

### **Table of Contents**

### 1 HIGHLIGHTS

### 2 INTRODUCTION

- 7 Key Questions
- 8 Data, Variables, and Analyses

### 12 KEY QUESTION 1:

What are the characteristics of South Carolina's principal population relative to personal demographics, educational attainment and experience, and principal evaluation results? How do these characteristics compare with principals nationally?

- 12 Characteristics of South Carolina Principals Compared to Principals Nationwide
- 13 Trends in Principal Characteristics Over Time
- 14 Relationships Between South Carolina Principal Characteristics and Published Studies

### 15 KEY QUESTION 2:

How do principal characteristics compare among city, suburb, town, and rural schools in South Carolina?

- 15 Differences in Principal Characteristics Across Geographic Locales
- 15 Differences in Principal Characteristics Over Time by Geographic Locale
- 17 Relationships Between South Carolina Principal Characteristics Across Geographic Locale and Published Studies

### 19 KEY QUESTION 3:

How do principal characteristics compare among South Carolina schools with different levels of student poverty?

- 19 Differences in Principal Characteristics Across School Poverty Levels
- 20 Differences in Principal Characteristics Over Time by School Poverty Level
- 22 Relationships Between South Carolina Principal Characteristics Across School Poverty and Published Studies

### 23 KEY QUESTION 4:

What are the characteristics of South Carolina's assistant principal population relative to personal demographics, educational attainment, and experience?

- 23 Relationships Between South Carolina Assistant Principal Characteristics and Published Studies
- 24 CONCLUSIONS AND RECOMMENDATIONS
- **25 REFERENCES**
- 31 APPENDIX: DETAILED TECHNICAL ANALYSIS REPORT

# Administrator Workforce Profile

### + HIGHLIGHTS

Each year, SC TEACHER publishes different workforce profiles, sharing details and demographics around South Carolina educators for a better understanding of our public school workforce. Among these publications, this report is the first to examine the state's school *administrator* workforce.

The analysis in this report uses statewide data from 2022–23, as well as available data from published research, to compare South Carolina's administrator workforce with the overall national administrator workforce and that of other states. This report also provides a longitudinal view of state trends by comparing data across three academic years from 2020–21 to 2022–23. State data were collected for 3,388 South Carolina administrators with positions categorized as either principal or assistant principal.

# Main Findings From the 2022–23 South Carolina Administrator Workforce

- The percentage of South Carolina principals who possessed a doctoral degree (16%) was notably higher than the national average (11%). Additionally, 10% of assistant principals in the state had earned a doctoral degree.
- Of principals in the state, 98% received a principal evaluation (PADEPP) rating of "Exemplary" (42%) or "Proficient" (56%) in 2022–23.
- In South Carolina, 35% of principals were Black, notably higher than the national average of 10%. Over the past three academic years, this percentage has increased from 32.6% to 35%, indicating a positive trend.
- The longitudinal profile of South Carolina principals demonstrates considerable stability across several areas, including demographics, experience in education, and longevity. Principals continue to average 22 years of experience and five years of tenure at their current school.

# Recommendations Regarding the South Carolina Administrator Workforce

- This report examines demographic factors related to administrator experience (i.e., highest degree attained, years of experience in education, years as principal at current school, and principal evaluation ratings) as possible indicators of quality. However, prior research linking these variables to effectiveness is inconsistent or lacking. A deeper examination is necessary for determining whether these elements are suitable metrics or proxies for administrator quality. Further study should also include potential relationships with factors like teachers' perceptions of working conditions and student achievement.
- Research shows that administrator turnover can affect teacher attrition and negatively impact student learning. Consequently, working to determine why some administrators choose to leave schools (in addition to assessing the effects of district-mandated movement) is imperative. Measuring administrators' perceptions of their working conditions and their job satisfaction could be a first step in better understanding South Carolina's administrator turnover, providing districts and state leaders with actionable data for mitigation.

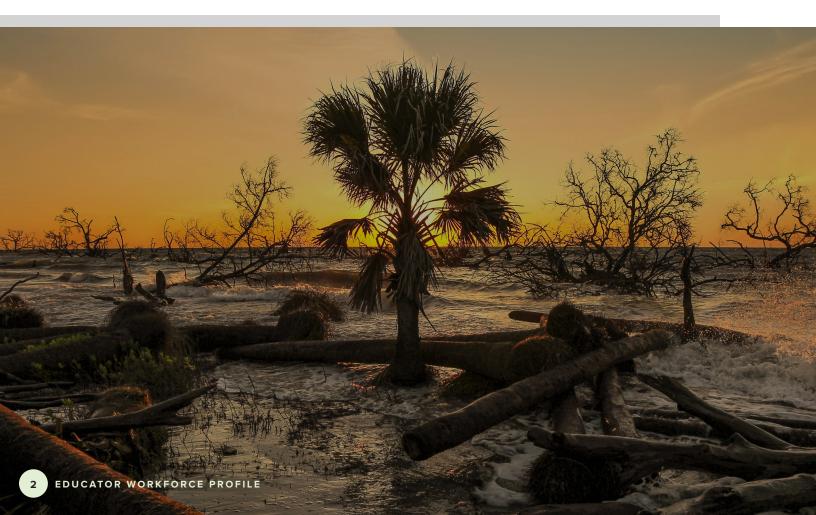
### + INTRODUCTION

Principals and assistant principals play critical roles in the function and operation of effective schools. School administrators lead policy implementation (Leithwood et al., 2004), develop school improvement plans (Goldring et al., 2021), and provide teachers with appropriate professional development opportunities (Boyd et al., 2011). They have major responsibilities in establishing positive school climates (Burkhauser, 2017) and supportive working conditions (Schmidt-Davis & Bottoms, 2011; Wahlstrom et al., 2010).

While teacher retention and recruitment have received significant attention in recent years (e.g., Arthur & Bradley, 2023; Berry et al., 2021; Lochmiller et al., 2024; Miller & Youngs, 2021; Tran et al., 2023), the topics of administrator retention and the principal pipeline have been generally and comparably understudied, despite their potentially critical impact (Perrone et al., 2022). The heightened focus on teacher retention is

understandable, considering the acknowledged importance of effective teaching on student learning and achievement (Coleman et al., 1966; Hanushek, 1992; Sanders & Rivers, 1996) and concerns about national and international teacher shortages (Balingit, 2023; Loehrke, 2024; UNESCO & International Task Force on Teachers for Education 2030, 2024). Still, extending similar attention to school administrators is also key for building and maintaining successful schools.

Principal retention rates are one factor driving the need for this focus. The average rate of principal turnover throughout the U.S. has remained close to 20% over the last 15 years, according to surveys conducted by the National Center for Education Statistics (NCES, 2024). According to the latest data from 2020–21, this figure sat at exactly 20% and more than half of these departing principals left administrative roles entirely that year (Taie & Lewis, 2023).



When it comes to studying principal retention, a nuanced approach is necessary, as not all administrator turnover is the same. For the 2021–21 academic year, 6% of principals moved to new schools nationally. Lateral movers, such as these, represent one complication in this research: administrators may be transferred by their district leadership, even if they would prefer to stay at their current school (Farley-Ripple, Raffel, & Welch, 2012). Administrators who are moved to a different school without a choice likely differ significantly from those who voluntarily leave. Not distinguishing between these groups may obscure interpretations (Farley-Ripple, Solano, & McDuffie, 2012; Loeb et al., 2010).

As an additional nuance, replacing ineffective principals may benefit schools (Walsh & Dotter, 2019). In some instances, shuffling principals has been used as a strategy for addressing issues at low-performing schools (Russell, 2009) and staving off administrator complacency (Harper, 2017). While this is an important consideration, most existing literature still indicates that administrative turnover is generally followed by lower school performance (e.g., Bartanen et al., 2019; Béteille et al., 2012; Henry & Harbatkin, 2019; Miller, 2013). The rate of "principal churn" (DeMatthews et al., 2022, p. 100) tends to be highest at the lowest-performing schools (Fuller & Young, 2009; Grissom et al., 2019; Levin & Bradley, 2019), indicating further problems with this strategy.

Taking these complexities into account, the study of administrator turnover remains critical. Some predictions of looming mass exoduses have developed (e.g., National Association of Secondary School Principals, 2021), furthering this need.





Studies have shown that the impact of administrators stretches over multiple levels. Perhaps most importantly, investigations have shown that school leadership affects student achievement (e.g., Dhuey & Smith, 2014; Waters et al., 2003). Grissom et al. (2021) synthesized data from several studies on this relationship and found that "for improving the school as a whole...the effectiveness of the principal is more important than the effectiveness of any single teacher" (p. 40), though this is largely because the gains associated apply to more students.

The mechanisms through which administrators affect student achievement are not inherently clear, and many are likely indirect (Wahlstrom et al., 2010). For example, teachers' decisions to stay at a particular school are greatly influenced by their perceptions of school administration (Boyd et al., 2011). The most effective principals are especially successful at retaining the highest-performing teachers (Grissom & Bartanen, 2019). The resulting retention trickles down to student achievement outcomes through the instruction provided by these teachers.

There is some evidence that principals have a direct effect on student achievement, as well (Bartanen et al., 2019). Administrators' ability to establish a safe, academically-focused school culture (Sebastian & Allensworth, 2012) that emphasizes collaboration, continuous improvement, organizational trust, and collective efficacy (Bevel & Mitchell, 2012) could be responsible for a direct impact on student learning. Additionally, there is evidence that effective principals can have measurable success decreasing student absenteeism (Bartanen, 2020), increasing graduation rates (Sorensen et al., 2021), and even significantly influencing student rates of adult incarceration (Bacher-Hicks et al., 2019).

The effects that school administrators can have on their students, teachers, and local communities speak to the need to build a comprehensive understanding of this workforce. It is not inherently clear which personal characteristics or qualifications can predict administrator effectiveness, especially as successes may be dependent on complex interactions, like the alignment of a principal's values with those of the local community.



For example, studies on the effects of a principal's race or ethnicity on student achievement have been inconclusive thus far. Some show no relationships (Bowers & White, 2014), some show that nonwhite principals see lower rates of student growth (Bastian & Henry, 2015), and others find results dependent on the grade and subject area (Brockmeier et al., 2013). These inconclusive results are likely because simply comparing outcomes based on principal race would not reveal any causal relationships and lacks important contextual factors. More nuanced research, though, does point to important findings to consider. For example, Bartanen and Grissom (2019) found that Black students' math scores improved when they had a Black principal, perhaps due more so to matching race/ethnicity between students and teachers. This complex relationship is illustrated by Meier et al. (2004), who found that higher standardized test scores by Latinx students in schools with Latinx administrators were largely attributable to greater numbers of Latinx teachers also in these contexts. Researchers have consistently found that students with race/ethnicity-matched teachers perform better in school (e.g., Blazar & Lagos, 2021; Egalite et al., 2015; Redding, 2019).

Research on principal race has shown some differences in teacher hiring and retention (Grissom et al., 2021), yet most teacher-level effects seem to be better explained by other factors (e.g., school context; Jackson, 2012). This current report will not investigate these complex relationships in South Carolina but will present race/ethnicity demographics of administrators in the state as a first step toward deeper inquiry. Similarly, though studies have not revealed that principal gender has much of an effect on general student or teacher outcomes (Grissom et al., 2021), the possibility of some nuanced relationships (e.g., male teachers are more likely to leave schools led by female principals; Husain et al., 2024) indicates including gender in the current analysis may be helpful moving forward.

