



TEACHER WORKING CONDITIONS

#### **RESEARCH TEAM**

Angela Starrett, Ph.D. Steve Barth Ruiqin Gao, Ph.D. Christine DiStefano, Ph.D. Jin Liu, Ph.D. Jungsun Go

The Yvonne & Schuyler Moore Child Development Research Center at the University of South Carolina is a Collaborating Partner with SC TEACHER

SC TEACHER provides comprehensive research about South Carolina's educator workforce. We are expanding a robust statewide data network to report results that will inform policy and practice.

Suggested citation: Starrett, A., Barth, S., Geo, R., DiStefano, C., Liu, J., & Go, J. 2023 South Carolina teacher working conditions survey. (2023). SC TEACHER. https://sc-teacher.org/documents/teacher-working-conditions/

**GROWING DATA + GAINING INSIGHT** 

# **Table of Contents**

#### **3** INTRODUCTION

- 6 Key Questions
- 7 Survey Development
- 9 Survey Administration
- 10 Comparison of the SCTWCS to the School Climate Survey
- 11 Data, Variables, and Analyses

#### 14 KEY QUESTION 1:

How do South Carolina teachers perceive their working conditions, job satisfaction, and intention to stay in the profession?

- 14 2022-2023 Teacher Working Conditions
- 15 Job Satisfaction and Intention to Stay in Current Positions
- 15 Relationship Between South Carolina Teacher Working Conditions and Published Studies

#### 16 KEY QUESTION 2A:

How do teacher working conditions differ by school organizational levels?

16 Teacher Working Conditions by School Organizational Level

17 Relationship Between South Carolina Teacher Working Conditions and Published Studies by School Organizational Level

#### 17 KEY QUESTION 2B:

How do teacher working conditions differ by school poverty level?

- 18 Teacher Working Conditions by School Poverty Level
- 18 Relationship Between South Carolina Teacher Working Conditions and Published Studies by School Poverty Level

#### **19 KEY QUESTION 2C:**

How do teacher working conditions differ depending on the geographic location of the school?

- 19 Teacher Working Conditions by School Location
- 20 Relationship Between South Carolina Teacher Working Conditions and Published Studies by School Location

#### 20 KEY QUESTION 3A:

How do teacher working conditions relate to job satisfaction?

- 20 Teacher Working Conditions and Job Satisfaction
- 22 Relationship Between South Carolina Teacher Working Conditions and Published Studies of Job Satisfaction

#### 22 KEY QUESTION 3B:

How do teacher working conditions relate to teachers' intentions to remain in the classroom?

- 23 Teacher Working Conditions With Intentions to Remain in the Classroom
- 23 Relationship Between South Carolina Teacher Working Conditions and Published Studies With Teachers' Intention to Stay in Current Positions

#### 24 KEY QUESTION 4:

How do new teachers across South Carolina perceive their mentoring support?

- 24 New Teachers' Mentoring Experiences Working Conditions With Intentions to Remain in the Classroom
- 25 Relationship Between South Carolina New Teachers' Mentoring Experiences and Published Studies
- 26 KEY FINDINGS AND RECOMMENDATIONS
- 27 HOW SCTWCS DATA COULD BE USED
- 27 FUTURE WORK

#### 28 REFERENCES

- 31 APPENDIX A: SURVEY DEVELOPMENT AND ADMINISTRATION
- 36 APPENDIX B: DETAILED TECHNICAL ANALYSIS RESULTS

# South Carolina Teacher Working Conditions Survey

# + HIGHLIGHTS

The South Carolina Teacher Working Conditions Survey (SCTWCS) was mandated by Act 185 of the 2022-2023 South Carolina state appropriations to offer better insights into teachers' workplace satisfaction and working conditions. SC TEACHER designed the SCTWCS to include 11 areas of working conditions (seven resources and four demands) with job satisfaction and intentions to stay in the classroom as outcomes; three areas of mentor support for new teachers (support for teaching, support outside of teaching, and proximity) are included. SCTWCS results provide a clearer understanding of the working conditions for classroom teachers across the state. Findings can be leveraged to enhance and sustain the South Carolina teacher workforce.

