elementary, middle, or high) had more than 5 percent uncertified teachers (Exhibit 23).

Exhibit 23. Percentage distribution of schools, by percentage of teachers who were not fully certified and school grade level: 2013-14

| School grade level | Zero | $>\mathbf{0}$ to $<\mathbf{5 \%}$ | $\mathbf{5 \%}$ to <br> $<\mathbf{1 0 \%}$ | $\mathbf{1 0 \%}$ to <br> $<\mathbf{1 5 \%}$ | $\mathbf{1 5 \%}$ or <br> more |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Elementary schools | 87 | 6 | 3 | 2 | 3 |
| Middle schools | 85 | 8 | 3 | 2 | 2 |
| High schools | 81 | 10 | 4 | 2 | 4 |
| Other/combined schools | 78 | 6 | 5 | 3 | 9 |

Exhibit reads: Across all elementary schools, 87 percent had no uncertified teachers.
Note: Detail may not sum to 100 percent due to rounding.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

## References

Aaronson, Daniel, Lisa Barrow, and William Sander. 2007. "Teachers and Student Achievement in the Chicago Public High Schools." Journal of Labor Economics, 25(1), 95-135.

Betts, Julian, Andrew Zau, and Lorien Rice. 2003. Determinants of Student Achievement: New Evidence From San Diego. San Francisco: Public Policy Institute of California.

Boyd, Donald, Hamilton Lankford, Susanna Loeb, and James Wyckoff. 2005. "Explaining the Short Careers of High-Achieving Teachers in Schools With Low-Performing Students." American Economic Review.

Boyd, Donald, Pamela Grossman, Hamilton Lankford, Susanna Loeb, and James Wyckoff. 2006. "How Changes in Entry Requirements Alter the Teacher Workforce and Affect Student Achievement." Education Finance and Policy, 1(2): 176-216.

Carroll, Stephen, Robert Reichardt, and Cassandra Guarino. 2000. The Distribution of Teachers Among California's School Districts and Schools. Pittsburgh: RAND Corporation.

Clotfelter, Charles, Helen Ladd, and Jacob Vigdor. 2007. "Teacher Credentials and Student Achievement in High School: A Cross-Subject Analysis With Student Fixed Effects." Journal of Human Resources, 45(3): 655-681.

Clotfelter, Charles, Helen Ladd, and Jacob Vigdor. 2004. Teacher Quality and Minority Achievement Gaps. Working Paper Series SANO4-04. Durham, NC: Terry Sanford School of Public Policy at Duke University.

Constantine, Jill, Daniel Player, Tim Silva, Kristen Hallgren, Mary Grider, and John Deke. 2009. An Evaluation of Teachers Trained Through Different Routes to Certification: Final Report (NCEE 2009-4043). Washington, D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation. Retrieved from http://ies.ed.gov/ncee/pubs/20094043/pdf/20094043.pdf.

Goldhaber, Dan, and Dominic Brewer. 2000. "Does Teacher Certification Matter? High School Certification Status and Student Achievement." Educational Evaluation and Policy Analysis, 22:129-145.

Goldhaber, Dan, Lesley Lavery, and Roddy Theobald. 2015. "Uneven Playing Field? Assessing the Teacher Quality Gap Between Advantaged and Disadvantaged Students." Educational Researcher, 44(5): 293-307.

Hanushek, Eric, John Kain, and Steven Rivkin. 2004. "The Revolving Door: Factors Affecting Teacher Turnover." In Developments in School Finance: 2003. William J. Fowler, ed. Washington, D.C.: National Center for Education Statistics, Institute for Education Sciences.

Iatarola, Patrice, and Leanna Stiefel. 2003. "Intradistrict Equity of Public Education Resources and Performance." Economics of Education Review, 22: 69-78.

Kalogrides, Demetra, and Susanna Loeb. 2012. "Different Teachers, Different Peers: The Magnitude and Effects of Student Sorting Within Schools." Educational Researcher, 42(6): 304-316.

Kane, Thomas J., Jonah E. Rockoff, and Douglas O. Staiger. 2008. "What Does Certification Tell Us About Teacher Effectiveness? Evidence from New York City." Economics of Education Review 27:615631.

Lankford, Hamilton, Susanna Loeb, and James Wyckoff. 2002. "Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis." Education Evaluation and Policy Analysis, 24 (1): 37-62.

National Research Council. 2010. Preparing Teachers: Building Evidence for Sound Policy. Committee on the Study of Teacher Preparation Programs in the United States, Center for Education. Washington, DC: The National Academies Press. Retrieved from
http://www.nap.edu/catalog/12882/preparing-teachers-building-evidence-for-sound-policy.
Palardy, Gregory, and Russell Rumberger. 2008. "Teacher Effectiveness in First Grade: The Importance of Background Qualifications, Attitudes, and Instructional Practices for Student Learning." Educational Evaluation and Policy Analysis, 30(2): 111.

Roda, Allison, and Amy Stuart Wells. 2013. "School Choice Policies and Racial Segregation: Where White Parents' Good Intentions, Anxiety, and Privilege Collide." American Journal of Education, 119(2): 261-293.

Rumberger, Russell, and Patricia Gándara. 2000. "The Schooling of English Learners." In Crucial Issues in California Education 2000: Are the Reform Pieces Fitting Together? Stanford, CA: Policy Analysis for California Education.

Scafidi, Benjamin, David Sjoquist, and Todd Stinebrickner. 2005. Race, Poverty, and Teacher Mobility. Centre for Human Capital and Productivity. CHCP Working Papers, 2005-3. London, ON: Department of Economics, University of Western Ontario.

## Appendix: Supplemental Tables

Exhibit A.1. Number of schools, teachers, and uncertified teachers included in analyses, by state: 2013-14

| State | Number of schools | Number of schools with uncertified teachers | Number of teachers | Number of teachers in schools with uncertified teachers | Number of uncertified teachers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 States and D.C. | 93,323 | 14,421 | 3,130,193 | 612,697 | 53,865 |
| Alabama | 1,385 | 140 | 47,132 | 4,951 | 409 |
| Alaska | 483 | 34 | 7,676 | 350 | 68 |
| Arizona | 1,874 | 542 | 56,735 | 15,519 | 2,874 |
| Arkansas | 1,083 | 153 | 34,957 | 4,666 | 508 |
| California | 9,763 | 1,171 | 273,729 | 44,198 | 4,083 |
| Colorado | 1,823 | 437 | 50,951 | 15,023 | 5,771 |
| Connecticut | 1,113 | 101 | 44,010 | 4,281 | 516 |
| Delaware | 219 | 33 | 9,364 | 1,400 | 104 |
| District of Columbia | 194 | 147 | 5,665 | 4,486 | 1,038 |
| Florida | 3,640 | 2,344 | 160,829 | 115,464 | 6,745 |
| Georgia | 2,381 | 852 | 109,012 | 43,848 | 2,270 |
| Hawaii | 284 | 157 | 11,687 | 7,358 | 418 |
| Idaho | 690 | 59 | 14,658 | 1,855 | 96 |
| Illinois | 4,064 | 156 | 136,916 | 8,498 | 822 |
| Indiana | 1,854 | 147 | 60,614 | 6,287 | 331 |
| lowa | 1,418 | 2 | 35,118 | 15 | 2 |
| Kansas | 1,380 | 252 | 35,547 | 8,032 | 458 |
| Kentucky | 1,394 | 92 | 43,791 | 3,730 | 287 |
| Louisiana | 1,330 | 517 | 46,860 | 19,752 | 2,037 |
| Maine | 570 | 128 | 14,288 | 3,609 | 298 |
| Maryland | 1,411 | 528 | 62,092 | 27,296 | 1,960 |
| Massachusetts | 1,840 | 463 | 71,363 | 23,009 | 1,707 |
| Michigan | 3,590 | 155 | 82,562 | 4,440 | 407 |
| Minnesota | 1,990 | 203 | 56,975 | 7,357 | 387 |
| Mississippi | 951 | 179 | 32,912 | 6,584 | 540 |
| Missouri | 2,224 | 246 | 65,881 | 7,103 | 553 |
| Montana | 783 | 41 | 11,208 | 1,074 | 866 |
| Nebraska | 1,019 | 33 | 23,264 | 1,050 | 42 |
| Nevada | 637 | 34 | 24,464 | 877 | 65 |
| New Hampshire | 482 | 76 | 15,123 | 3,164 | 172 |
| New Jersey | 2,453 | 424 | 115,151 | 23,196 | 1,628 |
| New Mexico | 851 | 183 | 22,555 | 7,465 | 470 |
| New York | 4,862 | 294 | 211,907 | 11,219 | 1,125 |
| North Carolina | 2,494 | 46 | 96,910 | 1,686 | 311 |
| North Dakota | 449 | 17 | 8,778 | 457 | 125 |
| Ohio | 3,590 | 203 | 107,415 | 6,833 | 740 |
| Oklahoma | 1,798 | 120 | 44,839 | 3,632 | 679 |
| Oregon | 1,283 | 61 | 26,708 | 1,631 | 106 |
| Pennsylvania | 3,027 | 235 | 120,080 | 10,926 | 643 |
| Rhode Island | 286 | 41 | 11,430 | 1,999 | 107 |
| South Carolina | 1,222 | 253 | 48,767 | 10,224 | 1,479 |
| South Dakota | 675 | 27 | 9,766 | 550 | 26 |
| Tennessee | 1,786 | 130 | 66,259 | 5,483 | 318 |
| Texas | 8,098 | 1,166 | 329,299 | 51,989 | 5,000 |
| Utah | 941 | 277 | 25,807 | 9,350 | 608 |
| Vermont | 304 | 45 | 8,107 | 1,652 | 73 |
| Virginia | 1,947 | 761 | 91,141 | 44,568 | 3,215 |
| Washington | 2,134 | 54 | 54,800 | 1,353 | 103 |
| West Virginia | 711 | 244 | 18,698 | 7,987 | 641 |
| Wisconsin | 2,187 | 407 | 58,674 | 14,878 | 626 |
| Wyoming | 356 | 11 | 7,720 | 347 | 13 |