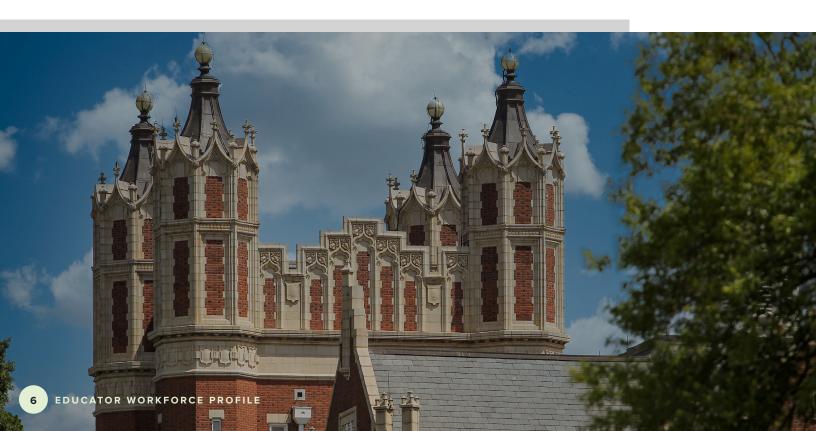
The relationships between principal turnover and both teacher turnover and student achievement highlight other important factors analyzed in this report. Tenure at the current school is obviously related to principal turnover (Grissom & Bartanen, 2019b). Longer tenures likely have positive effects because they create a sense of stability (Fuller & Young, 2009) and give principals time to foster and nurture important relational components (Bartanen et al., 2019). Because new principals tend to have less school leadership experience (Grissom et al., 2019) and principal effectiveness increases with experience (Clark et al., 2009; Grissom et al., 2018), years of experience was also a variable of interest in this report.

Small positive effects on schools have been found with principals who have earned doctoral or specialist degrees (Grissom & Loeb, 2011). This relationship has not been studied extensively but may represent another variable that can predict some level of administrator effectiveness, along with tenure and years of experience. Finally, annual principal evaluation scores are the most likely marker of administrator quality in the datasets used in this report. South Carolina requires that all principals be evaluated each year with a main goal of providing feedback for their improvement. This evaluation system is based on the Expanded Program for Assisting, Developing, and Evaluating Principal Performance (PADEPP). The current standards were approved in 2022, and they are aligned with the Professional Standards for Educational Leaders, which were adopted by the National Policy Board for Educational Administration in 2015 (South Carolina State Board of Education, 2022).

In PADEPP, individual evaluators or evaluation teams assess principals on nine standards: (1) vision, (2) instructional leadership, (3) effective management, (4) climate, (5) school/community relations, (6) ethical behavior, (7) interpersonal skills, (8) staff development, and (9) principal's professional development. Evaluators collect evidence from informal and formal observations and examine this evidence, along with artifacts provided by the principal, to rate the principal's performance on multiple criteria for each standard. These ratings range from "Exemplary" as a top score to "Proficient," "Needs Improvement," and "Unsatisfactory" (South Carolina State Board of Education, 2022). The sample analyzed for this report included no instances of "Unsatisfactory" ratings.

A principal's performance for each standard is assigned based on the weight of evidence. Then, an Overall Summative Rating is determined based on the ratings across all standards (e.g., an overall "Exemplary" rating means that performances across all standards are "Exemplary"). If there is a team of evaluators, the final evaluation rating is determined by the team in consensus. Principals are given targeted feedback as part of this evaluation to help them understand the steps needed to continue growing in their leadership positions (South Carolina State Board of Education, 2022).

As this report provides an overview of the South Carolina school administrator workforce, it will additionally examine the factors noted in the literature and discussed throughout this introduction. Further analysis will help determine how such demographic characteristics and metrics compare across different contexts and in South Carolina specifically.



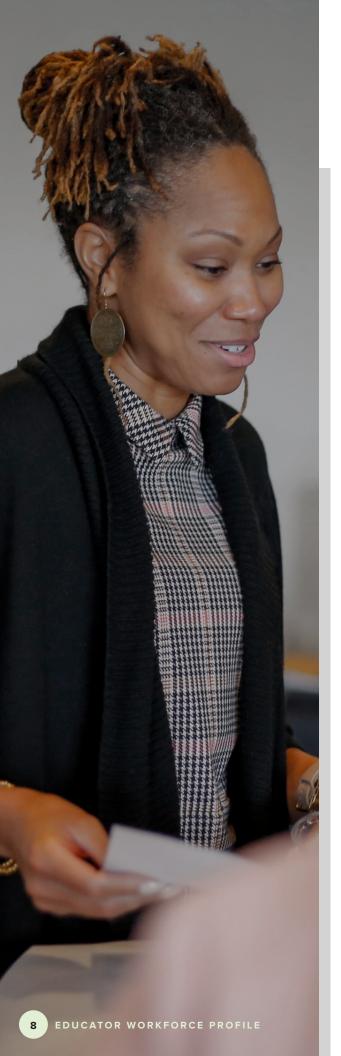
### **KEY QUESTIONS**

This report aims to describe South Carolina's school administrator workforce during the 2022-23 school year. The analysis includes a comparison of the demographic characteristics of South Carolina's principal workforce with national figures. The report also presents state-specific comparisons, examining the effects of school-level factors (i.e., geographic locale and student poverty level) on the principal workforce. Key characteristics of assistant principals in the state are also presented. Longitudinal trends are examined throughout the report, using data from the academic years 2020–21 through 2022–23. This report serves as a building block in the process of better understanding the state's administrator population, and the analysis herein can be used in conjunction with other SC TEACHER reports to inform decisions that could improve the educator workforce.

This report addresses the following key questions:

- 1. What are the characteristics of South Carolina's principal population relative to personal demographics, educational attainment and experience, and principal evaluation results? How do these characteristics compare with principals nationally?
- 2. How do principal characteristics compare among city, suburb, town, and rural schools in South Carolina?
- 3. How do principal characteristics compare among South Carolina schools with different levels of student poverty?
- 4. What are the characteristics of South Carolina's assistant principal population relative to personal demographics, educational attainment, and experience?





### DATA, VARIABLES, AND ANALYSES

This study is primarily based on data from the 2022–23 school year for 3,388<sup>1</sup> administrators, including 1,243 principals and 2,163 assistant principals, employed by South Carolina public school districts. The data analyzed came from three sources. The South Carolina Department of Education (SCDE) provided individuallevel data. Principals and assistant principals included in this analysis were identified by position code (i.e., 1 for principal, 2 for assistant principal). School-level data were obtained from the 2022-23 South Carolina School Report Cards. However, data for school locales came from the National Center for Education Statistics (NCES). Data collected from all three sources were merged before analysis. For the longitudinal analysis, a similar process was used for data from 2020-21 and 2021–22 school years. Missing data within some records are noted; however, all available data were used when possible, resulting in slightly different sample sizes for some comparisons.

This study focused on six demographic variables describing South Carolina principals: gender, racial/ethnic background, highest educational degree attained, years of experience in education, tenure at current school, and performance evaluation results (i.e., PADEPP ratings). The last two variables were unavailable for assistant principals, so only the first four (i.e., gender, racial/ethnic background, highest educational degree attained, and years of experience in education) were analyzed.

For most of the variables discussed, percentages of administrators possessing the characteristic of interest (e.g., those holding a doctoral degree) were used in analysis. Percentages were used because comparing the raw numbers of administrators would have presented a skewed view, as the number of administrators is not evenly distributed across contexts (e.g., there are more rural schools than town schools and, therefore, more rural principals than town principals). For the two variables linked to experience (i.e., years of experience and tenure at current school), averages were computed, and these averages were the basis for comparisons across contexts.

<sup>&</sup>lt;sup>1</sup>This total is not equal to the sum of principals and assistant principals because some administrators have been assigned positions of both principal and assistant principal.



For locale, schools were categorized according to census-defined geographic designations (city, suburb, town, or rural) assigned through NCES (NCES, n.d.). These codes are based on population density and proximity to an urban area (i.e., city) or an urbanized cluster (i.e., town). SC TEACHER uses these four geographic designations instead of the urban-rural dichotomy to provide a more nuanced context for geographic locale.

The SCDE's pupils-in-poverty (PIP) index was used for assessing school poverty levels. All schools in South Carolina were ranked, and quartiles were determined to create poverty designations of high-poverty (i.e., top 25%), moderate-poverty (i.e., middle 50%), and low-poverty (i.e., bottom 25%) schools.

The national data about principals in this report also came from NCES, which has produced a series of reports on principals nationwide since 2010 (e.g., Battle, 2010). These reports are based on the National Teacher and Principal Survey and a Principal Follow-up Survey. The most recent, related data were published in the *Characteristics of 2020–21 Public and Private K–12 School Principals in the United States* report (Taie & Lewis, 2022). That specific report was the source of the national data included throughout this study.

A detailed description of the statistical processes utilized in the analyses for this report is provided in the technical appendix. For each of the first three key questions, the report includes three parts: (1) a summary of the distribution of the principal characteristics, (2) a longitudinal comparison of data over three academic years from 2020–21 to 2022–23, and (3) a discussion of the results to draw comparisons between South Carolina findings and published research findings from across the U.S. For the fourth key question, the report includes a summary of the distribution of assistant principal characteristics in the 2022–23 academic year and a brief comparison with the available data published elsewhere.

Statistical analyses were only conducted with 2022–23 data. Longitudinal data comparisons from the 2020-21 and 2021-22 school years are presented descriptively. Throughout this report, we focus on the magnitude of differences or effect sizes. This is a common method for analyzing population data (rather than using p-values for sample data), as we are here with the entire population of South Carolina principals. Effect size measures how strong or meaningful a difference or relationship is between groups or variables. For instance, an effect size can indicate how significant the difference is in the average tenure of principals at schools with different poverty levels. A large effect size means the difference is quite noticeable and important, while a small effect size means the difference is minor and less impactful. For differences or relationships to be categorized as having a certain effect size (small, medium, or large), specific statistical thresholds must be met.



### + KEY QUESTION 1

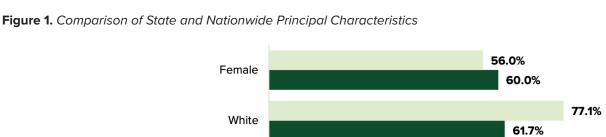
What are the characteristics of South Carolina's principal population relative to personal demographics, educational attainment and experience, and principal evaluation results? How do these characteristics compare with principals nationally?