#### Main Findings Regarding Teacher Working Conditions in South Carolina

- Resources of staff cooperation, principal communication, and classroom autonomy were rated the highest among the teachers' working conditions but were not the strongest factors related to teachers' job satisfaction and intent to stay in the profession.
- Student misbehavior was the least favorable area among the 11 working conditions but was not strongly related to teachers' job satisfaction and intent to stay in the profession. Teachers' perceptions of the time available to complete their duties were strongly associated with intending to stay in the profession and choosing a teaching career again.
- Student engagement varied the most depending on the school context. SCTWCS results indicated that student engagement was rated highest in elementary schools, schools located in suburban and rural areas, and schools with lower levels of student poverty.
- Administrative support and influence over school policy demonstrated a consistent association with teachers' job satisfaction and intent to stay in the profession. Teachers, on average, reported positive perceptions of administrative support, but the perceived influence on decision-making and school policy was rated much lower.

# Recommendations for Further Study of Teacher Working Conditions in South Carolina

- SCTWCS had 53% of districts participating and more than 17,000 teachers responding (a 49% response rate). More participation from districts and teachers in future survey administrations will lead to a more accurate reflection of working conditions of South Carolina teachers. Efforts should be made to establish stronger relationships and communication with non-participating districts through various means (e.g., administration, School Improvement Councils, etc.) to encourage collaboration, clarify confusion, and/or address concerns about the survey process.
- The administration of SCTWCS and the School Climate Survey coincided, which might have led to confusion. Staggering the administration of the two surveys to avoid overlapping time frames and increasing awareness and understanding of the purpose and goals of the surveys among the participants can help avoid confusion.
- Presenting the preliminary findings to key audiences marks the beginning
  of utilizing the data from SCTWCS. A detailed study of the survey content,
  the extent to which items correspond with their intended categories,
  and their relationship with specific outcomes are planned for refining the
  survey, thereby enhancing the accuracy and quality of data obtained from
  future SCTWCS administrations.
- Incorporating SCTWCS data with other South Carolina teacher data sources (e.g., School Climate Survey, Teacher Exit Survey, South Carolina Department of Education data warehouse) can offer a more comprehensive understanding of the state's teacher workforce. Merging SCTWCS findings with existing databases that furnish demographic, preparation, and evaluation information can provide valuable insights into the individual needs and career trajectories of South Carolina teachers.



# + INTRODUCTION

Educators, administrators, and policymakers have a shared goal of providing students with a high-quality education. To realize this goal, schools must attract and retain effective teachers. Working conditions play an important part in constructing a stable, competent educator workforce. Broadly defined, working conditions encompass a wide array of issues encountered at a school or district, including areas such as workload, administrative support, autonomy, and access to professional development opportunities (Carver-Thomas & Darling-Hammond, 2017). Generally, schools which provide a safe, welcoming, and supportive environment are better able to recruit and retain higher quality teachers.

> Teachers' working conditions are also important to students and families. Positive teacher working conditions are more likely to turn out teachers that are motivated, engaged, and satisfied with their jobs, leading to better student outcomes, including higher academic achievement and improved socialemotional development.

Conversely, the effects of a poor working environment can be detrimental to both teachers and students. For teachers, a poor work environment is likely to lead to higher levels of teacher stress, burnout, and greater turnover (Carver-Thomas & Darling-Hammond, 2017). Considering students, poor teacher working conditions can contribute to inconsistent teaching, decreased teacher effectiveness, and a lack of morale. Fostering positive teacher working conditions is not only important for strengthening the well-being of teachers, but it is essential for promoting an equitable, high-quality education for all students.

<u>المجارعة</u>

Research has noted that teaching is a highly stressful profession (Herman et al., 2018; Skaalvik & Skaalvik, 2015).

If procedures that help teachers to alleviate stress are not in place, over time, elevated stress leads to lower-quality instruction, negative well-being, health problems, burnout, and, ultimately, teachers leaving the profession. (Alarcon, 2011; Clunies-Ross et al., 2008; Harmsen et al., 2018).

The Job Demands-Resources (JD-R) model is an established framework used to understand how work demands and resources impact employee well-being and job performance. The JD-R model is applicable to many areas; the framework has been adapted and applied to the teaching context to gain a greater understanding of the day-to-day factors that influence teachers' well-being and effectiveness (Skaalvik & Skaalvik, 2015).