[^8]Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

Exhibit A.2. Percentage of schools with uncertified teachers and percentage of uncertified teachers, by state: 2013-14

| State | Percentage of schools with uncertified teachers | Percentage of uncertified teachers |
| :---: | :---: | :---: |
| 50 States and D.C. | 15 | 1.7 |
| Alabama | 10 | 0.9 |
| Alaska | 7 | 0.9 |
| Arizona | 29 | 5.1 |
| Arkansas | 14 | 1.5 |
| California | 12 | 1.5 |
| Colorado | 24 | 11.3 |
| Connecticut | 9 | 1.2 |
| Delaware | 15 | 1.1 |
| District of Columbia | 76 | 18.3 |
| Florida | 64 | 4.2 |
| Georgia | 36 | 2.1 |
| Hawaii | 55 | 3.6 |
| Idaho | 9 | 0.7 |
| Illinois | 4 | 0.6 |
| Indiana | 8 | 0.5 |
| lowa | 0 | 0.0 |
| Kansas | 18 | 1.3 |
| Kentucky | 7 | 0.7 |
| Louisiana | 39 | 4.3 |
| Maine | 22 | 2.1 |
| Maryland | 37 | 3.2 |
| Massachusetts | 25 | 2.4 |
| Michigan | 4 | 0.5 |
| Minnesota | 10 | 0.7 |
| Mississippi | 19 | 1.6 |
| Missouri | 11 | 0.8 |
| Montana | 5 | 7.7 |
| Nebraska | 3 | 0.2 |
| Nevada | 5 | 0.3 |
| New Hampshire | 16 | 1.1 |
| New Jersey | 17 | 1.4 |
| New Mexico | 22 | 2.1 |
| New York | 6 | 0.5 |
| North Carolina | 2 | 0.3 |
| North Dakota | 4 | 1.4 |
| Ohio | 6 | 0.7 |
| Oklahoma | 7 | 1.5 |
| Oregon | 5 | 0.4 |
| Pennsylvania | 8 | 0.5 |
| Rhode Island | 14 | 0.9 |
| South Carolina | 21 | 3.0 |
| South Dakota | 4 | 0.3 |
| Tennessee | 7 | 0.5 |
| Texas | 14 | 1.5 |
| Utah | 29 | 2.4 |
| Vermont | 15 | 0.9 |
| Virginia | 39 | 3.5 |
| Washington | 3 | 0.2 |
| West Virginia | 34 | 3.4 |
| Wisconsin | 19 | 1.1 |
| Wyoming | 3 | 0.2 |

Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

Exhibit A.3. Number of schools with uncertified teachers, overall and by type of school, by state: 2013-14

| State | $\begin{array}{r} \text { All } \\ \text { schools } \end{array}$ | High-poverty schools | Schools with 75\%+ students of color | Schools with 20\%+ English learners | Schools with 20\%+ students with disabilities | Rural schools | Urban schools |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50 States and D.C. | 14,421 | 5,100 | 5,948 | 2,584 | 2,402 | 2,803 | 5,230 |
| Alabama | 140 | 65 | 63 | 3 | 15 | 54 | 41 |
| Alaska | 34 | 24 | 33 | 33 | 2 | 33 | 0 |
| Arizona | 542 | 178 | 214 | 68 | 58 | 64 | 267 |
| Arkansas | 153 | 41 | 26 | 11 | 16 | 57 | 20 |
| California | 1,171 | 579 | 838 | 583 | 69 | 74 | 608 |
| Colorado | 437 | 149 | 154 | 169 | 19 | 68 | 227 |
| Connecticut | 101 | 25 | 63 | 11 | 15 | 6 | 47 |
| Delaware | 33 | 3 | 8 | 3 | 11 | 6 | 14 |
| District of Columbia | 147 | 145 | 129 | 25 | 35 | - | 146 |
| Florida | 2,344 | 826 | 890 | 372 | 447 | 268 | 669 |
| Georgia | 852 | 393 | 320 | 48 | 41 | 255 | 133 |
| Hawaii | 157 | 25 | 131 | 32 | 12 | 23 | 35 |
| Idaho | 59 | 7 | 0 | 5 | 2 | 11 | 32 |
| Illinois | 156 | 97 | 101 | 27 | 35 | 12 | 99 |
| Indiana | 147 | 36 | 24 | 17 | 40 | 42 | 52 |
| lowa | 2 | 1 | 1 | 1 | 0 | 1 | 0 |
| Kansas | 252 | 56 | 37 | 59 | 42 | 104 | 73 |
| Kentucky | 92 | 11 | 0 | 2 | 12 | 31 | 19 |
| Louisiana | 517 | 271 | 252 | 6 | 118 | 151 | 169 |
| Maine | 128 | 4 | 0 | 4 | 68 | 92 | 4 |
| Maryland | 528 | 156 | 282 | 72 | 88 | 40 | 232 |
| Massachusetts | 463 | 142 | 153 | 90 | 248 | 43 | 139 |
| Michigan | 155 | 49 | 58 | 21 | 30 | 25 | 54 |
| Minnesota | 203 | 30 | 19 | 19 | 62 | 59 | 50 |
| Mississippi | 179 | 113 | 107 | 4 | 12 | 79 | 50 |
| Missouri | 246 | 62 | 58 | 21 | 40 | 110 | 81 |
| Montana | 41 | 7 | 6 | 3 | 6 | 23 | 14 |
| Nebraska | 33 | 2 | 1 | 1 | 7 | 15 | 13 |
| Nevada | 34 | 3 | 2 | 2 | 2 | 14 | 7 |
| New Hampshire | 76 | 1 | - | 1 | 41 | 27 | 15 |
| New Jersey | 424 | 134 | 177 | 40 | 92 | 33 | 35 |
| New Mexico | 183 | 96 | 107 | 74 | 32 | 30 | 95 |
| New York | 294 | 149 | 211 | 16 | 91 | 36 | 186 |
| North Carolina | 46 | 7 | 19 | 0 | 7 | 8 | 20 |
| North Dakota | 17 | 0 | 1 | 1 | 8 | 9 | 2 |
| Ohio | 203 | 93 | 75 | 8 | 58 | 24 | 112 |
| Oklahoma | 120 | 83 | 71 | 45 | 21 | 19 | 79 |
| Oregon | 61 | 12 | 5 | 7 | 6 | 9 | 28 |
| Pennsylvania | 235 | 96 | 122 | 11 | 83 | 24 | 141 |
| Rhode Island | 41 | 28 | 32 | 21 | 10 | 4 | 35 |
| South Carolina | 253 | 87 | 79 | 12 | 21 | 86 | 80 |
| South Dakota | 27 | 5 | 4 | 2 | 3 | 22 | 2 |
| Tennessee | 130 | 63 | 55 | 5 | 23 | 38 | 55 |
| Texas | 1,166 | 566 | 756 | 373 | 104 | 185 | 643 |
| Utah | 277 | 18 | 13 | 24 | 24 | 53 | 28 |
| Vermont | 45 | 1 | - | 1 | 22 | 25 | 5 |
| Virginia | 761 | 64 | 171 | 167 | 79 | 150 | 161 |
| Washington | 54 | 5 | 3 | 12 | 3 | 5 | 21 |
| West Virginia | 244 | 2 | 0 | 0 | 51 | 138 | 17 |
| Wisconsin | 407 | 90 | 77 | 52 | 69 | 114 | 174 |
| Wyoming | 11 | 0 | 0 | 0 | 2 | 4 | 1 |