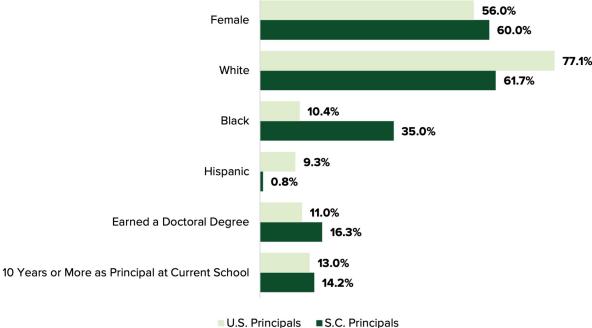
To address Key Question 1, we examined the percentage of South Carolina principals by categories of available demographic data, including gender, race/ethnicity, degree attainment, years of experience in public education, tenure as principal at the current school, and principal evaluation ratings (i.e., PADEPP). Longitudinal values for these variables from the years 2020–21 to 2022–23 were also analyzed. National figures used in comparison were from the 2020–21 academic year.

### Characteristics of South Carolina Principals Compared to Principals Nationwide

Analysis of 2022–23 school year data revealed that the principal workforce in the state largely mirrored the workforce nationwide (Figure 1). Most South Carolina principals were female (60%), representing a slightly higher percentage than the U.S. average (56%). The state principal workforce had a markedly higher percentage of individuals with a doctorate (16%) than principals nationwide (11%). The percentage of those individuals who had served as principals at their current school for ten or more years was comparable, with the South Carolina workforce marginally higher (14%) than the country as a whole (13%).

The most striking differences between state and national data pertain to the racial and ethnic composition of principals. In South Carolina, 35% of principals were Black, compared to just 10% nationally. Conversely, only 1% of South Carolina principals were Hispanic, significantly lower than the 9% national average. These trends are consistent with similar patterns observed in the South Carolina teacher workforce (Starrett et al., 2023). Furthermore, the percentage of Black principals closely reflects the Black student population in the state, which stands at 31% (S.C. Department of Education, 2024).





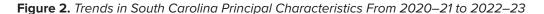
Note. For the percentage of U.S. principals with a doctoral degree, the value represents those with a doctorate or a first professional degree (e.g., M.D., D.D.S., or J.D.). The South Carolina value solely represents those with a doctorate.

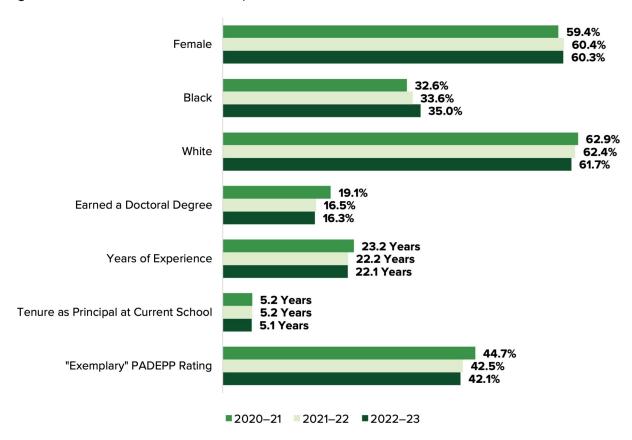
Regarding years of experience in education, South Carolina principals had an average of 22.1 years. This figure could not be directly compared to national figures as the state-level variable represents all years of experience in public education (e.g., years teaching, years as a teacher's aide, years as an assistant principal), while the available U.S. data solely represents years of experience as a principal (i.e., 6.9 years; Taie & Lewis, 2022). Regardless, this average for South Carolina principals indicates the population's notable investment and experience in the field. For tenure at their current school, state principals had an average of slightly more than five years. This was slightly higher than the national average, which was 4.5 years (Taie & Lewis, 2022).

The analysis of South Carolina principal evaluation data (i.e., PADEPP) revealed that more than 40% of these school leaders achieved an "Exemplary" rating, and 98% achieved either "Exemplary" or "Proficient" ratings. No comparisons to national data were available, as states largely have unique systems for rating their principals.

### **Trends in Principal Characteristics Over Time**

These characteristics from 2022–23 present a snapshot of the current South Carolina principal population. Additionally, it is important to examine demographic data across time to identify any notable trends or changes occurring in the state. Figure 2 shows percentages of principal demographics across the three academic years from 2020–21 through 2022–23, as well as the average number of years of experience and tenure at the current school.





The longitudinal profile of South Carolina principals shows significant stability across categories. The percentage of Black principals over the three academic years rose slightly, corresponding with a small decrease in the percentage of White principals.

The percentage of principals with a doctorate perhaps had the most notable change from 2020–21 to 2021–22. This dip from 19.1% to 16.5% was accompanied by a small decrease in years of experience (i.e., from 23.2 to 22.2 years) over the same two years. The percentage of principals achieving an "Exemplary" PADEPP rating also dropped slightly during the examined span, with the largest decrease being from 2020–21 to 2021–22. It is possible that emerging from the pandemic may have played a role in these changes. Monitoring these figures over the next few years will help reveal whether any of these changes truly represent significant trends.

### Relationships Between South Carolina Principal Characteristics and Published Studies

There is limited published material about the demographic characteristics of principals in the U.S. beyond the national data previously discussed. Illinois recently reported that 54% of their school principals are female, about 14% identify as Black, and about 6% identify as Latinx (Illinois State Board of Education, 2021). Comparably, South Carolina has a higher percentage of female and Black principals but a much lower percentage of Latinx or Hispanic principals. These kinds of comparisons may be misleading, as states have different demographic compositions. For example, Texas public schools had a comparable percentage of female principals to South Carolina (i.e., 67%), a lower percentage of Black principals (i.e., 15%), and a higher percentage of Hispanic principals (i.e., 25%) (Landa, 2022). Yet, about 40% of Texas's population identifies as Hispanic, based on the latest estimates from the U.S. Census Bureau (Ura, 2022). That is a much higher proportion of the state compared to the approximately 7% of South Carolina's population (U.S. Census Bureau, 2021b).

Different contexts like these are also why some of the previous comparisons with national data should be viewed with caution. The national average for the percentage of Hispanic principals was close to 9%, whereas South Carolina's was less than 1%. Knowing the Hispanic population makes up about 19% of the country's population (U.S. Census Bureau, 2021a)—almost three times the percentage of the state—adds important context to this finding. Such differences in baseline demographic rates suggest that, particularly for variables like race/ethnicity, comparing South Carolina to states with similar population demographics would be more appropriate. Georgia, for example, reported recent values in line with South Carolina, with 41% of their state principals identifying as Black and 2% identifying as Latinx (The Education Trust, 2022). In comparison, Grissom et al. (2019) reported that only 19% of Tennessee's principals identified as Black.

Other examined variables are easier to compare across all states but are not frequently reported. Guthery and Bailes (2022) found that the average principal tenure at a school in Texas was four years, about a year shorter than in South Carolina. Breazeale (2022) found that about 57% of Mississippi public school principals were in their first, second, or third year of tenure at their current school but did not report an overall average. Grissom et al. (2019) reported that 40% of Tennessee's principals had earned a doctorate or specialist degree (Ed.S.). This value is significantly higher than South Carolina (16%), but our reported value solely represents principals with doctoral degrees (i.e., not specialist degrees).

Principals are not evaluated at the national level, so comparisons of South Carolina ratings to country-wide ratings are not available. Some studies (e.g., Grissom et al., 2019) use the School Leaders Licensure Assessment score as a proxy for a principal rating, but this test is for entry-level leaders only. (In most cases, they take it only once.) Many individual states evaluate public school principals, but these evaluations can vary dramatically; only 30 states currently require annual evaluations (National Council of Teacher Quality, 2022). Because of the differences in these assessments and when they are given, we have refrained from drawing comparisons.

### + KEY QUESTION 2

# How do principal characteristics compare among city, suburb, town, and rural schools in South Carolina?

For Key Question 2, South Carolina schools were categorized by geographical locale using the location codes provided by NCES to represent a city, suburb, town, or rural setting. After dividing principals into these four categories based on their work location, percentages of principals were compared by characteristics. Detailed statistical analyses are presented in the technical appendix.

Most principals in South Carolina work in rural (n = 494; 40%) or suburban (n = 367, 30%) school settings. Fewer principals work in city (n = 221; 18%) or town (n = 149; 12%) school settings. Differences in percentages for principals' characteristics were analyzed among these locales.

### **Differences in Principal Characteristics Across Geographic Locales**

There were no statistically significant differences in principals' gender, total years of experience, and doctoral degree attainment across city, suburban, town, and rural school settings. The observed differences in principals' race and PADEPP evaluation ratings were statistically significant between suburban schools and each of the three other locales (i.e., city, town, and rural schools). Differences in the mean tenure at the current school were statistically significant between principals in suburban and town schools and principals in suburban and rural schools. However, the magnitudes of all these statistically significant differences were small.

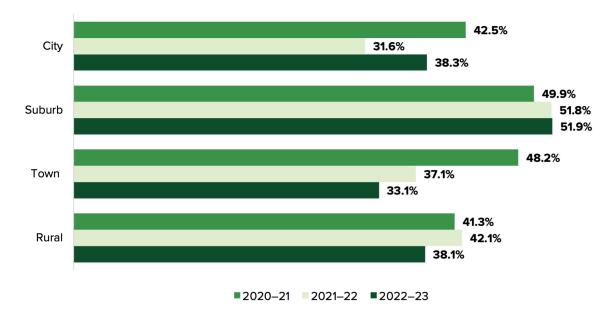
Looking among school locations, suburban schools were most distinct in terms of principal characteristics. The racial distribution of principals in suburban schools differed, with a smaller percentage of Black principals (25%) and a greater percentage of White principals than in other locales. A higher proportion of principals in suburban schools earned an "Exemplary" PADEPP rating (52%), compared to those in city (38%), town (33%), and rural schools (38%). Finally, on average, principals in suburban schools had been working at their current schools longer (m = 5.6 years) than their counterparts in town (m = 4.5 years) and rural schools (m = 4.7 years).

### Differences in Principal Characteristics Over Time by Geographic Locale

We also investigated trends in the characteristics of South Carolina principals across school locales over three academic years. The most notable variability was observed in the percentage of principals who earned an "Exemplary" rating on their PADEPP evaluation. Figure 3 illustrates longitudinal changes for this characteristic across locations.

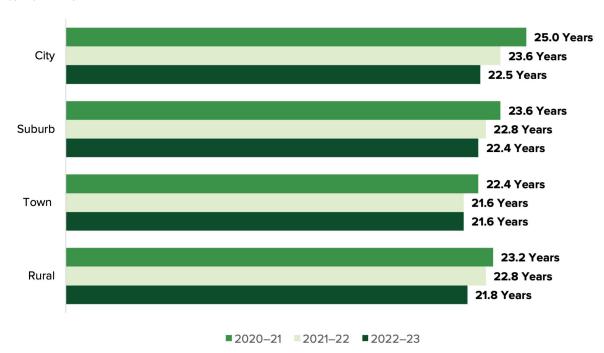
In suburban schools, the proportion of principals with an "Exemplary" rating was relatively stable, increasing from around 50% to 52% in the academic years from 2020–21 to 2022–23. City, town, and rural schools experienced a downward trend but at differing rates. The most noticeable decrease was observed in town schools where the proportion of principals who earned an "Exemplary" rating was 48%, the second highest among the four locations in 2020–21. It shrunk to 37% in 2021–22 and then dropped to 33%, the lowest among the four locations, in 2022–23. Rural schools experienced a small dip from 41% in 2020–21 to 38% in 2022–23. City schools saw a significant drop in this proportion of principals from 2020–21 to 2021–22 but saw it recover somewhat in 2022–23. Considering that suburban schools have experienced an increase in the proportion of principals with an "Exemplary" rating while the other locations have seen a decrease, there may be a growing disparity between suburban and other schools in this regard. Monitoring principal ratings over the next academic years across school locales will be essential for assessing the growth rate and magnitude of this gap.