Under the JD-R framework, two overarching areas affect working conditions: 1) Demands placed upon employees due to the job and 2) Resources that employees may access through their job. Job demands refer to the physical, psychological, social, or organizational aspects that require sustained physical and/or psychological effort. In the teaching context, demands encountered by teachers may be low levels of student engagement, student misbehavior, or lack of collegial relationships. Job resources refer to physical, psychological, social, or organizational aspects that assist in achieving work goals, reduce job demands, and/or promote personal development. For teachers, resources encountered may include autonomy in choosing content and activities to teach, access to professional development opportunities, and administrator support.

The JD-R model suggests that when there is a balance between demands and resources, teachers can effectively fulfill their responsibilities. However, a lack of resources as compared to the day-to-day level of demands encountered by teachers results in stress and leads to burnout and attrition (Harmsen et al., 2018). Studies have found that job demands, such as high workload and student misbehavior, can have negative effects on teachers, such as emotional exhaustion and higher turnover intention (Skaalvik & Skaalvik, 2015). Conversely, higher levels of job resources compared to the demand, such as supportive colleagues and effective school leadership, can have a beneficial impact. With teachers, research has found that higher levels of resources lead to increased engagement, job satisfaction, and positive outcomes, such as teacher self-efficacy and student achievement (Skaalvik & Skaalvik, 2015).

Given the importance of working conditions to the teaching profession, teachers, students, and families in South Carolina, the General Assembly requested a survey of the state's teacher workforce. Using the JD-R model as a guiding framework, this report discusses the development and implementation of the South Carolina Teacher Working Conditions Survey. The overarching goal of the survey was to measure teacher working conditions and workplace satisfaction to provide a platform for teachers to share their perceptions of the day-to-day working environment in South Carolina schools. Providing an arena to support teachers can provide avenues to celebrate resiliency and strengths associated with teachers and the teaching profession, identify areas for improvement, and ultimately lead to greater teacher retention.



### **KEY QUESTIONS**

This report details the development, implementation, and administration of the 2023 South Carolina Teacher Working Conditions Survey (SCTWCS). The survey was commissioned by Act 185 from the 2022-2023 South Carolina state appropriations (SC General Assembly, 2022) to better understand the working conditions and workplace satisfaction of South Carolina teachers.

Using data collected from the SCTWCS, we examined the following key questions regarding working conditions in South Carolina schools:

- How do classroom teachers across South Carolina perceive their working conditions?
- How do teacher working conditions for South Carolina teachers differ by:
  - a. organization level?
  - b. poverty level?
  - c. school location?
- 3. How do teacher working conditions relate to:
  - a. job satisfaction?
  - b. intent to remain in the classroom?
- 4. How do new teachers in South Carolina perceive their mentoring support?

Results from SCTWCS can provide stakeholders with an understanding of working conditions for classroom teachers in South Carolina's public schools. Findings can be used to improve and support the South Carolina teacher workforce.

#### SURVEY DEVELOPMENT

The SCTWCS was a new instrument developed specifically for use with South Carolina classroom teachers. Figure 1 details the process used to construct a survey aimed at measuring the working conditions of teachers in our state. Accurately and appropriately measuring teachers' working conditions is complex, as multiple factors can influence a teacher's working environment. To create a survey that provides trustworthy and useful data, SC TEACHER began survey construction by extensively reviewing existing surveys and scales, prior studies, and alternative definitions. SCTWCS was designed using best practices of the survey design field and the Job Demands-Resources (JD-R) model, which identifies job resources and demands that can impact employee well-being.

The SCTWCS developed through this process includes 11 areas of working conditions (seven resources and four demands), four items of outcomes associated with the JD-R model (i.e., job satisfaction and intentions to stay in the classroom), and three areas of mentor support for new teachers (i.e., support for teaching, support outside of teaching, and proximity). The SCTWCS was designed for the approximately 55,000 South Carolina teachers with professional certification codes of prekindergarten, kindergarten, classroom, special education (i.e., itinerant, self-contained, and resource), and retired teachers returning to teach. See Appendix A for details on each stage of the development of SCTWCS.



Figure 1. Stages of Development for SCTWCS

Figure 2 provides the areas of working conditions, outcomes, and mentor support included in the SCTWCS. The numbers in parentheses denote the number of items for the area. For each question with resources, demands, and outcomes, teachers rated the level of agreement using a five-point scale ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Neither agree or disagree, 4 = Agree, and 5 = Agree. Teachers who had been teaching no more than five years and had an assigned mentor were routed to the questions related to mentor support. Mentor support for teaching and mentor support outside of the classroom were on the same agreement scale as other items. New teachers provided information about mentor proximity using a yes/no scale.