[^9]Exhibit A.4. Number and percentage of uncertified teachers, by state: 2013-14

| State | Number of uncertified teachers | Total number of teachers | Percentage of uncertified teachers |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 53,865 | 3,130,193 | 1.7 |
| Alabama | 409 | 47,132 | 0.9 |
| Alaska | 68 | 7,676 | 0.9 |
| Arizona | 2,874 | 56,735 | 5.1 |
| Arkansas | 508 | 34,957 | 1.5 |
| California | 4,083 | 273,729 | 1.5 |
| Colorado | 5,771 | 50,951 | 11.3 |
| Connecticut | 516 | 44,010 | 1.2 |
| Delaware | 104 | 9,364 | 1.1 |
| District of Columbia | 1,038 | 5,665 | 18.3 |
| Florida | 6,745 | 160,829 | 4.2 |
| Georgia | 2,270 | 109,012 | 2.1 |
| Hawaii | 418 | 11,687 | 3.6 |
| Idaho | 96 | 14,658 | 0.7 |
| Illinois | 822 | 136,916 | 0.6 |
| Indiana | 331 | 60,614 | 0.5 |
| lowa | 2 | 35,118 | \# |
| Kansas | 458 | 35,547 | 1.3 |
| Kentucky | 287 | 43,791 | 0.7 |
| Louisiana | 2,037 | 46,860 | 4.3 |
| Maine | 298 | 14,288 | 2.1 |
| Maryland | 1,960 | 62,092 | 3.2 |
| Massachusetts | 1,707 | 71,363 | 2.4 |
| Michigan | 407 | 82,562 | 0.5 |
| Minnesota | 387 | 56,975 | 0.7 |
| Mississippi | 539 | 32,912 | 1.6 |
| Missouri | 553 | 65,881 | 0.8 |
| Montana | 866 | 11,208 | 7.7 |
| Nebraska | 42 | 23,263 | 0.2 |
| Nevada | 65 | 24,464 | 0.3 |
| New Hampshire | 172 | 15,123 | 1.1 |
| New Jersey | 1,628 | 115,151 | 1.4 |
| New Mexico | 470 | 22,555 | 2.1 |
| New York | 1,125 | 211,907 | 0.5 |
| North Carolina | 311 | 96,910 | 0.3 |
| North Dakota | 125 | 8,778 | 1.4 |
| Ohio | 740 | 107,415 | 0.7 |
| Oklahoma | 679 | 44,839 | 1.5 |
| Oregon | 106 | 26,708 | 0.4 |
| Pennsylvania | 643 | 120,080 | 0.5 |
| Rhode Island | 107 | 11,430 | 0.9 |
| South Carolina | 1,479 | 48,767 | 3.0 |
| South Dakota | 26 | 9,766 | 0.3 |
| Tennessee | 318 | 66,259 | 0.5 |
| Texas | 5,000 | 329,299 | 1.5 |
| Utah | 608 | 25,807 | 2.4 |
| Vermont | 73 | 8,107 | 0.9 |
| Virginia | 3,214 | 91,141 | 3.5 |
| Washington | 103 | 54,800 | 0.2 |
| West Virginia | 641 | 18,698 | 3.4 |
| Wisconsin | 626 | 58,674 | 1.1 |
| Wyoming | 13 | 7,720 | 0.2 |

\# Rounds to zero
Note: Detail may not sum to totals due to rounding.
Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

Exhibit A.5. Number and percentage of uncertified teachers in high-poverty schools, by state: 2013-14

| State | Number of uncertified teachers | Total number of teachers | Percentage of uncertified teachers |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 21,685 | 758,280 | 2.9 |
| Alabama | 179 | 11,219 | 1.6 |
| Alaska | 49 | 1,418 | 3.5 |
| Arizona | 779 | 16,891 | 4.6 |
| Arkansas | 136 | 8,732 | 1.6 |
| California | 2,687 | 105,854 | 2.5 |
| Colorado | 2,800 | 10,067 | 27.8 |
| Connecticut | 117 | 5,218 | 2.2 |
| Delaware | 8 | 708 | 1.1 |
| District of Columbia | 1,033 | 5,606 | 18.4 |
| Florida | 2,285 | 47,034 | 4.9 |
| Georgia | 1,091 | 41,289 | 2.6 |
| Hawaii | 70 | 1,665 | 4.2 |
| Idaho | 14 | 918 | 1.5 |
| Illinois | 585 | 36,285 | 1.6 |
| Indiana | 87 | 10,460 | 0.8 |
| lowa | 1 | 2,682 | \# |
| Kansas | 164 | 6,686 | 2.4 |
| Kentucky | 42 | 8,219 | 0.5 |
| Louisiana | 1,015 | 19,119 | 5.3 |
| Maine | 4 | 524 | 0.8 |
| Maryland | 636 | 10,467 | 6.1 |
| Massachusetts | 565 | 12,664 | 4.5 |
| Michigan | 119 | 15,379 | 0.8 |
| Minnesota | 49 | 6,556 | 0.8 |
| Mississippi | 298 | 15,128 | 2.0 |
| Missouri | 138 | 7,812 | 1.8 |
| Montana | 12 | 910 | 1.3 |
| Nebraska | 2 | 3,421 | 0.1 |
| Nevada | 3 | 6,324 | \# |
| New Hampshire | 1 | 200 | 0.5 |
| New Jersey | 623 | 19,470 | 3.2 |
| New Mexico | 260 | 9,893 | 2.6 |
| New York | 667 | 53,190 | 1.3 |
| North Carolina | 36 | 21,245 | 0.2 |
| North Dakota | 0 | 346 | 0.0 |
| Ohio | 390 | 20,179 | 1.9 |
| Oklahoma | 574 | 13,619 | 4.2 |
| Oregon | 20 | 5,096 | 0.4 |
| Pennsylvania | 302 | 17,837 | 1.7 |
| Rhode Island | 73 | 2,171 | 3.4 |
| South Carolina | 644 | 12,456 | 5.2 |
| South Dakota | 6 | 1,018 | 0.6 |
| Tennessee | 161 | 17,596 | 0.9 |
| Texas | 2,538 | 119,642 | 2.1 |
| Utah | 41 | 1,582 | 2.6 |
| Vermont | 1 | 157 | 0.6 |
| Virginia | 206 | 7,533 | 2.7 |
| Washington | 5 | 8,686 | 0.1 |
| West Virginia | 4 | 249 | 1.6 |
| Wisconsin | 169 | 6,637 | 2.5 |
| Wyoming | 0 | 227 | 0.0 |

\# Rounds to zero
Note: Detail may not sum to totals due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.6. Number and percentage of uncertified teachers in schools with high percentages of students of color, by state: 2013-14