**Figure 3.** Percentages of South Carolina Principals Receiving "Exemplary" Evaluations by School Locale From 2020–21 to 2022–23



Over the three academic years examined, the total years of experience in education for South Carolina principals decreased across all locales (Figure 4). In 2020–21, principals working in city schools had the greatest average years of experience. However, city school leaders also experienced the largest decrease (i.e., a 10% drop) in experience during the three-year period. Town schools, which had principals with the lowest average years of experience each academic year, saw the smallest drop over this examined timespan (3.6%). These longitudinal trends resulted in principals having similar average years of experience across locales in 2022–23.

**Figure 4.** Average Years of Experience for South Carolina Principals by School Locale From 2020–21 to 2022–23



As shown in Figure 5, city, suburban, and town schools experienced stability in principals' average tenure at the current school across this longitudinal data. Rural schools, however, experienced a downward trend, with the mean tenure decreasing from an average of 5.2 years in 2020–21 to 4.7 years in 2022–23. Over these three academic years, rural schools became more similar to town schools, where the average tenure had been the lowest among the four locations each year.

5.5 Years City 5.7 Years 5.6 Years 5.5 Years Suburb 5.7 Years 5.6 Years 4.5 Years Town 4.1 Years 4.5 Years 5.2 Years Rural 5.0 Years 4.7 Years **■**2020-21 **■**2021-22 **■**2022-23

**Figure 5.** Average Tenure at Current School for South Carolina Principals by School Locale From 2020-21 to 2022-23

# Relationships Between South Carolina Principal Characteristics Across Geographic Locale and Published Studies

There is not much available data reported from other states examining principal characteristics across geographic locales. However, there are some national figures from the same NCES source discussed in Key Question 1 (i.e., Taie & Lewis, 2022). While there were no differences in percentages of principals' gender in South Carolina across locales, the national data seems notably different. Throughout the U.S., the percentage of female principals was 62.4% in city schools, 58.3% in suburban schools, 50.5% in rural schools, and 47.9% in town schools. This variability stands in contrast to the approximately 60% across all locales in South Carolina schools. The national report (i.e., Taie & Lewis, 2022) did not present statistical analysis of such locale-based differences.

In South Carolina, the average years of experience did not vary significantly across locales for principals. This was also the case for national data (Taie & Lewis, 2022). It is important to note again that the national data for this variable is not exactly comparable to South Carolina data. State values represented years of experience in the field of education, and the national data represented years of experience solely as a principal.

The percentage of principals in South Carolina earning doctoral degrees did not differ significantly across locale, but the national data showed noticeable differences. Nationally, percentages were much higher in city (13.6%) and suburban schools (13.1%), compared to rural (8.5%) and town schools (5.7%) (Taie & Lewis, 2022). In South Carolina, the highest percentages were in city and town schools (18.1% in both), followed by rural (15.8%) and suburban schools (15.3%).

In South Carolina, there were a few differences regarding principal tenure based on locales, with suburban school leaders having slightly longer durations than town or rural school principals. National data shows a small difference between suburban school principals (4.6 years) and town school principals (4.3 years) but negligible differences otherwise (i.e., 4.5 years for both city and rural settings) (Taie & Lewis, 2022).

The largest divergence between state principal trends and nationwide trends relates to race/ethnicity. In the U.S. as a whole, the highest percentage of Black principals is in city schools (18.5%), followed by suburban (9.8%), town (6.4%), and rural contexts (4.6%) (Taie & Lewis, 2022). In South Carolina, percentages are higher across all locales, with the greatest percentage in town schools (43.0%), followed by city (40.3%), rural (37.3%), and suburban contexts (25.1%).

There are no national rating systems for principals, but scholars have published analyses of some other states' evaluations across locales. Grissom et al. (2018) found that there were no significant differences in Tennessee's principal evaluations (Tennessee Educator Acceleration Model [TEAM]) across city, suburban, rural, and town schools, unlike the results presented here for South Carolina. However, it is important to note that Grissom et al. (2018) examined differences between means, whereas we examined differences in the percentages of principals achieving "Exemplary" status.

Notably, Grissom et al. (2019) examined several similar demographics to this report in Tennessee's principal population across locales (grouping town and rural schools together). They specifically examined years of principal experience, tenure at school, degree attainment, and rating (i.e., School Leaders Licensure Assessment score). While they did find some statistically significant differences across locales (e.g., town/rural school principals had lower ratings than suburban or city schools but a higher percentage of principals with Ph.D.s or specialist degrees), they concluded that most of these differences were largely attributable to a few other factors, including student poverty.

### + KEY QUESTION 3

# How do principal characteristics compare among South Carolina schools with different levels of student poverty?

For Key Question 3, South Carolina schools were categorized by the number of students living in poverty, using the SCDE pupils-in-poverty (PIP) index. Schools in the highest 25% of the state's PIP ratings were considered high-poverty schools. Schools in the lowest quartile were marked as low-poverty schools. Schools falling between these two quartiles, the middle 50% of PIP ratings, were categorized as moderate-poverty schools.

After dividing schools into these three PIP levels, principal characteristics were compared across categories. Variations among poverty levels were analyzed to identify any significant and/or meaningful differences. Detailed statistical analyses are presented in the technical appendix.

### **Differences in Principal Characteristics Across School Poverty Levels**

Several of the examined principal characteristics did not differ meaningfully across school poverty levels (Figure 6). Mean years of experience in education and average tenure at the current school showed little variance across contexts. Principals at high-poverty schools had slightly lower years of tenure at the current school (4.7 years) than the other two contexts and slightly more years of experience (22.2 years), but none of the pairwise comparisons were statistically significant.

Gender, degree attainment, and PADEPP ratings were statistically different across some poverty levels, but the differences did not meet notable effect size thresholds. The percentage of female principals in low-poverty schools was significantly lower than in high-poverty contexts, but the magnitude of this difference was small. Other comparisons regarding gender were not statistically significant. There was a statistically significant difference between low- and high-poverty schools regarding percentages of principals holding a doctoral degree, with a greater proportion in high-poverty contexts. Finally, across poverty levels, all pairwise comparisons between the percentages of principals earning an "Exemplary" evaluation on PADEPP were statistically significant. However, the magnitudes of these differences were all small.

The relationships that reached at least medium levels of significance primarily concerned race/ethnicity, though not all pairwise comparisons met this threshold. The percentage of Black principals was statistically higher in high-poverty schools than in low-poverty schools, with the difference meeting the high effect size threshold. Additionally, the difference in the percentage of Black principals between high-poverty and moderate-poverty schools was significant and met the medium effect size threshold. Lastly, there was a statistically significant difference between the percentages of Black principals at low- and moderate-poverty schools. However, this difference did not meet the medium effect size threshold.

Similarly, the percentages of White principals were significantly different across all school poverty level comparisons. Differences between low- and high-poverty schools and moderate- and high-poverty schools both met the medium effect size threshold. In these sets of comparisons, the lower-poverty schools had measurably higher percentages of White principals.

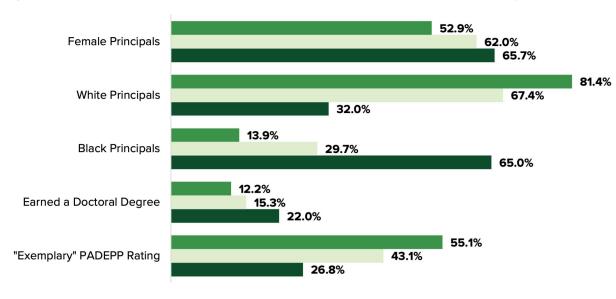


Figure 6. Comparisons of South Carolina Principal Characteristics Across School Poverty Levels

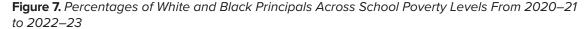
### Differences in Principal Characteristics Over Time by School Poverty Level

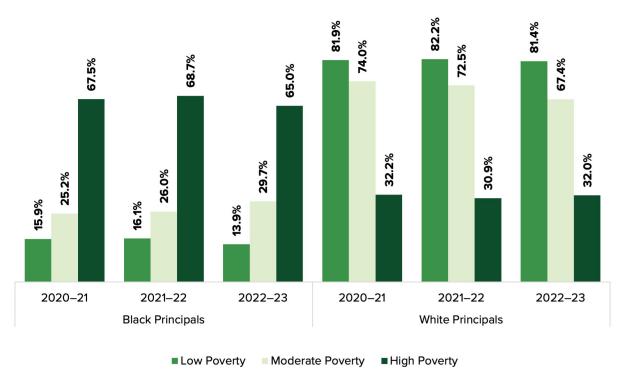
■ Low Poverty

These principal characteristics were analyzed over time to determine if there were notable longitudinal trends. Examining the differences in race/ethnicity across school poverty contexts from 2020–21 to 2022–23 (Figure 7) showed stable percentages over time. The most notable change was a slight increase in the percentage of Black principals in moderate-poverty schools from 2021–22 to 2022–23, with a coinciding decrease in White principals in that context.

■ Moderate Poverty

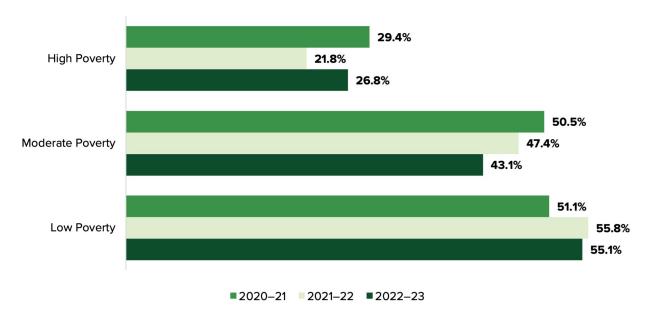
■ High Poverty





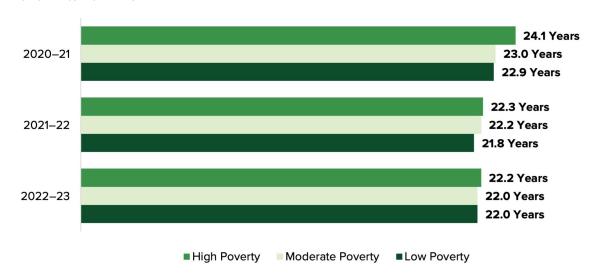
Differences in the measure of principal performance (i.e., PADEPP ratings of "Exemplary") are displayed in Figure 8. Across the three categories of school poverty, the percentage of South Carolina principals receiving a rating of "Exemplary" varied irregularly over time. The percentage in high-poverty contexts decreased and then increased from 2021–22 to 2022–23. In moderate-poverty contexts, it decreased across this time span. In low-poverty contexts, it increased and then decreased. Throughout all three years, the percentage of principals in high-poverty schools rated as "Exemplary" was much lower than that of principals in low- or moderate-poverty locations.