Figure 2. Areas Included on the SCTWCS

RESOURCES	DEMANDS	OUTCOMES	MENTOR SUPPORT
Administrative Support (6)	Amount of Paperwork and Routine Duties (4)	Job Satisfaction (3)	Mentor Support for Teaching (14)
Communication with Principal (4)	Student Engagement (5)	Intention to Stay in the Classroom (1)	Mentor Support Outside of Teaching (6)
Availability of Resources (5)	Student Behavior (5)		Mentor Proximity (3)
Parent Support (5)	Student Health and Safety (5)		
Cooperation and Recognition Among Staff (6)			
Influence Over School Policy and Decision-making (8)			
Control in the Classroom (8)			

*Note.* Numbers in parentheses represent the number of items per area. Only teachers with five years or less experience and an assigned mentor answered items related to mentor support. Excluding items for mentor proximity on a yes/no scale, all items used a five-point scale ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Neither agree or disagree, 4 = Agree, and 5 = Agree.



#### SURVEY ADMINISTRATION

Prior to data collection, the Institutional Review Board at the University of South Carolina approved all survey content and administration procedures. Figure 2 details the timeline of survey administration for the initial administration of the SCTWCS. The SC TEACHER team requested approval from all South Carolina school districts through various means of communication (e.g., emails, postal letters, and phone calls). Discussions detailed the survey's purpose, benefits, and confidentiality. Incentives to participate included tailored school- and district-level reports and tools to support improvement planning. By mid-February 2023, 44 of the 83 school districts in South Carolina had elected to participate.

The SCTWCS was administered to certified teachers across the state using the Qualtrics online platform. A total of 36,873 classroom teachers across 855 public schools were sent an email to complete the SCTWCS, and reminders were sent a minimum of twice a week to encourage participation. The survey was open for six weeks and closed on March 31st. See Appendix A for more details on the timeline of events related to the administration of SCTWCS.

Figure 3. Timeline of SCTWCS Administration



۶ ک



#### COMPARISON OF THE SCTWCS TO THE SCHOOL CLIMATE SURVEY

In South Carolina, a school climate survey is administered yearly to parents, students, and teachers in South Carolina schools. This report focuses on the Teacher School Climate survey to note the differences between it and the SCTWCS.

The School Climate Survey for teachers includes 72 items measuring many aspects of the school environment. Three "summative" items summarizing the three main survey sections are included on the School Report Card. Recently, the Education Oversight Committee amended the school accountability formula to include information from the teacher (and student) climate surveys as part of a school's yearly accountability score.

Given that teacher working conditions and school climate are related, it is understandable that there may be confusion between the two statewide teacher surveys. Admittedly, there is some overlap between the two surveys. For example, the School Climate Survey considers Working Conditions as one of the main constructs. Under this construct, similar areas are covered between the two scales (e.g., autonomy in the classroom that supports state and local standards, availability of resources, administrative support, and influence over school policy and decision-making roles). In addition, some items are worded similarly across the two instruments and measure similar areas (e.g., administrative support and availability of resources).

However, there are some noted differences between the two surveys. The SCTWCS was developed from a well-known framework, drawing from the JD-R model to discuss resources and demands surrounding teachers' existing working conditions. Importantly, as noted earlier, the School Climate Survey asks teachers to infer perceptions about a larger group (e.g., "Students at my school are motivated and interested in learning"). Also, the SCTWCS focuses on teachers' individual perceptions of their existing working conditions (mostly in their classrooms) and personal experiences with aspects of the school environment (e.g., "Administrators at your school show fairness in your teaching evaluation").

Perhaps the greatest difference between the two surveys is the use of the data. The SCTWCS aims to use the data as an agent for change and improvement. Plans are to administer the SCTWCS to teachers in South Carolina on a two-year cycle. The survey is administered in odd years (beginning with 2023), and the even (second) year is focused entirely on addressing the previous year's results with district- and school-specific toolboxes. School Climate surveys are administered annually to teachers, parents, and students in South Carolina schools to gauge their perspectives of school climate. Information from teacher (and student) school climate surveys plays a role in school accountability ratings. Feedback from the SCTWCS is to provide a mechanism for voice, improvement, and change; results have no bearing on school performance ratings.