| State | Number of uncertified teachers | Total number of teachers | Percentage of uncertified teachers |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 26,933 | 870,306 | 3.1 |
| Alabama | 165 | 9,741 | 1.7 |
| Alaska | 67 | 2,132 | 3.1 |
| Arizona | 879 | 19,785 | 4.4 |
| Arkansas | 145 | 4,562 | 3.2 |
| California | 3,385 | 159,980 | 2.1 |
| Colorado | 3,044 | 10,940 | 27.8 |
| Connecticut | 403 | 8,009 | 5.0 |
| Delaware | 17 | 1,217 | 1.4 |
| District of Columbia | 953 | 4,840 | 19.7 |
| Florida | 2,578 | 52,496 | 4.9 |
| Georgia | 1,088 | 36,003 | 3.0 |
| Hawaii | 352 | 9,940 | 3.5 |
| Idaho | 0 | 85 | 0.0 |
| Illinois | 594 | 40,085 | 1.5 |
| Indiana | 87 | 6,427 | 1.3 |
| lowa | 1 | 894 | 0.1 |
| Kansas | 93 | 3,901 | 2.4 |
| Kentucky | 0 | 1,310 | 0.0 |
| Louisiana | 1,314 | 14,260 | 9.2 |
| Maine | 0 | 43 | 0.0 |
| Maryland | 1,239 | 23,927 | 5.2 |
| Massachusetts | 660 | 11,680 | 5.6 |
| Michigan | 137 | 11,999 | 1.1 |
| Minnesota | 35 | 6,417 | 0.6 |
| Mississippi | 282 | 10,297 | 2.7 |
| Missouri | 149 | 5,440 | 2.7 |
| Montana | 9 | 854 | 1.1 |
| Nebraska | 1 | 2,555 | \# |
| Nevada | 2 | 10,084 | \# |
| New Hampshire | - | - | - |
| New Jersey | 753 | 32,827 | 2.3 |
| New Mexico | 289 | 12,240 | 2.4 |
| New York | 985 | 80,129 | 1.2 |
| North Carolina | 123 | 20,221 | 0.6 |
| North Dakota | 1 | 525 | 0.2 |
| Ohio | 308 | 12,146 | 2.5 |
| Oklahoma | 535 | 5,537 | 9.7 |
| Oregon | 6 | 1,310 | 0.5 |
| Pennsylvania | 448 | 17,095 | 2.6 |
| Rhode Island | 83 | 2,183 | 3.8 |
| South Carolina | 654 | 9,181 | 7.1 |
| South Dakota | 6 | 573 | 1.0 |
| Tennessee | 150 | 11,149 | 1.3 |
| Texas | 3,850 | 164,220 | 2.3 |
| Utah | 41 | 1,012 | 4.1 |
| Vermont | - | - | - |
| Virginia | 854 | 17,682 | 4.8 |
| Washington | 5 | 6,617 | 0.1 |
| West Virginia | 0 | 16 | 0.0 |
| Wisconsin | 165 | 5,585 | 3.0 |
| Wyoming | 0 | 157 | 0.0 |

[^10]Exhibit A.7. Number and percentage of uncertified teachers in schools with high percentages of English learners, by state: 2013-14

| State | Number of uncertified teachers | Total number of teachers | Percentage of uncertified teachers |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 12,273 | 470,533 | 2.6 |
| Alabama | 5 | 1,382 | 0.4 |
| Alaska | 67 | 1,535 | 4.4 |
| Arizona | 296 | 6,497 | 4.6 |
| Arkansas | 56 | 3,790 | 1.5 |
| California | 2,328 | 121,696 | 1.9 |
| Colorado | 3,358 | 13,772 | 24.4 |
| Connecticut | 60 | 2,459 | 2.4 |
| Delaware | 8 | 649 | 1.2 |
| District of Columbia | 172 | 1,201 | 14.3 |
| Florida | 940 | 24,817 | 3.8 |
| Georgia | 111 | 10,648 | 1.0 |
| Hawaii | 84 | 2,518 | 3.3 |
| Idaho | 7 | 1,033 | 0.7 |
| Illinois | 139 | 23,249 | 0.6 |
| Indiana | 27 | 5,461 | 0.5 |
| Iowa | 1 | 2,744 | \# |
| Kansas | 109 | 6,301 | 1.7 |
| Kentucky | 2 | 1,207 | 0.2 |
| Louisiana | 38 | 534 | 7.1 |
| Maine | 4 | 967 | 0.4 |
| Maryland | 289 | 6,376 | 4.5 |
| Massachusetts | 233 | 10,011 | 2.3 |
| Michigan | 43 | 5,304 | 0.8 |
| Minnesota | 42 | 7,275 | 0.6 |
| Mississippi | 9 | 175 | 5.1 |
| Missouri | 50 | 1,957 | 2.6 |
| Montana | 4 | 424 | 0.9 |
| Nebraska | 1 | 2,024 | \# |
| Nevada | 3 | 7,061 | \# |
| New Hampshire | 1 | 270 | 0.4 |
| New Jersey | 185 | 5,880 | 3.1 |
| New Mexico | 178 | 7,372 | 2.4 |
| New York | 55 | 24,812 | 0.2 |
| North Carolina | 0 | 7,056 | 0.0 |
| North Dakota | 2 | 144 | 1.4 |
| Ohio | 38 | 2,589 | 1.5 |
| Oklahoma | 372 | 4,702 | 7.9 |
| Oregon | 10 | 3,910 | 0.3 |
| Pennsylvania | 28 | 2,630 | 1.1 |
| Rhode Island | 57 | 1,477 | 3.9 |
| South Carolina | 72 | 2,922 | 2.5 |
| South Dakota | 2 | 612 | 0.3 |
| Tennessee | 7 | 3,146 | 0.2 |
| Texas | 1,433 | 100,240 | 1.4 |
| Utah | 61 | 2,146 | 2.9 |
| Vermont | 1 | 155 | 0.6 |
| Virginia | 1,129 | 13,599 | 8.3 |
| Washington | 21 | 9,330 | 0.2 |
| West Virginia | - | - | - |
| Wisconsin | 135 | 4,285 | 3.2 |
| Wyoming | 0 | 186 | 0.0 |

[^11]Exhibit A.8. Number and percentage of uncertified teachers in schools with high percentages of students with disabilities, by state: 2013-14

| State | Number of uncertified teachers | Total number of teachers | Percentage of uncertified teachers |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 7,867 | 445,160 | 1.8 |
| Alabama | 29 | 6,447 | 0.4 |
| Alaska | 2 | 924 | 0.2 |
| Arizona | 252 | 5,007 | 5.0 |
| Arkansas | 31 | 2,919 | 1.0 |
| California | 188 | 9,479 | 2.0 |
| Colorado | 155 | 1,057 | 14.6 |
| Connecticut | 56 | 7,670 | 0.7 |
| Delaware | 22 | 2,264 | 1.0 |
| District of Columbia | 223 | 1,297 | 17.2 |
| Florida | 1,722 | 23,993 | 7.2 |
| Georgia | 88 | 4,113 | 2.1 |
| Hawaii | 48 | 425 | 11.2 |
| Idaho | 2 | 635 | 0.3 |
| Illinois | 145 | 19,197 | 0.8 |
| Indiana | 77 | 13,346 | 0.6 |
| lowa | 0 | 2,362 | 0.0 |
| Kansas | 90 | 4,525 | 2.0 |
| Kentucky | 31 | 8,416 | 0.4 |
| Louisiana | 647 | 6,979 | 9.3 |
| Maine | 138 | 7,166 | 1.9 |
| Maryland | 321 | 5,982 | 5.4 |
| Massachusetts | 747 | 36,032 | 2.1 |
| Michigan | 60 | 7,523 | 0.8 |
| Minnesota | 104 | 7,690 | 1.4 |
| Mississippi | 74 | 2,227 | 3.3 |
| Missouri | 100 | 6,673 | 1.5 |
| Montana | 8 | 878 | 0.9 |
| Nebraska | 10 | 3,723 | 0.3 |
| Nevada | 2 | 812 | 0.2 |
| New Hampshire | 109 | 8,568 | 1.3 |
| New Jersey | 298 | 30,744 | 1.0 |
| New Mexico | 76 | 2,734 | 2.8 |
| New York | 321 | 54,573 | 0.6 |
| North Carolina | 29 | 5,943 | 0.5 |
| North Dakota | 20 | 1,809 | 1.1 |
| Ohio | 246 | 22,412 | 1.1 |
| Oklahoma | 100 | 10,696 | 0.9 |
| Oregon | 9 | 2,052 | 0.4 |
| Pennsylvania | 217 | 36,439 | 0.6 |
| Rhode Island | 25 | 3,001 | 0.8 |
| South Carolina | 100 | 4,376 | 2.3 |
| South Dakota | 4 | 1,310 | 0.3 |
| Tennessee | 50 | 9,524 | 0.5 |
| Texas | 255 | 21,800 | 1.2 |
| Utah | 49 | 1,725 | 2.8 |
| Vermont | 36 | 3,446 | 1.1 |
| Virginia | 297 | 7,501 | 4.0 |
| Washington | 4 | 5,379 | 0.1 |
| West Virginia | 143 | 4,000 | 3.6 |
| Wisconsin | 109 | 6,433 | 1.7 |
| Wyoming | 2 | 933 | 0.2 |