**Figure 8.** Percentage of South Carolina Principals Earning "Exemplary" PADEPP Ratings by School Poverty Level From 2020–21 to 2022–23



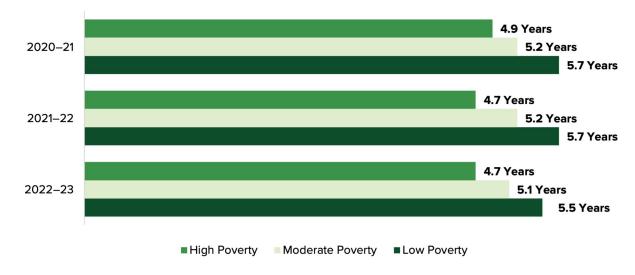
Statistical analysis of mean years of experience across poverty levels did not reveal any differences. Longitudinal analysis of this relationship from 2020–21 to 2022–23 (Figure 9) indicates that these similarities in experience levels have been consistent over time.

**Figure 9.** Average Years of Experience for South Carolina Principals by School Poverty Level From 2020–21 to 2022–23



Tenure at the current school also did not have statistical differences across poverty level contexts in 2022–23. Examining this variable over time from 2020–21 to 2022–23 (Figure 10) reveals that the average tenure across schools has remained consistent, with high-poverty schools having the lowest average and low-poverty schools having the highest average over this time span.

**Figure 10.** Average Tenure at Current School for South Carolina Principals by School Poverty Level From 2020–21 to 2022–23



## Relationships Between South Carolina Principal Characteristics Across School Poverty and Published Studies

National reports (e.g., Taie & Lewis, 2022) and published results based on data from other states (e.g., Tennessee; Grissom et al., 2019) do report patterns of principal characteristics across poverty contexts. However, in many cases, different metrics are used from the ones analyzed in this report (PIP). For example, Taie & Lewis (2022) and Grissom et al. (2019, 2021) used percentages of students who qualified for free and reduced-price lunches as a measure of student poverty. This difference means that we can only safely make qualitative comparisons between South Carolina results and these other findings.

One finding at the national level is that female principals are overrepresented in high-poverty schools and underrepresented in low-poverty schools (Grissom et al., 2021). This gender pattern is similar to trends in South Carolina. Nationally, high-poverty schools are also more likely to have a Black or Hispanic principal than moderate- or low-poverty schools (Taie & Lewis, 2022). Again, this higher likelihood of having a Black principal in a higher poverty context matches the relationship in South Carolina.

Regarding degree attainment, Taie and Lewis (2022) reported that across the U.S., high-poverty schools had the highest percentages of principals with a doctorate or first professional degree (e.g., M.D., D.D.S., or J.D.). This was also the case for South Carolina. Another similarity with the national data was that high-poverty schools tended to have principals with the shortest tenure (Taie & Lewis, 2022).

As far as comparisons to other states, Grissom et al. (2018) reported that higher-poverty schools in Tennessee were more likely to have principals with lower ratings than schools in other contexts, similar to the findings in South Carolina. Notably, Grissom et al. (2018) warned that this pattern might be due, in part, to evaluators mistaking additional challenges within these schools (e.g., fewer resources) with ineffective leadership, a bias found in Hermann and Ross's (2016) study on New Jersey schools.

### + KEY QUESTION 4

# What are the characteristics of South Carolina's assistant principal population relative to personal demographics, educational attainment, and experience?

Demographics of assistant principals closely mirrored data on principals. This was expected given the typical career progression. In 2022–23, the majority of assistant principals were White (62%), with Black assistant principals making up 35%. Regarding gender, 61% of assistant principals were female, slightly higher than the 60% of principals. The average experience in the field of education for assistant principals was 18 years, compared to 22 years for principals. Additionally, 10% of assistant principals had earned a doctoral degree, compared to 16% of principals. These latter two characteristics are likely to change as some assistant principals gain experience and pursue doctoral degrees on their paths to becoming principals.

# Relationships Between South Carolina Assistant Principal Characteristics and Published Studies

As noted by Goldring et al. (2021), there are no national studies on the demographic characteristics of assistant principals, and NCES does not collect data on this population. However, Goldring et al. (2021) did find related data from published research on administrators in Illinois (Ringel et al., 2004), Iowa (Hollingworth & Dude, 2009), Florida (Folsom et al., 2015), and North Carolina (Gates et al., 2004; Osborne-Lampkin & Folsom, 2017), as well as state administrative data from Pennsylvania and Tennessee. In their synthesis of this data, Goldring et al. (2021) found that 24% of assistant principals in these states were people of color, though they pointed out the percentages varied noticeably from state to state (e.g., a low of about 8% in Iowa to a high of about 40% in Florida). These percentages also varied over time, which is an important consideration, given the different datasets stretched over 20 years. Regarding gender across these states, only 52% of assistant principals were female on average (compared to 61% in South Carolina). This percentage also varied greatly across location and time, ranging from 29% in Iowa in 2008 to 65% in Tennessee in 2016 (Goldring et al., 2021). Within their overall research, Goldring et al. (2021) noted a great need for future studies to investigate differences in assistant principals—and their advancement to principalships—across different variables like locale and context.

### + CONCLUSIONS AND RECOMMENDATIONS

The purpose of this SC TEACHER South Carolina Administrator Workforce Profile for 2022–23 is to proffer an accurate description of the state's public school principals and assistant principals. It also provides analysis to reveal trends in how the administrator workforce has changed from 2020–21 to 2022–23. This recurring study of annual and longitudinal data will allow us to further define shifts in the administrator workforce over time, a long-term goal of this work. Another long-term goal is to use the results presented here in conjunction with other SC TEACHER reports to form a better understanding of how school administrator characteristics are related to factors regarding the functionality of schools, including teacher quality and student learning. This report uses a multimethod approach to attempt to capture metrics related to administrator effectiveness by including variables such as highest degree attained, years of experience in education, tenure at the current school, and evaluation ratings. However, more work is needed to determine whether these or other variables are meaningful indicators of quality for South Carolina administrators.

The 2022–23 data revealed that a notable percentage of principals in the state (16%) had earned doctorates. This value has fallen from 19% in 2020–21 but is still higher than the national average (11%). For years of experience in education, the average was 18 years for assistant principals and 22 years for principals in the state. These results could not be compared to national data in a clear manner as NCES reports years of experience as a principal, and South Carolina data includes all years in the field of education. Both values are important, and teasing the state data apart would give two variables for meaningful examination.

Principals in the state continue to meet necessary PADEPP evaluations, with over 42% earning an "Exemplary" rating in 2022–23 and almost 56% earning "Proficient." The percentage of principals earning the highest rating is statistically different depending on the locale of the school, with suburban principals much higher (52%) than administrators in the other locales.

PADEPP ratings may be linked to principal effectiveness, but a closer look at other important measures is needed to firmly establish that relationship. For instance, analyzing data related to the effectiveness principals had as teachers (e.g., ADEPT rating) before becoming administrators might also be helpful, as some research has shown that more effective teachers make more successful principals (Goldhaber et al., 2019). Additionally, given that student achievement is the ultimate goal for schools, examining how PADEPP ratings relate to student performance and learning (e.g., graduation rate, college readiness, standardized test results) metrics is an important future step. Finally, the costs that accompany teacher turnover (e.g., lower student achievement, increased expenses for recruiting new teachers) indicate that examining the relationship between PADEPP ratings and teachers' leaving would also be valuable. Links between principal PADEPP ratings and teachers' perceptions of their working conditions could also be examined to gain insights into whether the ratings at all inform how teachers feel about working in their schools.

Administrator turnover is also important to examine. Principals and assistant principals exert their influence in a variety of ways, affecting everyone else at the school. Research has shown that when administrators leave, teachers are more likely to leave (Buckley, 2021), and student achievement decreases (Kearney et al., 2012). Determining administrators' perceptions of their working conditions and their job satisfaction may provide insights that can lead to improved conditions and an increased likelihood of staying in their positions.

This SC TEACHER overview of the 2022–23 South Carolina administrator workforce helps provide a better picture of the public school principals and assistant principals working in our state. By coupling this report with further research initiatives, we can aim to deepen our understanding of how administrator attributes relate to overall school functionality, teacher quality, and student learning outcomes.

### + REFERENCES

- Arthur, L., & Bradley, S. (2023). Teacher retention in challenging schools: Please don't say goodbye! *Teachers and Teaching, 29*(7-8), 753–771. https://doi.org/10.1080/13540602.2023.2201423
- Bacher-Hicks, A., Billings, S., & Deming, D. (2019). *The school to prison pipeline: Long-run impacts of school suspensions on adult crime* (Working Paper 26257). National Bureau of Economic Research. https://doi.org/10.3386/w26257
- Balingit, M. (2023, August 24). Teacher shortages have gotten worse. Here's how schools are coping. The Washington Post. https://www.washingtonpost.com/education/2023/08/24/teacher-shortages-pipeline-college-licenses/
- Bartanen, B. (2020). Principal quality and student attendance. *Educational Researcher, 49*(2), 101–113. https://doi.org/10.3102/0013189x19898702
- Bartanen, B., & Grissom, J. A. (2019). *School principal race and the hiring and retention of racially diverse teachers.* (EdWorkingPaper: 19-59). Annenberg Institute at Brown University. https://doi.org/10.26300/ny03-zw18
- Bartanen, B., Grissom, J. A., & Rogers, L. K. (2019). The impacts of principal turnover. *Educational Evaluation and Policy Analysis*, 41(3), 350–374. https://doi.org/10.3102/0162373719855044
- Bastian, K. C., & Henry, G. T. (2015). The apprentice: Pathways to the principalship and student achievement. *Educational Administration Quarterly, 51*(4), 600–639. https://doi.org/10.1177/0013161x14562213
- Battle, D. (2010). *Principal attrition and mobility: Results from the 2008–09 Principal Follow-up Survey* (NCES 2010-337). U.S. Department of Education, National Center for Education Statistics. https://nces.ed.gov/pubs2010/2010337.pdf
- Berry, B., Bastian, K. C., Darling-Hammond, L., & Kini, T. (2021, January). *The importance of teaching and learning conditions: Influences on teacher retention and school performance in North Carolina.* The Learning Policy. https://learningpolicyinstitute.org/product/leandro-teaching-and-learning-conditions-brief
- Béteille, T., Kalogrides, D., & Loeb, S. (2012). Stepping stones: Principal career paths and school outcomes. *Social Science Research*, *41*(4), 904–919. https://doi.org/10.1016/j.ssresearch.2012.03.003
- Bevel, R. K., & Mitchell, R. M. (2012). The effects of academic optimism on elementary reading achievement. *Journal of Educational Administration*, *50*(6), 773–787. https://doi.org/10.1108/09578231211264685
- Blazar, D., & Lagos, F. (n.d.). *Professional staff diversity and student outcomes: Extending our understanding of race/ethnicity-matching effects in education* (EdWorkingPaper: 21-500). Annenberg Institute at Brown University. https://doi.org/10.26300/BZ9T-7640
- Bowers, A. J., & White, B. R. (2014). Do principal preparation and teacher qualifications influence different types of school growth trajectories in Illinois? *Journal of Educational Administration*, *52*(5), 705–736. https://doi.org/10.1108/JEA-12-2012-0134
- Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., & Wyckoff, J. (2011). The influence of school administrators on teacher retention decisions. *American Educational Research Journal*, *48*(2), 303–333. https://doi.org/10.3102/0002831210380788
- Breazeale, G. (2022, November). *The leadership shuffle: Exploring turnover in Mississippi's principal workforce*. Mississippi First. https://www.mississippifirst.org/blog/leadership-shuffle/#:~:text=target%20this%20issue.-,Over%20one%2Dfifth%20of%20Mississippi%20principals%20are%20in%20the%20first,they%20did%20in%202021%2D2022