#### DATA, VARIABLES, AND ANALYSES

#### DATA

Of the 82 school districts in South Carolina, 44 districts (54%) participated in the South Carolina Teacher Working Conditions Survey. Within these districts, 36,873 classroom teachers across 855 public schools received an email to complete the survey, representing nearly 68% of all classroom teachers in the state.

Of the roughly 36,800 teachers receiving an invitation to participate,17,954 (49%) participated in the survey across 849 public schools. Of the participating teachers, 14,404 (39%) teachers submitted complete responses; 3,550 teachers started the survey but did not submit a complete response. For the 3,550 teachers not completing the survey, progress ranged from 4% to 96% completed, with an average of 20% of the survey completed. Teachers with incomplete data were included in the analyses of this report in an effort to represent and respect teacher voices by including all responses in the analyses.

Figure 4 shows participation percentages for the 39 physical school districts. Lighter shades denote lower participation, while darker shades show higher participation. Overall, district participation rates ranged from 5% to 81%, with greater participation in the Midlands, PeeDee, and Lowcountry regions. School districts without percentages chose not to participate in the SCTWCS process. Appendix B provides a detailed table of participation numbers and percentages, including five school districts not pictured on the map (e.g., Palmetto Unified School District).



Figure 4. Map of SCTWCS Participation Rates by School District



#### VARIABLES

The 11 working conditions (four demand and seven resource areas) represented the focal variables for addressing the report's Key Questions (i.e., administrative support, communication with principal, availability of resources, parent support, cooperation and recognition among staff, influence over school policy and decision-making roles, autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties, student engagement, student behavior, and student safety and health).

Each working conditions area consisted of a different number of items. To make information easy to interpret and comparable across survey areas, agreement scores were created by summing item-level scores and dividing by the number of items. Area average scores can be interpreted on the same five-point Agreement scale used to respond to items, where higher average area scores show higher levels of agreement. Average scores for the 11 areas of working conditions were used in analyses. Since 10 areas contained positively worded statements, items from the student behavior area were reverse-scored to no longer represent student misbehavior. This assisted with consistency and interpretability. As such, higher average values represented higher levels of agreement with the characteristics investigated (e.g., higher administrative support, more time for paperwork and routine duties, greater intention to stay in teaching) for all areas (see Figure 2).

To address Key Question 4, the two areas containing items related to mentor support for new teachers (mentor support for teaching and mentor support outside of teaching) were similarly averaged.



#### ANALYSES

Descriptive statistics, correlation coefficients, and statistical tests of mean differences (i.e., analysis of variance) were used to examine the key questions. For each question, we provide 1) a summary of the perceived working conditions, 2) illustrate how this data may be used, and 3) provide a comparison of the working conditions in South Carolina with published research findings. A detailed, technical description of all research, including comprehensive descriptions of statistical analyses, significance levels, and effect size coefficients, can be found in the Appendix materials.

### + KEY QUESTION 1:

# How do South Carolina teachers perceive their working conditions, job satisfaction, and intention to stay in the profession?

To address Key Question 1, we examined the average responses of the 11 areas included on the SCTWCS. Higher scores on the scale that express agreement with the survey item indicate a positive view of the teacher's working conditions, while lower scores describe a less positive view of a particular work condition area. Average scores by area are presented in Figure 4.

#### 2022-2023 Teacher Working Conditions

South Carolina teachers rated working conditions related to resources higher than the demands areas, suggesting that teachers recognize the presence of some of the supportive features as helpful to buffer some of the more difficult components of teaching. All resource areas reported high levels of agreement, with ratings at or above the midpoint of the scale. Cooperation among staff, principal communication, and classroom autonomy were the most highly rated areas of the teacher working conditions, with teachers Agreeing to Strongly Agreeing that these resources were available (average ratings above Agree = 4). Of the Resources available to teachers, Policy Influence received the lowest rating, with an average rating of 3.38 (between 3 = Neither Agree/Disagree and 4 = Agree on the rating scale), indicating it is a resource that not all teachers find evident.