[^12]Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

Exhibit A.9. Number and percentage of uncertified teachers in schools in rural areas, by state: 2013-14

| State | Number of uncertified teachers | Total number of teachers | Percentage of uncertified teachers |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 6,294 | 630,010 | 1.0 |
| Alabama | 98 | 18,698 | 0.5 |
| Alaska | 67 | 2,716 | 2.5 |
| Arizona | 163 | 5,805 | 2.8 |
| Arkansas | 128 | 12,452 | 1.0 |
| California | 114 | 16,182 | 0.7 |
| Colorado | 266 | 7,513 | 3.5 |
| Connecticut | 30 | 5,738 | 0.5 |
| Delaware | 20 | 1,637 | 1.2 |
| District of Columbia | - | - | - |
| Florida | 631 | 17,487 | 3.6 |
| Georgia | 568 | 29,026 | 2.0 |
| Hawaii | 62 | 1,074 | 5.7 |
| Idaho | 15 | 4,031 | 0.4 |
| Illinois | 26 | 15,315 | 0.2 |
| Indiana | 94 | 17,534 | 0.5 |
| lowa | 1 | 12,539 | \# |
| Kansas | 104 | 10,836 | 1.0 |
| Kentucky | 71 | 15,472 | 0.5 |
| Louisiana | 430 | 12,958 | 3.3 |
| Maine | 221 | 8,159 | 2.7 |
| Maryland | 108 | 8,544 | 1.3 |
| Massachusetts | 96 | 6,956 | 1.4 |
| Michigan | 38 | 17,389 | 0.2 |
| Minnesota | 107 | 13,014 | 0.8 |
| Mississippi | 252 | 15,479 | 1.6 |
| Missouri | 178 | 20,939 | 0.9 |
| Montana | 51 | 4,924 | 1.0 |
| Nebraska | 21 | 7,405 | 0.3 |
| Nevada | 15 | 1,741 | 0.9 |
| New Hampshire | 32 | 5,666 | 0.6 |
| New Jersey | 144 | 9,858 | 1.5 |
| New Mexico | 79 | 5,440 | 1.4 |
| New York | 48 | 27,878 | 0.2 |
| North Carolina | 35 | 35,826 | 0.1 |
| North Dakota | 56 | 4,156 | 1.3 |
| Ohio | 45 | 25,505 | 0.2 |
| Oklahoma | 53 | 15,085 | 0.3 |
| Oregon | 23 | 3,967 | 0.6 |
| Pennsylvania | 27 | 24,121 | 0.1 |
| Rhode Island | 5 | 1,220 | 0.4 |
| South Carolina | 282 | 16,271 | 1.7 |
| South Dakota | 21 | 4,547 | 0.5 |
| Tennessee | 80 | 19,994 | 0.4 |
| Texas | 393 | 56,496 | 0.7 |
| Utah | 87 | 2,939 | 3.0 |
| Vermont | 44 | 4,549 | 1.0 |
| Virginia | 415 | 23,020 | 1.8 |
| Washington | 3 | 6,772 | \# |
| West Virginia | 349 | 8,154 | 4.3 |
| Wisconsin | 95 | 14,638 | 0.6 |
| Wyoming | 6 | 2,349 | 0.2 |

- Not applicable; the District of Columbia did not have rural schools.
\# Rounds to zero
Note: Detail may not sum to totals due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.10. Number and percentage of uncertified teachers in schools in urban areas, by state: 2013-14

| State | Number of uncertified teachers | Total number of teachers | Percentage of uncertified teachers |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 26,360 | 904,084 | 2.9 |
| Alabama | 203 | 11,541 | 1.8 |
| Alaska | 0 | 2,620 | 0.0 |
| Arizona | 1,430 | 27,284 | 5.2 |
| Arkansas | 64 | 8,862 | 0.7 |
| California | 2,607 | 117,748 | 2.2 |
| Colorado | 4,820 | 20,590 | 23.4 |
| Connecticut | 315 | 11,309 | 2.8 |
| Delaware | 45 | 1,352 | 3.3 |
| District of Columbia | 1,036 | 5,628 | 18.4 |
| Florida | 1,845 | 42,067 | 4.4 |
| Georgia | 437 | 18,146 | 2.4 |
| Hawaii | 64 | 2,741 | 2.3 |
| Idaho | 59 | 3,188 | 1.8 |
| Illinois | 622 | 39,477 | 1.6 |
| Indiana | 137 | 18,683 | 0.7 |
| lowa | 0 | 9,212 | 0.0 |
| Kansas | 254 | 9,121 | 2.8 |
| Kentucky | 34 | 10,172 | 0.3 |
| Louisiana | 1,047 | 12,925 | 8.1 |
| Maine | 4 | 1,651 | 0.2 |
| Maryland | 999 | 12,929 | 7.7 |
| Massachusetts | 644 | 12,467 | 5.2 |
| Michigan | 127 | 19,905 | 0.6 |
| Minnesota | 100 | 12,781 | 0.8 |
| Mississippi | 129 | 3,482 | 3.7 |
| Missouri | 221 | 10,217 | 2.2 |
| Montana | 768 | 2,604 | 29.5 |
| Nebraska | 15 | 7,939 | 0.2 |
| Nevada | 26 | 11,724 | 0.2 |
| New Hampshire | 53 | 1,846 | 2.8 |
| New Jersey | 119 | 8,686 | 1.4 |
| New Mexico | 254 | 7,615 | 3.3 |
| New York | 904 | 87,977 | 1.0 |
| North Carolina | 94 | 27,780 | 0.3 |
| North Dakota | 20 | 2,151 | 0.9 |
| Ohio | 416 | 20,639 | 2.0 |
| Oklahoma | 549 | 9,102 | 6.0 |
| Oregon | 45 | 9,094 | 0.5 |
| Pennsylvania | 462 | 22,232 | 2.1 |
| Rhode Island | 101 | 2,869 | 3.5 |
| South Carolina | 726 | 9,451 | 7.7 |
| South Dakota | 2 | 2,465 | 0.1 |
| Tennessee | 151 | 21,089 | 0.7 |
| Texas | 3,358 | 135,697 | 2.5 |
| Utah | 69 | 4,027 | 1.7 |
| Vermont | 6 | 582 | 1.0 |
| Virginia | 516 | 21,828 | 2.4 |
| Washington | 27 | 19,202 | 0.1 |
| West Virginia | 61 | 2,583 | 2.4 |
| Wisconsin | 379 | 17,153 | 2.2 |
| Wyoming | 1 | 1,655 | 0.1 |

[^13]Exhibit A.11. Number of schools, by percentage of uncertified teachers, overall and by school charter status: 2013-14

| Type of school | Total | Zero | $\begin{aligned} & >0 \text { to } \\ & <5 \% \end{aligned}$ | $\begin{aligned} & 5 \% \text { to } \\ & <10 \% \\ & \hline \end{aligned}$ | $\begin{array}{r} 10 \% \text { to } \\ <15 \% \end{array}$ | $\begin{array}{r} 15 \% \text { to } \\ <25 \% \end{array}$ | $\begin{array}{r} 25 \% \text { or } \\ \text { more } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All schools | 93,323 | 78,902 | 6,687 | 3,296 | 1,540 | 1,197 | 1,701 |
| High-poverty schools | 23,632 | 18,532 | 1,924 | 1,250 | 648 | 532 | 746 |
| Schools with $75 \%+$ students of color | 24,427 | 18,479 | 2,222 | 1,394 | 762 | 661 | 909 |
| Schools with $20 \%+$ English learners | 14,005 | 11,421 | 1,076 | 603 | 312 | 249 | 344 |
| Schools with 20\%+ students with disabilities | 15,646 | 13,244 | 965 | 590 | 265 | 261 | 321 |
| Rural schools | 25,559 | 22,756 | 1,314 | 745 | 313 | 207 | 224 |
| Urban schools | 24,438 | 19,208 | 2,119 | 1,065 | 580 | 525 | 941 |
| Traditional schools | 87,406 | 75,356 | 6,304 | 2,894 | 1,144 | 811 | 897 |
| High-poverty schools | 21,419 | 17,329 | 1,795 | 1,081 | 478 | 358 | 378 |
| Schools with 75\%+ students of color | 21,466 | 16,939 | 2,028 | 1,151 | 511 | 418 | 419 |
| Schools with 20\%+ English learners | 13,074 | 10,850 | 1,013 | 538 | 259 | 183 | 231 |
| Schools with $20 \%+$ students with disabilities | 14,863 | 12,785 | 932 | 539 | 205 | 196 | 206 |
| Rural schools | 24,964 | 22,327 | 1,280 | 721 | 287 | 175 | 174 |
| Urban schools | 21,378 | 17,569 | 1,940 | 834 | 343 | 282 | 410 |
| Charter schools | 5,917 | 3,546 | 383 | 402 | 396 | 386 | 804 |
| High-poverty schools | 2,213 | 1,203 | 129 | 169 | 170 | 174 | 368 |
| Schools with 75\%+ students of color | 2,961 | 1,540 | 194 | 243 | 251 | 243 | 490 |
| Schools with 20\%+ English learners | 931 | 571 | 63 | 65 | 53 | 66 | 113 |
| Schools with 20\%+ students with disabilities | 783 | 459 | 33 | 51 | 60 | 65 | 115 |
| Rural schools | 595 | 429 | 34 | 24 | 26 | 32 | 50 |
| Urban schools | 3,060 | 1,639 | 179 | 231 | 237 | 243 | 531 |