- Brockmeier, L. L., Starr, G., Green, R., Pate, J. L., & Leech, D. W. (2013). Principal and school-level effects on elementary school student achievement. *International Journal of Educational Leadership Preparation*, 8(1), 49–61. https://files.eric.ed.gov/fulltext/EJ1013001.pdf
- Buckman, D. G. (2021). The influence of principal retention and principal turnover on teacher turnover. Journal of Educational Leadership and Policy Studies, V, 1–26. https://files.eric.ed.gov/fulltext/EJ1342371.pdf
- Burkhauser, S. (2017). How much do school principals matter when it comes to teacher working conditions? Educational Evaluation and Policy Analysis, 39(1), 126–145. https://doi.org/10.3102/0162373716668028
- Clark, D., Martorell, P., & Rockoff, J. (2009). School principals and school performance. National Center for Analysis of Longitudinal Data in Education Research. https://files.eric.ed.gov/fulltext/ED509693.pdf
- Cohen J. (1988). Statistical power analysis for the behavioral sciences. Routledge Academic.
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfield, F. D., & York, R. L. (1966). *Equality of educational opportunity.* U.S. Department of Health, Education and Welfare. https://files.eric.ed.gov/fulltext/ED012275.pdf
- DeMatthews, D. E., Knight, D. S., & Shin, J. (2022). The principal-teacher churn: Understanding the relationship between leadership turnover and teacher attrition. *Educational Administration Quarterly*, 58(1), 76–109. https://doi.org/10.1177/0013161X211051974
- Dhuey, E., & Smith, J. (2014). How important are school principals in the production of student achievement? Canadian Journal of Economics/Revue Canadienne d'économique, 47(2), 634–663. https://doi.org/10.1111/caje.12086
- The Education Trust. (2022, December). *Increasing school leader diversity in Georgia*. The Education Trust. https://edtrust.org/resource/increasing-school-leader-diversity-in-georgia/
- Egalite, A. J., Kisida, B., & Winters, M. A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review, 45*, 44–52. https://doi.org/10.1016/j.econedurev.2015.01.007
- Farley-Ripple, E. N., Raffel, J. A., & Welch, J. C. (2012). Administrator career paths and decision processes. *Journal of Educational Administration*, 50(6), 788–816. https://doi.org/10.1108/09578231211264694
- Farley-Ripple, E. N., Solano, P. L., & McDuffie, M. J. (2012). Conceptual and methodological issues in research on school administrator career behavior. *Educational Researcher*, *41*(6), 220–229. https://doi.org/10.3102/0013189X12451774
- Folsom, J. S., Osborne-Lampkin, L., & Herrington, C. (2015). *A descriptive analysis of the principal workforce in Florida schools* (REL 2015-068). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. https://files.eric.ed.gov/fulltext/ED555572.pdf
- Fuller, E., & Young, M. D. (2009). *Tenure and retention of newly hired principals in Texas*. University Council for Educational Administration, Department of Educational Administration, University of Texas at Austin. https://www.casciac.org/pdfs/ucea\_tenure\_and\_retention\_report\_10\_8\_09.pdf
- Gates, S. M., Guarino, C. M., Santibanez, L., Ghosh-Dastidar, B., Brown, A. B., & Chung, C. H. (2004). *Career paths of school administrators in North Carolina*. RAND Corporation. https://www.rand.org/pubs/technical\_reports/TR129.html
- Goldhaber, D., Holden, K., & Chen, B. (2019). Do more effective teachers become more effective principals? (CALDER Working Paper No. 215-0119-1). National Center for Analysis of Longitudinal Data in Education Research. https://caldercenter.org/publications/do-more-effective-teachers-become-more-effective-principals

- Goldring, E., Rubin, M., & Herrmann, M. (2021, April). *The role of assistant principals: Evidence and insights for advancing school leadership.* The Wallace Foundation. https://wallacefoundation.org/sites/default/files/2023-10/the-role-of-assistant-principals-evidence-insights-for-advancing-school-leadership.pdf
- Grissom, J. A., & Bartanen, B. (2019). Principal effectiveness and principal turnover. *Education Finance and Policy*, 14(3), 355–382. https://doi.org/10.1162/edfp\_a\_00256
- Grissom, J. A., Bartanen, B., & Mitani, H. (2019). Principal sorting and the distribution of principal quality. *AERA Open, 5*(2), 233285841985009. https://doi.org/10.1177/2332858419850094
- Grissom, J. A., Blissett, R. S. L., & Mitani, H. (2018). Evaluating school principals: Supervisor ratings of principal practice and principal job performance. *Educational Evaluation and Policy Analysis*, 40(3), 446–472. https://doi.org/10.3102/0162373718783883
- Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How principals affect students and schools:*A systematic synthesis of two decades of research. The Wallace Foundation. https://wallacefoundation.org/report/how-principals-affect-students-and-schools-systematic-synthesis-two-decades-research
- Grissom, J. A., & Loeb, S. (2011). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals identify the central importance of managerial skills. *American Educational Research Journal*, 48(5), 1091–1123. https://doi.org/10.3102/0002831211402663
- Guthery, S., & Bailes, L. P. (2022). Building experience and retention: The influence of principal tenure on teacher retention rates. *Journal of Educational Administration*, 60(4), 439–455. https://doi.org/10.1108/JEA-09-2021-0172
- Hanushek, E. A. (1992). The trade-off between child quantity and quality. *Journal of Political Economy, 100*(1), 84–117. https://doi.org/10.1086/261808
- Harper, A. (2017, October 23). Shuffling principals can sometimes improve overall school district effectiveness. *K*–12 *Dive*. https://www.k12dive.com/news/shuffling-principals-can-sometimes-improve-overall-school-district-effectiv/507865/
- Henry, G. T., & Harbatkin, E. (2019). *Turnover at the top: Estimating the effects of principal turnover on student, teacher, and school outcomes.* (EdWorkingPaper: 19–95). Annenberg Institute at Brown University. http://www.edworkingpapers.com/ai19-95
- Hermann, M., & Ross, C. (2016, August). *Measuring principals' effectiveness: Results from New Jersey's first year of statewide principal evaluation.* U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Mid-Atlantic. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=REL2016156
- Hollingworth, L., & Dude, D. (2009). Race, gender, and school leadership in a state with shifting student demographics. *Journal of Women in Educational Leadership, 7*(3), 175–194. https://digitalcommons.unl.edu/jwel/254/
- Husain, A. N., Matsa, D. A., & Miller, A. R. (2023). Do male workers prefer male leaders?: An analysis of principals' effects on teacher retention. *Journal of Human Resources*, *58*(5), 1480–1522. https://doi.org/10.3368/jhr.58.5.1118-9838R2
- Illinois State Board of Education Department of District and School Leadership. (2021, July). Why diversity in leadership matters. Illinois State Board of Education. https://www.isbe.net/Documents/Why-Diversity-in-Leadership-Matters.pdf
- Jackson, K. M. (2012). Influence matters: The link between principal and teacher influence over school policy and teacher turnover. *Journal of School Leadership*, 22(5), 875–901. https://doi.org/10.1177/105268461202200503

- Kearney, W. S., Valadez, A., & Garcia, L. (2012). Leadership for the long-haul: The impact of administrator longevity on student achievement. *School Leadership Review, 7*(2), Article 5. https://scholarworks.sfasu.edu/slr/vol7/iss2/5/?utm\_source=scholarworks.sfasu.edu%2Fslr%2Fvol7%2Fiss2%2F5&utm\_medium=PDF&utm\_campaign=PDFCoverPages
- Landa, J. B. (2024). *Employed principal demographics 2015–16 through 2023–24*. Texas Education Agency. https://tea.texas.gov/reports-and-data/educator-data/employed-principal-demographics-2023-2024.pdf
- Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration*, *38*(2), 112–129. https://doi.org/10.1108/09578230010320064
- Levin, S., & Bradley, K. (2019). *Understanding and addressing principal turnover: A review of the research*. National Association of Secondary School Principals, Learning Policy Institute. https://learningpolicyinstitute.org/product/nassp-understanding-addressing-principal-turnover-review-research-report
- Lochmiller, C. R., Perrone, F., & Finley, C. (2024). Understanding school leadership's influence on teacher retention in high-poverty settings: An exploratory study in the U.S. *Education Sciences*, *14*(5), 545. https://doi.org/10.3390/educsci14050545
- Loeb, S., Kalogrides, D., & Horng, E. L. (2010). Principal preferences and the uneven distribution of principals across schools. *Educational Evaluation and Policy Analysis*, 32(2), 205–229. https://doi.org/10.3102/0162373710369833
- Loehrke, J. (2024, March 19). Where are all the teachers? Breaking down America's teacher shortage crisis in 5 charts. *USA Today.* https://www.usatoday.com/story/graphics/2024/03/19/teacher-shortage-crisis-explained/72958393007/
- Meier, K. J., O'Toole, L. J., Jr., & Nicholson Crotty, S. (2004). Multilevel governance and organizational performance: Investigating the political bureaucratic labyrinth. *Journal of Policy Analysis and Management*, 23(1), 31–47. https://doi.org/10.1002/pam.10177
- Miller, A. (2013). Principal turnover and student achievement. *Economics of Education Review, 36*, 60–72. https://doi.org/10.1016/j.econedurev.2013.05.004
- Miller, J. M., & Youngs, P. (2021). Person-organization fit and first-year teacher retention in the United States. *Teaching and Teacher Education*, *97*, 103226. https://doi.org/10.1016/j.tate.2020.103226
- National Association of Secondary School Principals. (2021, December). *NASSP survey signals a looming mass exodus of principals from schools*. National Association of Secondary School Principals. https://www.nassp.org/news/nassp-survey-signals-a-looming-mass-exodus-of-principals-from-schools/
- National Center for Education Statistics. (n.d.). *Elementary/secondary education data table generator.* U.S. Department of Education. https://nces.ed.gov/ccd/elsi/tableGenerator.aspx
- National Center for Education Statistics. (2024). *Principal turnover: Stayers, movers, and leavers. Condition of education*. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/programs/coe/indicator/slb
- National Council of Teacher Quality. (2022, November). State of the states 2022: Teacher and principal evaluation policies. National Council of Teacher Quality. https://www.nctq.org/dmsView/PrintReady\_NCTQ\_State-of-the-States-2022-Teacher-and-Principal-Evaluation-Policies
- Perrone, F., Young, M. D., & Fuller, E. J. (2022). A call for data on the principal pipeline. *Educational Researcher*, *51*(6), 423–430. https://doi.org/10.3102/0013189X221075767