On the whole, working conditions related to demanding aspects of teachers' jobs were rated lower by teachers, reflecting the challenges presented by these factors. Student Health and Safety was the most positively rated area related to potential demands on teachers, with an average score of 3.77 (between 3 = Neither Agree/Disagree and 4 = Agree on the rating scale). Student engagement had an average rating of 3.34, indicating that a narrow majority of teachers view student engagement positively. However, the two other areas of working conditions related to demands, student behavior and available time, received lower average ratings (between 2 = Disagree and 3 = Neither Agree/Disagree on the agreement scale).



#### Figure 5. Statewide Average Scores, by SCTWCS Areas (n = 17,954)

Note. The darker shade represents resources, and the lighter shade represents demands.

#### Job Satisfaction and Intention to Stay in Current Positions

In addition to assessing teachers' working conditions, the SCTWCS asked teachers about their level of satisfaction with their teaching position (three items) and their intention to stay in the profession (one item). All items were presented on the same five-point agreement scale used for the working conditions, where higher scores reflect more positive outcomes.

Figure 5 presents the average scores separately for job satisfaction and intention. Teachers across the state were positive about their ability to make a difference in students' lives (M = 4.1). South Carolina teachers' agreement with how much they enjoy their present job and intention to stay in the profession were also above the midpoint of the scales indicating a mostly positive view. In response to the statement, "If you could start over, you would choose teaching again as your career," the average score was very close to the midpoint of the scale, reflecting a mixed level of agreement for choosing the teaching profession.



Figure 6. Average Score for Teachers' Job Satisfaction and Intention to Stay in the Profession

*Note.* Darker shades relate to the job satisfaction items, and the lighter-shaded bar represents teachers' intention to stay in the profession.

#### Relationship Between South Carolina Teacher Working Conditions and Published Studies

As might be expected, areas of teacher working conditions that could be considered resources from the perspective of the JD-R framework, such as cooperation among staff, administrative support, and a sense of classroom autonomy, were more highly rated than areas that might be deemed demanding aspects of teaching, such as dealing with student behavior, engaging students in learning, or the amount of time available to complete teaching duties. Influence over school policy issues was the lowest rated resource among the working condition areas, which might warrant further investigation as influencing school policy issues has been shown to be significantly related to teachers' sense of organizational commitment (Collie, 2021)

Conversely, student health and well-being is traditionally seen as a demanding aspect of teaching but was rated relatively high in this survey. While the COVID pandemic certainly exacerbated issues related to student well-being (Gross & Hamilton, 2023), efforts made by school districts to prioritize mental health support for students (Tinubu Ali & Cherukumilli, 2020) may have at least mitigated the severity of these demands. Lastly, teachers' strong ratings of their teaching efficacy reflect both a protective effect from how job demands are perceived (Prieto et al., 2008) and signal that schools are being supportive of teachers' well-being (Bean, 2017).

# + KEY QUESTION 2A: How do teacher working conditions differ by school organizational levels?

Key question 2a examines teacher working conditions by school organizational levels (elementary, middle, and high schools). The South Carolina 21-22 School Accountability Manual guidelines were utilized to categorize schools electing to participate in the SCTWCS by these three organizational levels. Of the 849 South Carolina schools summarized in this report, results include 7,603 teachers from 415 elementary schools (grades K through 5), 3,619 teachers from 157 middle schools (grades 6 through 8), and 4,426 teachers from 130 high schools (grades 9 through 12). Information from other organizational groupings, such as preschools/child development centers, virtual schools, charter schools, schools with combined levels (e.g., grades 6 through 12), and schools serving students with special needs are not included in this summary due to the small number of schools by level. Technical Appendix B provides additional details about all school types and detailed statistical results.

Average scores for each working condition area were compared across organizational levels (elementary, middle, and high schools) using a one-way Analysis of Variance (ANOVA). Figure 6 provides a graphical depiction of the largest differences among school organizational levels.

#### Teacher Working Conditions by School Organizational Level

Four aspects of teacher working conditions exhibited meaningful differences in teacher working conditions across organizational levels. Ratings for the remaining seven working condition areas either showed no difference between school organizational levels or were too small to be considered a meaningful difference. The discussion focuses on the four working condition areas illustrating differences by organizational level.