Note: Traditional schools are schools that are not charter schools.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.12. Percentage distribution of schools, by percentage of uncertified teachers, overall and by school charter status: 2013-14

| Type of school | Zero | $\begin{aligned} & >0 \text { to } \\ & <5 \% \end{aligned}$ | $\begin{aligned} & \text { 5\% to } \\ & <10 \% \end{aligned}$ | $10 \%$ to <15\% | 15\% to <25\% | 25\% or more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All schools | 85 | 7 | 4 | 2 | 1 | 2 |
| High-poverty schools | 78 | 8 | 5 | 3 | 2 | 3 |
| Schools with 75\%+ students of color | 76 | 9 | 6 | 3 | 3 | 4 |
| Schools with 20\%+ English learners | 82 | 8 | 4 | 2 | 2 | 2 |
| Schools with $20 \%+$ students with disabilities | 85 | 6 | 4 | 2 | 2 | 2 |
| Rural schools | 89 | 5 | 3 | 1 | 1 | 1 |
| Urban schools | 79 | 9 | 4 | 2 | 2 | 4 |
| Traditional schools | 86 | 7 | 3 | 1 | 1 | 1 |
| High-poverty schools | 81 | 8 | 5 | 2 | 2 | 2 |
| Schools with 75\%+ students of color | 79 | 9 | 5 | 2 | 2 | 2 |
| Schools with 20\%+ English learners | 83 | 8 | 4 | 2 | 1 | 2 |
| Schools with 20\%+ students with disabilities | 86 | 6 | 4 | 1 | 1 | 1 |
| Rural schools | 89 | 5 | 3 | 1 | 1 | 1 |
| Urban schools | 82 | 9 | 4 | 2 | 1 | 2 |
| Charter schools | 60 | 6 | 7 | 7 | 7 | 14 |
| High-poverty schools | 54 | 6 | 8 | 8 | 8 | 17 |
| Schools with 75\%+ students of color | 52 | 7 | 8 | 8 | 8 | 17 |
| Schools with 20\%+ English learners | 61 | 7 | 7 | 6 | 7 | 12 |
| Schools with $20 \%+$ students with disabilities | 59 | 4 | 7 | 8 | 8 | 15 |
| Rural schools | 72 | 6 | 4 | 4 | 5 | 8 |
| Urban schools | 54 | 6 | 8 | 8 | 8 | 17 |

[^14]Exhibit A.13. Percentage of schools with uncertified teachers, overall and by school charter status: 2013-14

| Type of school | Total number <br> of schools | Number of schools <br> with uncertified <br> teachers | Percentage of schools <br> with uncertified <br> teachers |
| :--- | ---: | ---: | ---: |
| All schools | 93,323 |  |  |
| High-poverty schools | 23,632 | 14,421 | 15 |
| Schools with 75\%+ students of color | 24,427 | 5,100 | 22 |
| Schools with 20\%+ English learners | 14,005 | 5,948 | 24 |
| Schools with 20\%+ students with disabilities | 15,646 | 2,584 | 18 |
| Rural schools | 25,559 | 2,402 | 15 |
| Urban schools | 24,438 | 2,803 | 11 |
|  |  | 5,230 | 21 |
| Traditional schools | 87,406 |  |  |
| High-poverty schools | 21,419 | 12,050 | 14 |
| Schools with 75\%+ students of color | 21,466 | 4,090 | 19 |
| Schools with 20\%+ English learners | 13,074 | 4,527 | 21 |
| Schools with 20\%+ students with disabilities | 14,863 | 2,224 | 17 |
| Rural schools | 24,964 | 2,078 | 14 |
| Urban schools | 21,378 | 3,837 | 11 |
|  |  |  | 18 |
| Charter schools | 5,917 | 2,371 |  |
| High-poverty schools | 2,213 | 1,010 | 40 |
| Schools with 75\%+ students of color | 2,961 | 1,421 | 46 |
| Schools with 20\%+ English learners | 931 | 360 | 48 |
| Schools with 20\%+ students with disabilities | 783 | 324 | 39 |
| Rural schools | 595 | 166 | 41 |
| Urban schools | 3,060 | 1,421 | 28 |

Note: Traditional schools are schools that are not charter schools.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.14. Percentage of uncertified teachers, overall and by type of school: 2013-14

| Type of school | Total number <br> of teachers | Number of uncertified <br> teachers | Percentage of <br> uncertified teachers |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| All schools | $3,130,193$ | 53,865 | 1.7 |
| High-poverty schools | 758,280 | 21,685 | 2.9 |
| Schools with 75\%+ students of color | 870,306 | 26,933 | 3.1 |
| Schools with 20\%+ English learners | 470,533 | 12,273 | 2.6 |
| Schools with 20\%+ students with disabilities | 445,160 | 7,867 | 1.8 |
| Rural schools | 630,010 | 6,294 | 1.0 |
| Urban schools | 904,084 | 26,360 | 2.9 |
| Traditional schools |  |  |  |
| High-poverty schools | $2,984,750$ | 40,136 | 1.3 |
| Schools with 75\%+ students of color | 703,619 | 15,663 | 2.2 |
| Schools with 20\%+ English learners | 793,441 | 18,299 | 2.3 |
| Schools with 20\%+ students with disabilities | 447,626 | 10,193 | 2.3 |
| Rural schools | 429,294 | 6,162 | 1.4 |
| Urban schools | 619,647 | 5,646 | 0.9 |
|  | 828,086 | 17,003 | 2.1 |
| Charter schools |  |  |  |
| High-poverty schools | 145,443 | 13,729 | 9.4 |
| Schools with $75 \%+$ students of color | 6,661 | 11.9 |  |
| Schools with 20\%+ English learners | 76,865 | 8,634 | 11.2 |
| Schools with 20\%+ students with disabilities | 22,907 | 9,080 | 10.7 |
| Rural schools | 15,865 | 1,704 | 648 |
| Urban schools | 10,363 | 9,357 | 13.6 |

Notes: Traditional schools are schools that are not charter schools. Detail may not sum to totals due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.15. Number of uncertified teachers, by percentage of uncertified teachers in the school and by school charter status: 2013-14

| Type of school | Total | <5\% | $\begin{aligned} & 5 \% \text { to } \\ & <10 \% \end{aligned}$ | $\begin{array}{r} 10 \% \text { to } \\ <15 \% \\ \hline \end{array}$ | $\begin{array}{r} 15 \% \text { to } \\ <25 \% \end{array}$ | $\begin{array}{r} 25 \% \text { or } \\ \text { more } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All schools | 53,865 | 8,979 | 9,224 | 6,336 | 7,011 | 22,315 |
| High-poverty schools | 21,685 | 2,473 | 3,326 | 2,590 | 3,125 | 10,171 |
| Schools with $75 \%+$ students of color | 26,933 | 3,121 | 3,957 | 3,211 | 4,057 | 12,587 |
| Schools with $20 \%+$ English learners | 12,273 | 1,372 | 1,663 | 1,408 | 1,633 | 6,199 |
| Schools with $20 \%+$ students with disabilities | 7,867 | 1,268 | 1,515 | 889 | 1,186 | 3,009 |
| Rural schools | 6,294 | 1,453 | 1,566 | 957 | 790 | 1,529 |
| Urban schools | 26,360 | 2,915 | 2,977 | 2,377 | 3,176 | 14,914 |
| Traditional schools | 40,136 | 8,463 | 8,314 | 5,049 | 5,005 | 13,305 |
| High-poverty schools | 15,663 | 2,320 | 2,920 | 1,998 | 2,132 | 6,293 |
| Schools with $75 \%+$ students of color | 18,299 | 2,873 | 3,378 | 2,385 | 2,679 | 6,983 |
| Schools with $20 \%+$ English learners | 10,193 | 1,297 | 1,534 | 1,228 | 1,313 | 4,821 |
| Schools with $20 \%+$ students with disabilities | 6,163 | 1,225 | 1,414 | 721 | 891 | 1,911 |
| Rural schools | 5,646 | 1,413 | 1,528 | 889 | 664 | 1,151 |
| Urban schools | 17,003 | 2,678 | 2,420 | 1,571 | 1,827 | 8,507 |
| Charter schools | 13,729 | 516 | 910 | 1,287 | 2,006 | 9,010 |
| High-poverty schools | 6,022 | 153 | 406 | 592 | 993 | 3,878 |
| Schools with $75 \%+$ students of color | 8,634 | 248 | 579 | 826 | 1,377 | 5,604 |
| Schools with 20\%+ English learners | 2,080 | 75 | 129 | 180 | 320 | 1,377 |
| Schools with 20\%+ students with disabilities | 1,704 | 43 | 101 | 169 | 295 | 1,097 |
| Rural schools | 648 | 40 | 38 | 67 | 126 | 378 |
| Urban schools | 9,357 | 237 | 557 | 806 | 1,349 | 6,407 |