- Osborne-Lampkin, L., & Folsom, J. S. (2017). Characteristics and career paths of North Carolina school leaders (REL 2017-230). U.S. Department of Education, Institute of Education Sciences, Regional Educational Laboratory Southeast at Florida State University. https://ies.ed.gov/ncee/rel/Products/Region/southeast/Publication/3844#:~:text=The%20analysis%20of%20the%20career,assistant%20 principals%20and%20principals%20spent
- Redding, C. (2019). A teacher like me: A review of the effect of student-teacher racial/ethnic matching on teacher perceptions of students and student academic and behavioral outcomes. *Review of Educational Research*, 89(4), 499–535. https://doi.org/10.3102/0034654319853545
- Ringel, J., Gates, S., Chung, C., Brown, A., & Ghosh-Dastidar, B. (2004). *Career paths of school administrators in Illinois: Insights from an analysis of state data* (DTIC Technical Report). RAND Corporation. https://www.rand.org/pubs/technical\_reports/TR123.html
- Russell, D. (2009, February 25). CMS shuffling principals to low-performing schools. *WBTV*. https://www.wbtv.com/story/9828931/cms-shuffling-principals-to-low-performing-schools/
- Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. University of Tennessee Value-Added Research and Assessment Center.
- Sebastian, J., & Allensworth, E. (2012). The influence of principal leadership on classroom instruction and student learning: A study of mediated pathways to learning. *Educational Administration Quarterly, 48*(4), 626–663. https://doi.org/10.1177/0013161X11436273
- Schmidt-Davis, J., & Bottoms, G. (2011). Who's next: Let's stop gambling on school performance and plan for principal succession. South Regional Education Board. https://www.sreb.org/sites/main/files/file-attachments/11v19\_principal\_succession\_planning.pdf
- Sorensen, L. C., Bushway, S. D., & Gifford, E. J. (2022). Getting tough? The effects of discretionary principal discipline on student outcomes. *Education Finance and Policy, 17*(2), 255–284. https://doi.org/10.1162/edfp\_a\_00341
- South Carolina Board of Education. (2022, April). Expanded Program for Assisting, Developing, and Evaluating Principal Performance (PADEPP). South Carolina Department of Education. https://ed.sc. gov/educators/school-and-district-administrators/principal-evaluation/program-for-assisting-developing-and-evaluating-principal-performance-guidelines-2022/
- South Carolina Department of Education. (2024). *Active Student Headcounts*. South Carolina Department of Education. https://ed.sc.gov/data/other/student-counts/active-student-headcounts/
- Starrett, A., Barth, S., & DiStefano, C. (2023, August). Teacher workforce profile in South Carolina for 2021-2022. SC TEACHER. https://sc-teacher.org/teacher-workforce-profile-in-south-carolina-for-2021-2022/
- Taie, S., and Lewis, L. (2022). Characteristics of 2020–21 public and private K–12 school principals in the United States: Results from the National Teacher and Principal Survey first look (NCES 2022-112). U.S. Department of Education. National Center for Education Statistics. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2022112.
- Taie, S., and Lewis, L. (2023). *Principal attrition and mobility. Results from the 2021–22 Principal Follow-up Survey to the National Teacher and Principal Survey* (NCES 2023-046). U.S. Department of Education, National Center for Education Statistics. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2023046
- Tran, H., Cunningham, K., Yelverton, V., Osworth, D., & Hardie, S. (2023). How can school leaders retain teachers? The relative importance of different administrative supports for teacher retention in different types of schools. *NASSP Bulletin*, *107*(3), 185–217. https://doi.org/10.1177/01926365231198858

- UNESCO & International Task Force on Teachers for Education 2030. (2024). *Global report on teachers:*Addressing teacher shortages and transforming the profession. UNESCO. https://www.unesco.org/en/articles/global-report-teachers-addressing-teacher-shortages-and-transforming-profession
- Ura, A. (2022, September 15). Hispanic Texans may not be the state's largest demographic group, new census data shows. *The Texas Tribune*. https://www.texastribune.org/2022/09/15/texas-demographics-census-2021/
- U.S. Census Bureau. (2021a). 2020 U.S. population more racially and ethnically diverse than measured in 2010. U.S. Census Bureau. https://www.census.gov/library/stories/2021/08/2020-united-states-population-more-racially-ethnically-diverse-than-2010.html#:~:text=Figure%201):-,The%20 most%20prevalent%20racial%20or%20ethnic%20group%20for%20the%20United,largest%20 racial%20and%20ethnic%20group.
- U.S. Census Bureau. (2021b). *South Carolina: 2020 census*. U.S. Census Bureau. https://www.census.gov/library/stories/state-by-state/south-carolina-population-change-between-census-decade. html#:~:text=Race%20and%20ethnicity%20(White%20alone,%25%2C%20up%20from%2054.9%25).
- Wahlstrom, K. L., Seashore L., K., Leithwood, K., & Anderson, S. E. (2010). *Investigating the links to improved student learning: Executive summary of research findings*. The Wallace Foundation. https://wallacefoundation.org/sites/default/files/2023-09/Investigating-the-Links-to-Improved-Student-Learning-Executive-Summary.pdf
- Walsh, E., & Dotter, D. (2014). *The impact of replacing principals on student achievement in DC public schools.*Mathematica Policy Research, The Walton Family Foundation. https://www.mathematica.org/publications/the-impact-of-replacing-principals-on-student-achievement-in-dc-public-schools
- Waters, T., Marzano, R. J., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Mid-Continent Regional Educational Lab. https://files.eric.ed.gov/fulltext/ED481972.pdf

### + APPENDIX: DETAILED TECHNICAL ANALYSIS REPORT

This appendix details the research study and data analysis from a statistical perspective. All relevant hypothesis tests, tests of assumptions, and measures of results are described here.

### **Data Sources**

The findings presented in this report are based on the analysis of 3,388 administrators employed by South Carolina public school districts during the 2022–23 academic year. This total included 1,243 principals and 2,163 assistant principals. The data analyzed came from three sources. Individual-level data for PK–12 administrator positions were provided by the South Carolina Department of Education (SCDE). District- and school-level data were obtained from the 2022–23 South Carolina School Report Cards. Separately, school locale data came from the National Center for Education Statistics (NCES). Data collected from all three sources were merged before analysis.

The latest national summary of principal characteristics and trends from the National Center for Educational Statistics (NCES) was for the 2020–21 school year. However, the Institute of Educational Statistics has produced a series of reports on principals nationwide since 2010 based on the National Teacher and Principal Survey and a Principal Follow-up Survey. The most recent data on a national scale related to the variables in this report were published in the *Characteristics of 2020–21 Public and Private K-12 School Principals in the United States* report (Taie & Lewis, 2022). These figures provided a basis for comparison with the population of South Carolina principals.

### **Variables**

This analysis used variables at the individual and school levels. Individual-level variables included gender, race, highest educational degree achieved, overall years of experience in education, tenure as principal at the current school, and overall evaluation rating for principals (i.e., Program for Assisting, Developing, and Evaluating Principal Performance [PADEPP]).

School-level data included geographic locale (i.e., city, suburban, town, rural) and poverty level. Geographic locale designations for schools were obtained from public records provided by the NCES (NCES, n.d.). These codes are based on population density and proximity to an urban area (i.e., city) or an urbanized cluster (i.e., town).

School poverty level was based on the percentage of pupils-in-poverty (PIP), an index that comes from the SCDE. This continuous variable was used to construct a three-level categorical variable. High-poverty schools were designated as those in the highest quartile (i.e., top 25%) of PIP of all the public schools in the state in 2022–23. Schools in the lowest quartile (i.e., bottom 25%) of PIP were classified as low poverty. Schools in the middle two quartiles (i.e., 25–75%) were categorized as moderate poverty.

### **Data Analysis**

Separate analyses were conducted to compare principal demographic variables across school locations (city, suburb, town, and rural) and poverty levels (low, moderate, and high). Chi-square tests of homogeneity were used to determine if there was an overall difference in percentages across locations or poverty levels, with an alpha of .05 used as the basis for a significant difference with the global hypothesis test. After examination of the omnibus test, if an overall difference in the percentages was found, individual tests comparing percentages between all possible group pairings for the variable were conducted. For example, when considering the percentage of principals who achieved an "Exemplary" rating on the PADEPP evaluation standard, principals achieving "Exemplary" in city schools were used as the reference group, with which to compare principals achieving an "Exemplary" rating from suburban schools, town schools, and rural schools. Next, principals achieving an "Exemplary" rating in suburban schools were compared to city, town, and rural principals, and so on. Sequentially changing the reference group allowed each characteristic combination to be considered as the baseline for comparison. The Holm-Bonferroni method was used to adjust the p-values of these pairwise comparisons so that false significant inferences could be avoided. For the variables number of years of experience and tenure at the current school, means were compared across geographic locale and poverty using an ANOVA omnibus test, followed by all possible pairwise comparisons in the same fashion as noted above. When the homogeneity of variance assumption was not satisfied, we conducted Welch's oneway ANOVA and used Games-Howell post hoc tests for pairwise comparison.

Lastly, effect sizes for all statistically significant comparisons were computed using Cohen's *d* (difference in means) and Cohen's *h* (difference in percentages). Cohen's *d* effect size values of 0.2 are considered small, 0.5 are considered medium, and values of 0.8 or higher are considered large (Cohen, 1988). For Cohen's *h*, effect size values of 0.28 are small, 0.71 are medium, and 1.13 or greater are large (Cohen, 1988). As we examined the entire population of principals in South Carolina (i.e., census) and were not inferring to a wider population of principals, we elected to emphasize any effect sizes that were medium or larger (greater than or equal to 0.71 for Cohen's *h*), rather than focus on differences that were statistically significant but small in effect size.

### **Principal Demographic Data**

We compared the demographic characteristics of the South Carolina principal population to the greater population of principals in the United States (Table A1). This was only done for principals, as national data for assistant principals has not been reported. Data on the principal population in the United States during the 2020–21 school year were taken from NCES-published data from the 2020–21 National Teacher and Principal Survey (Taie & Lewis, 2022). In the 2022–23 school year, the majority of South Carolina principals (62%) were White, while 35% were Black. Less than 2% of principals were from other racial/ethnic backgrounds, with about 2% categorized as unknown. Compared to national data, South Carolina had a higher percentage of Black principals (35% statewide vs. 10% nationwide), a lower percentage of Hispanic principals (1% statewide vs. 9% nationwide), and a lower percentage of White principals (62% statewide vs. 77% nationwide). Regarding gender, South Carolina had a slightly higher percentage of female principals (60%) than the nation (56%). Examining race/ethnicity and gender in combination, 38% of South Carolina principals were White females, 25.0% were White males, 22.1% were Black females, and 13.7% were Black males in the 2022–23 academic year. (Comparable figures for examining race/ethnicity and gender in combination within national data are not available.)