Teachers' perceptions of the time available to complete their duties and their sense of autonomy in the classroom became more favorable with each rise in organizational level. Middle school teachers rated the time available to complete work duties and their sense of classroom autonomy higher than teachers at elementary schools. High school teachers rated those working conditions higher than middle and elementary school teachers. Conversely, teachers at elementary schools rated parent support and student engagement significantly higher than teachers at middle and high schools.



**Figure 7.** Average Scores for Working Conditions With Meaningful Differences Between School Organizational Levels (n = 15,648 teachers)

The highest agreement ratings for all levels were seen with Classroom Autonomy, with averages close to 4 (Agree). The lowest ratings overall were seen with the Available Time area, with teachers' ratings roughly at the midpoint of the agreement scale (Neither Agree/Disagree).

#### Relationship Between South Carolina Teacher Working Conditions and Published Studies by School Organizational Level

Elementary teachers' lower ratings of available time than other groups of teachers match what has been found in other studies. A study completed in North Carolina (Reeves et al., 2006) found that while most high school teachers believed they had sufficient time outside of instruction for their work duties, only one-third of elementary school teachers agreed with that assessment. In the same study, a quarter of elementary school teachers reported having no time to collaborate with colleagues during the week. As for teachers' sense of autonomy in the classroom, little attention in the literature has been given to differences between school levels. Instead, teacher autonomy has been linked to teachers' job satisfaction (Wright et al., 2018) and student achievement (Marshik et al., 2017). Further, there is evidence that a principal's support for teacher autonomy can lessen the negative impact of high-stakes testing environments on teachers' motivation (Corkin et al., 2018). Therefore, higher levels of Classroom Autonomy, as noted with South Carolina teachers, is an area that can be examined in future studies to examine concordance with other factors (job satisfaction, student achievement, administrator support). Parent support provided to teachers across different organizational levels has not been studied extensively; however, it has been noted that parent engagement with schools decreases throughout students' progression through the educational system (Gonzalez-DeHass & Willems, 2003). Similar to parent support, student engagement has also been shown to decrease as students get older (Larson et al., 2020).

### + KEY QUESTION 2B:

### How do teacher working conditions differ by school poverty level?

Key question 2b examines working conditions across school poverty levels. The South Carolina Department of Education (SCDE) classifies a child living in poverty if the student is enrolled in Medicaid, Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), or the foster system. The SCDE identified the percentage of pupils-in-poverty (PIP) at the school level during the 2021-2022 academic year. In this report, schools falling in the upper 25% for PIP were considered high-poverty schools, while schools in the lowest 25% for PIP were considered low-poverty schools. Schools in the middle (25% - 75% for PIP rankings) were categorized as moderate-poverty schools. Of the 849 schools included in this analysis, results presented here include working conditions ratings from 5,273 teachers across 201 high-poverty schools. For this question, 72 schools were excluded from the analysis as the SCDE does not report PIP for certain types of schools (e.g., career and technology centers, fine arts centers, and virtual schools).

Average scores for each teacher working condition area were compared across levels of student poverty at the school (low, moderate, and high) using a one-way Analysis of Variance (ANOVA). Figure 7 provides a graphical depiction of the largest differences among school poverty levels, with detailed statistical results in Technical Appendix B.

17

#### **Teacher Working Conditions by School Poverty Level**

There were significant differences in working conditions for teachers at schools with low student poverty levels compared to teachers at schools with moderate or high student poverty levels in four areas of teacher working conditions. Scores for the remaining seven working condition areas either showed no difference between school poverty levels or the differences were too small to be considered a meaningful difference.

South Carolina teachers at schools in the lowest quartile of student poverty perceived parent support, staff cooperation, and student engagement more favorably than teachers at schools in the remaining 75% of the schools in the state. A fourth area of teacher working conditions, student behavior, showed differences between each poverty category. Teachers at low-poverty schools rated student behavior significantly higher than teachers at schools with moderate levels of student poverty. Teachers at moderate-poverty schools rated student behavior higher than teachers at schools with the highest levels of student poverty.