Notes: Traditional schools are schools that are not charter schools. Detail may not sum to totals due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.16. Number of uncertified teachers, by percentage of uncertified teachers in the school and by school characteristics: 2013-14

| Type of School | Total | <5\% | $\begin{aligned} & 5 \% \text { to } \\ & <10 \% \end{aligned}$ | $\begin{array}{r} 10 \% \text { to } \\ <15 \% \end{array}$ | $\begin{array}{r} 15 \% \text { to } \\ <25 \% \end{array}$ | $\begin{array}{r} 25 \% \text { or } \\ \text { more } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| By percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |  |
| High (75\% or more) | 21,685 | 2,473 | 3,326 | 2,590 | 3,125 | 10,171 |
| Medium-high (50\% to less than 75\%) | 13,020 | 2,677 | 2,591 | 1,624 | 1,743 | 4,385 |
| Medium-low (35\% to less than 50\%) | 6,260 | 1,461 | 1,269 | 729 | 609 | 2,192 |
| Low (less than 35\%) | 10,293 | 2,309 | 1,898 | 1,287 | 1,290 | 3,510 |
| By percentage of students of color |  |  |  |  |  |  |
| High (75\% or more) | 26,933 | 3,121 | 3,957 | 3,211 | 4,057 | 12,587 |
| Medium ( $25 \%$ to less than 75\%) | 18,701 | 4,094 | 3,854 | 2,334 | 2,058 | 6,361 |
| Low (less than 25\%) | 8,231 | 1,763 | 1,414 | 791 | 896 | 3,367 |
| By percentage of English learners |  |  |  |  |  |  |
| High (20\% or more) | 12,273 | 1,372 | 1,663 | 1,408 | 1,633 | 6,199 |
| Medium (5\% to less than 20\%) | 14,435 | 2,619 | 2,848 | 1,823 | 1,924 | 5,221 |
| Low (more than 0 to less than 5\%) | 19,173 | 4,352 | 3,666 | 2,305 | 2,464 | 6,388 |
| No ELs | 7,983 | 637 | 1,047 | 801 | 990 | 4,509 |
| By percentage of students with disabilities |  |  |  |  |  |  |
| High (20\% or more) | 7,867 | 1,268 | 1,515 | 889 | 1,186 | 3,009 |
| Medium (10\% to less than 20\%) | 29,148 | 5,922 | 5,935 | 4,047 | 4,033 | 9,211 |
| Low (less than 10\%) | 16,851 | 1,789 | 1,774 | 1,400 | 1,792 | 10,096 |
| By urbanicity |  |  |  |  |  |  |
| Urban | 26,360 | 2,915 | 2,977 | 2,377 | 3,176 | 14,914 |
| Suburban | 16,664 | 3,787 | 3,729 | 2,400 | 2,541 | 4,206 |
| Town | 3,346 | 790 | 878 | 536 | 371 | 771 |
| Rural | 6,294 | 1,453 | 1,566 | 957 | 790 | 1,529 |
| By school size |  |  |  |  |  |  |
| Very large (more than 600 students) | 27,375 | 6,484 | 5,753 | 3,473 | 3,331 | 8,335 |
| Medium-Large (401 to 600 students) | 12,220 | 1,604 | 1,857 | 1,434 | 1,688 | 5,636 |
| Medium-small (201 to 400 students) | 9,452 | 791 | 1,219 | 964 | 1,378 | 5,101 |
| Small (200 or fewer students) | 4,818 | 99 | 395 | 466 | 614 | 3,244 |
| By school grade level |  |  |  |  |  |  |
| Elementary schools | 24,089 | 3,504 | 3,890 | 3,039 | 3,177 | 10,479 |
| Middle schools | 7,807 | 1,787 | 1,559 | 997 | 1,003 | 2,461 |
| High schools | 15,240 | 3,316 | 3,146 | 1,678 | 1,679 | 5,422 |
| Other/combined schools | 6,695 | 371 | 625 | 615 | 1,147 | 3,936 |

Note: Detail may not sum to totals due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.17. Percentage distribution of uncertified teachers, by percentage of uncertified teachers in the school and by school characteristics: 2013-14

| Type of school | <5\% | 5\% to <10\% | $10 \%$ to <15\% | $15 \%$ to <25\% | 25\% or more |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All schools | 17 | 17 | 12 | 13 | 41 |
| High-poverty schools | 11 | 15 | 12 | 14 | 47 |
| Schools with 75\%+ students of color | 12 | 15 | 12 | 15 | 47 |
| Schools with 20\%+ English learners | 11 | 14 | 11 | 13 | 51 |
| Schools with 20\%+ students with disabilities | 16 | 19 | 11 | 15 | 38 |
| Rural schools | 23 | 25 | 15 | 13 | 24 |
| Urban schools | 11 | 11 | 9 | 12 | 57 |
| Traditional schools | 21 | 21 | 13 | 12 | 33 |
| High-poverty schools | 15 | 19 | 13 | 14 | 40 |
| Schools with 75\%+ students of color | 16 | 18 | 13 | 15 | 38 |
| Schools with 20\%+ English learners | 13 | 15 | 12 | 13 | 47 |
| Schools with 20\%+ students with disabilities | 20 | 23 | 12 | 14 | 31 |
| Rural schools | 25 | 27 | 16 | 12 | 20 |
| Urban schools | 16 | 14 | 9 | 11 | 50 |
| Charter schools | 4 | 7 | 9 | 15 | 66 |
| High-poverty schools | 3 | 7 | 10 | 16 | 64 |
| Schools with 75\%+ students of color | 3 | 7 | 10 | 16 | 65 |
| Schools with 20\%+ English learners | 4 | 6 | 9 | 15 | 66 |
| Schools with $20 \%+$ students with disabilities | 3 | 6 | 10 | 17 | 64 |
| Rural schools | 6 | 6 | 10 | 19 | 58 |
| Urban schools | 3 | 6 | 9 | 14 | 68 |

Notes: Traditional schools are schools that are not charter schools. Detail may not sum to 100 percent due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.18. Percentage distribution of uncertified teachers, by percentage of uncertified teachers in the school and by school characteristics: 2013-14