Table A1. Comparison of Demographic Variables for Principals in South Carolina and Nationwide

Demographic variable		S.C. percentage (2020–21)	S.C. percentage (2021–22)	S.C. percentage (2022–23)	U.S. percentage (2020–21)	
	Female	59.4 60.4		60.3	56.0	
Gender	Male	39.8	39.8 38.6		44.0	
	Not reported	0.9	1.0	1.1	n/a	
	White	62.9	62.4	61.7	77.1	
	Black	32.6	33.6	35.0	10.4	
	Hispanic	0.9	0.9	0.8	9.3	
Race/ethnicity	Asian	0.2	0.2	0.2	1.0	
	Two or more races	n/a	n/a	0.1	1.3	
	Other	0.1	0.2	n/a	0.9	
	Not reported	3.4	2.8	2.2	n/a	

### **Principal Education and Experience Data**

Almost all the principals in South Carolina schools in 2022–23 had at least a postbaccalaureate degree (i.e., a master's degree) (see Table A2). The 89% of state principals in this category was similar to the 88% nationwide, though the percentage of South Carolina principals earning a doctoral degree (16%) was notably higher than the national percentage (11%).

Table A2. Comparison of Educational Attainment for Principals in South Carolina and Nationwide

Description	S.C. percentage (2020–21)	S.C. percentage (2021–22)	S.C. percentage (2022–23)	U.S. percentage (2020–21)	
Bachelor's degree	0.5	0.5	0.4	2.0	
Master's degree	79.6	82.2	82.4	86.9ª	
Doctorate or first professional degree <sup>b</sup>	19.1	16.5	16.3	11.0	
Not reported	0.9	0.9	0.9	n/a	

<sup>a</sup>This percentage is the sum of percentages of principals having a master's degree and those having an "education specialist or professional diploma" (indicating at least one year beyond the master's level). <sup>b</sup>For the South Carolina percentages, the values represent percentage of principals having a doctorate. For the U.S. data, the percentage listed includes both individuals having a doctorate and those having a first professional degree (e.g., M.D., D.D.S., or J.D.).

The data related to years of experience is complex. The national average for public school principals during 2020–21 was 6.9 years, representing the average years served in a principal position. In South Carolina, the available data reflects total years of experience in education, encompassing roles such as teacher, assistant principal, and principal. For 2022–23, the state average was 22.1 years. It is unclear how this compares directly to the national average. However, a more direct comparison is available for tenure at the current school in the principal position. The national average was 4.5 years in 2020–21, while the South Carolina average was 5.1 years in 2022–23. The percentages of principals with various tenures across the state and nation are shown in Table A3.

Table A3. Comparison of Tenure at Current School for Principals in South Carolina and Nationwide

Principal tenure at current school	S.C. percentage (2020–21)	S.C. percentage (2021–22)		
Less than 3 years	30.7	30.6	34.5	40.7
3 to 9 years	54.9	55.3	51.2	46.3
10 years or more	14.4	14.1	14.2	13.1

### **Principal Evaluation Data**

In South Carolina, principals are assessed annually based on the Expanded Program for Assisting, Developing, and Evaluating Principal Performance (PADEPP). They are assigned one of four ratings (i.e., "Exemplary," "Proficient," "Needs Improvement," or "Unsatisfactory") on nine distinct standards. In this report, we focused on the final summative ratings assigned to principals. These overall ratings are determined by evaluators who consider the individual standard scores collectively. That is, an overall "Exemplary" rating indicates that the principal's performance is at the "Exemplary" level across all standards. A "Proficient" rating indicates that performance is generally at or above the "Proficient" level on most performance standards. A "Needs Improvement" rating indicates that performance is generally below expectations, and an "Unsatisfactory" rating indicates that performance is below all expectations.

None of South Carolina's principals were assigned an "Unsatisfactory" overall rating in 2022–23. The percentages of principals assigned the other three ratings are shown in Table A4. Longitudinal data from 2020–21 and 2021–22 is also shown. The data revealed that, while the percentages of principals earning an "Exemplary" rating dropped over the time period and "Needs Improvement" rose slightly, the vast majority of principals earned "Exemplary" or "Proficient" evaluation ratings in all three years.

Table A4. South Carolina Overall Principal Evaluation Ratings

Ratings	S.C. percentage (2020–21)	S.C. percentage (2021–22)	S.C. percentage (2022–23)	
Exemplary	44.7	42.5	42.1	
Proficient	54.4	56.0	55.9	
Needs Improvement	0.9	1.5	2.0	

### Comparison of Principal Variables by Geographic Locale

While examining the demographic characteristics of school principals, we investigated potential differences across city, suburban, town, and rural schools (Table A5). We found statistically significant differences in the percentages of Black principals and White principals between suburban schools and each of the other three locales. Suburban schools had the highest percentage of White principals (72.8%) and the lowest percentage of Black principals (25.1%). Although statistically significant, all the percentage differences had a small effect size (between 0.28 and 0.39).

The differences in the percentage of principals with "Exemplary" evaluation results showed statistical significance across the four locales. However, all the differences were small, as reflected by Cohen's h. Specifically, pairwise comparisons revealed that there was a statistically significant difference in the proportion of principals with "Exemplary" evaluations in suburban schools compared to city schools (h = 0.26), suburban schools compared to town schools (h = 0.39), and suburban schools compared to rural schools (h = 0.27). In all these cases, the proportion was higher in suburban schools.

There were no statistically significant differences in the percentages of principals by gender across the locales. Similarly, no differences were recorded between percentages of principals who hold or do not hold a doctorate degree. Finally, the ANOVA results did not yield any statistically significant mean differences in years of experience in education across city, suburban, town, and rural schools. However, there was a statistically significant difference in tenure at the current school between suburban and rural schools (d = 0.21) and suburban and town contexts (d = 0.27).

Table A5. Summary Statistics and Inferential Tests for Principal Variables by Geographic Locale

Variable	N	S.C.	City	Suburb	Town	Rural	χ <sup>2</sup> (df)	р
Percent of Black principals	1,243	35.0	40.3ª	25.1 <sup>a,d,e</sup>	43.0 <sup>d</sup>	37.3 <sup>e</sup>	25.7(3)	<.001
Percent of White principals	1,243	61.7	53.4ª	72.8 <sup>a,d,e</sup>	55.7 <sup>d</sup>	59.3 <sup>e</sup>	26.3(3)	<.001
Percent of female principals	1,243	60.3	64.5	62.1	62.2	58.8	2.4(3)	0.502
Percent of principals with a doctorate degree	1,243	16.3	18.1	15.3	18.1	15.8	1.3(3)	0.721
Percent of principals with an "Exemplary" PADEPP rating	1,161	41.1	38.3ª	51.9 <sup>a,d,e</sup>	33.1 <sup>d</sup>	38.1 <sup>e</sup>	21.3(3)	<.001
Mean total years of experience*	1,243	22.1	22.5	22.4	21.6	21.8	F = 0.91	.43
Mean tenure at current school*	1,278	5.1	5.6	5.6 <sup>d,e</sup>	4.5d	4.7 <sup>e</sup>	F = 4.57	<.01

Note. Mean tenure at current school came from a different source and had a different number of principals listed. <sup>a</sup>This number represents a significant difference between city and suburb. <sup>b</sup>This number represents a significant difference between city and town. <sup>c</sup>This number represents a significant difference between city and rural. <sup>d</sup>This number represents a significant difference between suburb and town. <sup>e</sup>This number represents a significant difference between suburb and rural. <sup>f</sup>This number represents a significant difference between town and rural. \*An ANOVA test was conducted for mean years.

### Comparison of Principal Variables by Poverty Level

PIP rates were used to place schools into one of three poverty categories: schools with poverty rates in the upper 25% (PIP rates between 82.7 and 100%) were categorized as high-poverty schools, schools in the two middle quartiles (PIP rates between 53.8 and 82.7%) were categorized as moderate-poverty schools, and schools in the lowest quartile (PIP rates lower than 53.8%) were categorized as low-poverty schools.

Across poverty levels, overall omnibus tests were statistically significant for all the variables except for the differences in mean years of experience and tenure at the current school (Table A6). Pairwise comparisons demonstrated a high effect size (h = 1.13) for the difference in the percentage of Black principals in low-poverty and high-poverty schools and a medium effect size (h = 0.74) for the difference between moderate-poverty and high-poverty schools. The difference between low-poverty and moderate-poverty schools was small (h = 0.39). Similarly, percentage differences were significant for White principals between low-poverty and high-poverty schools (h = 1.10), between moderate-poverty and high-poverty schools (h = 0.73), and between low-poverty and moderate-poverty schools (h = 0.36). High-poverty schools had the lowest percentage of White principals and the highest percentage of Black principals, whereas the reverse was true for low-poverty schools.

Pairwise comparisons of female principal percentages across poverty levels yielded a difference with a small effect size between low-poverty and high-poverty schools (h = 0.26). Similarly, the percentage of principals with a doctorate degree had a difference with a small effect size between low-poverty and high-poverty schools (h = 0.26). Finally, pairwise comparisons revealed that the proportion of principals with "Exemplary" evaluations was higher in low-poverty schools compared to moderate schools (d = 0.23), in low-poverty schools compared to high-poverty schools (d = 0.36). Although statistically significant, none of the proportion differences met the medium effect size threshold.

Table A6. Summary Statistics and Inferential Tests for Principal Variables by Poverty Level

Variable	N	S.C.	Low	Moderate	High	χ <sup>2</sup> (df)	р
Percent of Black principals	1,243	35.0	13.9 <sup>a,b</sup>	29.7 <sup>a,c</sup>	65.0 <sup>b,c</sup>	186.9(2)	<.001
Percent of White principals	1,243	61.7	81.4 <sup>a,b</sup>	67.4 <sup>a,c</sup>	32.0 <sup>b,c</sup>	177.4(2)	<.001
Percent of female principals	1,243	60.3	52.9 <sup>b</sup>	62.0	65.7 <sup>b</sup>	10.9(2)	<.005
Percent of principals with a doctorate degree	1,243	16.3	12.2 <sup>b</sup>	15.3	22.0 <sup>b</sup>	11.5(2)	<.005
Percent of principals with an "Exemplary" PADEPP rating	1,161	41.1	55.1 <sup>a,b</sup>	43.1 <sup>a,c</sup>	26.8 <sup>b,c</sup>	45.1(2)	<.001
Mean total years of experience*	1,243	22.1	22.0	22.0	22.2	F = 0.08	.925
Mean tenure at current school*	1,278	5.1	5.5	5.1	4.7	F = 2.55	.079

*Note.* Mean tenure at the current school came from a different source and had a different number of principals listed. <sup>a</sup>This number represents a significant difference between low and moderate poverty schools. <sup>b</sup>This number represents a significant difference between low and high poverty schools. <sup>c</sup>This number represents a significant difference between moderate and high poverty schools. \*An ANOVA test was conducted mean years.

### **Assistant Principal Demographic Data**

We examined the demographic characteristics of the South Carolina assistant principal population for the 2022–23 academic year. The majority (62.0%) of assistant principals in the state were White, with Black assistant principals being the second largest demographic group (34.9%). Approximately 1.0% of principals were Hispanic and 0.4% were Asian. In relation to gender, 60.9% of South Carolina assistant principals were female. Both race and gender frequency distributions are similar to the corresponding distributions for school principals discussed previously.

On average, assistant principals worked in education for 17.9 years. Almost all of them (99.2%) had a post-baccalaureate degree and just over 10% had a doctorate degree.