| Type of School | <5\% | 5\% to <10\% | $\begin{array}{r} 10 \% \text { to } \\ <15 \% \end{array}$ | $\begin{array}{r} 15 \% \text { to } \\ <25 \% \end{array}$ | $\begin{array}{r} 25 \% \text { or } \\ \text { more } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| By percentage of students eligible for free or reduced-price lunch |  |  |  |  |  |
| High (75\% or more) | 11 | 15 | 12 | 14 | 47 |
| Medium-high ( $50 \%$ to less than 75\%) | 21 | 20 | 12 | 13 | 34 |
| Medium-low (35\% to less than 50\%) | 23 | 20 | 12 | 10 | 35 |
| Low (less than 35\%) | 22 | 18 | 13 | 13 | 34 |
| By percentage of students of color |  |  |  |  |  |
| High (75\% or more) | 12 | 15 | 12 | 15 | 47 |
| Medium (25\% to less than 75\%) | 22 | 21 | 12 | 11 | 34 |
| Low (less than 25\%) | 21 | 17 | 10 | 11 | 41 |
| By percentage of English learners |  |  |  |  |  |
| High (20\% or more) | 11 | 14 | 11 | 13 | 51 |
| Medium ( $5 \%$ to less than 20\%) | 18 | 20 | 13 | 13 | 36 |
| Low (more than 0 to less than 5\%) | 23 | 19 | 12 | 13 | 33 |
| No ELs | 8 | 13 | 10 | 12 | 56 |
| By percentage of students with disabilities |  |  |  |  |  |
| High (20\% or more) | 16 | 19 | 11 | 15 | 38 |
| Medium (10\% to less than 20\%) | 20 | 20 | 14 | 14 | 32 |
| Low (less than 10\%) | 11 | 11 | 8 | 11 | 60 |
| By urbanicity |  |  |  |  |  |
| Urban | 11 | 11 | 9 | 12 | 57 |
| Suburban | 23 | 22 | 14 | 15 | 25 |
| Town | 24 | 26 | 16 | 11 | 23 |
| Rural | 23 | 25 | 15 | 13 | 24 |
| By school size |  |  |  |  |  |
| Very large (more than 600 students) | 24 | 21 | 13 | 12 | 30 |
| Medium-Large (401 to 600 students) | 13 | 15 | 12 | 14 | 46 |
| Medium-small ( 201 to 400 students) | 8 | 13 | 10 | 15 | 54 |
| Small (200 or fewer students) | 2 | 8 | 10 | 13 | 67 |
| By school grade level |  |  |  |  |  |
| Elementary schools | 15 | 16 | 13 | 13 | 44 |
| Middle schools | 23 | 20 | 13 | 13 | 32 |
| High schools | 22 | 21 | 11 | 11 | 36 |
| Other/combined schools | 6 | 9 | 9 | 17 | 59 |

Note: Detail may not sum to 100 percent due to rounding.
Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

Exhibit A.19. Percentage distribution of all teachers and uncertified teachers, by school characteristics: 2013-14

| Type of School | All teachers | Uncertified teachers |
| :---: | :---: | :---: |
| By percentage of students eligible for free or reduced-price lunch |  |  |
| High (75\% or more) | 25 | 42 |
| Medium-high ( $50 \%$ to less than 75\%) | 28 | 25 |
| Medium-low (35\% to less than 50\%) | 17 | 12 |
| Low (less than 35\%) | 31 | 20 |
| By percentage of students of color |  |  |
| High ( $75 \%$ or more) | 28 | 50 |
| Medium ( $25 \%$ to less than 75\%) | 40 | 35 |
| Low (less than 25\%) | 32 | 15 |
| By percentage of English learners |  |  |
| High (20\% or more) | 15 | 23 |
| Medium (5\% to less than 20\%) | 26 | 27 |
| Low (more than 0 to less than 5\%) | 47 | 36 |
| No ELs | 13 | 15 |
| By percentage of students with disabilities |  |  |
| High (20\% or more) | 14 | 15 |
| Medium ( $10 \%$ to less than 20\%) | 64 | 54 |
| Low (less than 10\%) | 21 | 31 |
| By urbanicity |  |  |
| Urban | 29 | 50 |
| Suburban | 39 | 32 |
| Town | 12 | 6 |
| Rural | 20 | 12 |
| By school size |  |  |
| Very large (more than 600 students) | 54 | 51 |
| Medium-Large (401 to 600 students) | 25 | 23 |
| Medium-small (201 to 400 students) | 16 | 18 |
| Small (200 or fewer students) | 5 | 9 |
| By school grade level |  |  |
| Elementary schools | 49 | 45 |
| Middle schools | 19 | 15 |
| High schools | 28 | 28 |
| Other/combined schools | 4 | 12 |
| Note: Detail may not sum to 100 percent due to rounding. <br> Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14. |  |  |



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[^0]:    'The CRDC is a biennial survey conducted for the Department's Office for Civil Rights (OCR). The 2013-14 CRDC collected data from the universe of all public schools in the United States, which include a total of 50 million public school students.
    ${ }^{\mathrm{ii}}$ These are schools in which (1) 75 percent or more of students are eligible for free or reduced-price lunch, (2) 75 percent or more of students are students of color, (3) 20 percent or more of students are ELs, or (4) 20 percent or more of students are students with disabilities.
    iii In the 2013-14 CRDC, a "certified teacher is a teacher who has met all applicable state teacher certification requirements for a standard certificate. A certified teacher has a regular/standard certificate/license/endorsement issued by the state. A beginning teacher who has met the standard teacher education requirements is considered to have met state requirements even if he or she has not completed a state-required probationary period. A teacher working towards certification by way of alternative routes, or a teacher with an emergency, temporary, or provisional credential is not considered to have met state requirements." Nothing in this report is intended to imply that teachers working towards certification through alternative routes are not serving students as well as teachers who are fully certified. This report uses the terms "not certified," "not fully certified", and "uncertified" interchangeably.

[^1]:    ${ }^{1}$ Managers' statement accompanying the Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriation Act, 2016 (H.R. 3020):
    "Teachers-in-Training. The National Center for Education Statistics shall submit a report by December 31, 2016 to the Committees on Appropriations of the House of Representatives and the Senate, Committee on Education and the Workforce of the House of Representatives, and Committee on Health, Education, Labor and Pensions of the Senate, using and reporting data from the most recent school year by State and each local educational agency, regarding the extent at the school-level to which students in the following categories are taught by teachers who have not yet obtained full State certification: students with disabilities, English Learners, students in rural areas, students from low-income families, and minority students. "Full State certification" means that a teacher has met all teacher preparation requirements applicable to his or her years of experience; that the teacher is not authorized to teach on an emergency, temporary, provisional or waiver basis; that certification may be obtained through traditional or alternative routes; and, that except when used with respect to any teacher teaching in a public charter school, the teacher meets the requirements set forth in the State's public charter school law." The managers' statement can be accessed here: http://docs.house.gov/meetings/RU/RU00/20151216/104298/HMTG-114-RU00-20151216-SD009.pdf.

[^2]:    ${ }^{2}$ Although the data examined in this report treat teachers who are pursuing certification through alternative routes as not fully certified, rigorous studies on the effectiveness of these teachers compared with that of fully-certified teachers has found either very small differences or no statistically significant differences (National Research Council 2010; Constantine et al. 2009; Kane et al. 2008; Boyd et al. 2006). Nothing in this report is intended to imply that teachers teaching under state requirements for alternative routes to certification are not serving students as well as teachers who are fully certified.

[^3]:    ${ }^{3}$ The CRDC is a biennial survey conducted for the Department's Office for Civil Rights (OCR). The 2013-14 CRDC collected data from the universe of all public schools in the United States, which include a total of 50 million public school students.
    ${ }^{4}$ This report uses the terms "not fully certified," "not certified," and "uncertified" interchangeably.

[^4]:    ${ }^{5}$ All analyses also excluded juvenile justice facilities; of the 95,507 schools in the 2013-14 CRDC, 633 were juvenile justice facilities.

[^5]:    ${ }^{6}$ Students of color are students who are American Indian/Alaska Native, Asian, black, Native Hawaiian/Pacific Islander, Hispanic, or of two or more races.
    ${ }^{7}$ Using the CCD variable ULOCAL, rural schools are those coded as 41 (rural, fringe), 42 (rural, distant), or 43 (rural, remote); urban schools are those coded as 11 (city, large), 12 (city, mid-size), or 13 (city, small).

[^6]:    ${ }^{8}$ Education Commission of the States. January 2016. 50-State Comparison: Charter Schools - Do Teachers in a Charter School Have to be Certified? Accessed on November 14, 2016, http://ecs.force.com/mbdata/mbquestNB2?rep=CS1525.

[^7]:    Note: Detail may not sum to 100 percent due to rounding.
    Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

[^8]:    Note: Detail may not sum to totals due to rounding.

[^9]:    - Not applicable; the District of Columbia did not have rural schools.

    Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

[^10]:    - Not applicable; New Hampshire and Vermont did not have schools with high percentages of students of color.
    \# Rounds to zero
    Note: Detail may not sum to totals due to rounding.
    Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

[^11]:    - Not applicable; West Virginia did not have schools with high percentages of English learners.
    \# Rounds to zero
    Note: Detail may not sum to totals due to rounding.
    Source: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14.

[^12]:    Note: Detail may not sum to totals due to rounding.

[^13]:    Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

[^14]:    Notes: Traditional schools are schools that are not charter schools. Detail may not sum to 100 percent due to rounding.
    Sources: U.S. Department of Education, Office for Civil Rights (OCR), Civil Rights Data Collection (CRDC), 2013-14 and National Center for Education Statistics (NCES), Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2013-14.