**Figure 8.** Average Scores for Working Conditions With Meaningful Differences Among School Poverty Levels (n = 15,605)

# Relationship Between South Carolina Teacher Working Conditions and Published Studies by School Poverty Level

The disparities among schools with differing levels of student poverty have been established previously in the education literature base. Two recent reports from SC TEACHER, the Profile of the South Carolina Teacher Workforce for 2020-2021 (Starrett et al., 2022) and South Carolina Teacher Retention Rates for 2020-2021 (Starrett et al., 2023), described significant differences between teacher demographics and teacher retention rates among schools depending on the level of student poverty at the school. Four of the areas of teacher working conditions also showed significant differences based on their school's poverty level. The barriers to parent support are well-chronicled. Factors related to parents' low socio-economic status (SES), such as a lack of knowledge or issues related to work schedules and transportation, have been linked to reduced parent engagement, as parent involvement has been linked to students' "behavioral and cognitive engagement" (Dotterer and Wehrspann, 2016). The higher perceptions of staff cooperation in schools with less poverty are also not surprising since low-poverty schools have higher teacher retention rates, and schools with less teacher turnover tend to be more collaborative (Schleifer et al., 2017).

### + KEY QUESTION 2C:

# How do teacher working conditions differ depending on the geographic location of the school?

Key question 2c compares working conditions across a school's geographic location. Location was constructed by matching each school's physical address to a location code used by the National Center for Educational Statistics (NCES, 2006) to classify geographic locations as city, suburb, town, or rural. These classifications used designations of South Carolina schools from the 2021-2022 school year based on population densities and proximity to urban areas. Of the 849 South Carolina schools summarized in this report, results include 2,896 teachers from 146 city schools, 6,995 teachers from 274 suburban schools, 936 teachers from 70 town schools, and 4,798 teachers from 293 rural schools. Several schools (n = 66) were not included in these analyses, as they do not have an NCES designation (e.g., career and technology centers and virtual schools).

Average scores for each working condition area were compared across categories of school location (city, suburb, town, and rural schools) using a one-way Analysis of Variance (ANOVA). Figure 8 provides a graphical depiction of the largest differences found among school locations; detailed statistical results are provided in the Appendix.

#### **Teacher Working Conditions by School Location**

For South Carolina teachers, fewer significant differences were observed in teachers' ratings of their working conditions when compared across the school location. Teachers at schools located in towns rated their available time and sense of classroom autonomy higher than teachers at other schools, particularly compared to city and suburban schools. Teachers at suburban and rural schools rated student engagement significantly higher than teachers at city or suburban schools perceived their available time and sense of classroom autonomy as significantly lower than teachers in rural or town settings.



**Figure 9.** Average Scores for Working Conditions With Meaningful Differences Among School Locations (n = 15,625)

Across all locales, the amount of time for teachers to complete duties at school received low ratings. However, these were lowest for teachers in city and suburban areas. Student engagement ratings were seen as highest by suburban and rural teachers and lowest for teachers in towns. Classroom autonomy received higher ratings than the other areas, where the most autonomy was seen with town schools and the least autonomy was noted by city school teachers.

# Relationship Between South Carolina Teacher Working Conditions and Published Studies by School Location

Prior research has noted differences in working conditions based on school locale. For example, using groupings of urban and non-urban locations, a North Carolina study found teachers in non-urban locations reporting a greater sense of trust and administrative support; these aspects are often linked to autonomy (Lee et al., 2020). Equally interesting are the low ratings of the time available for teachers to complete their work given by city and suburban teachers. While city and suburban schools are often aggregated into an urban designation in studies, recent reports from SC TEACHER on the South Carolina teacher workforce and retention rates (Starrett et al., 2022, 2023) illustrated how such practices sometimes obscure distinct and even opposite trends when comparing schools in cities with suburban schools. In this case, the perception of time demands from city and suburban teachers are equal but may have different causes. Finally, the distinct findings related to schools based in South Carolina towns are unique and warrant further investigation, as most research comparing school locations often combines rural and town locations in their analyses.

### + KEY QUESTION 3A:

## How do teacher working conditions relate to job satisfaction?

To address Key Question 3a, we examined correlation coefficients between working conditions areas and job satisfaction items. Correlation values range from a low of 0 to a high of 1, with the sign of the coefficient (positive or negative) indicating the direction of the relationship. As the sample size is large, we focused on values of .30 or higher, demonstrating an important relationship between an aspect of teachers' working conditions. Student behavior, student safety support, and staff cooperation were the only working condition areas that did not strongly associate with teachers' likelihood of choosing a career in teaching again.

#### **Teacher Working Conditions and Job Satisfaction**

The first job satisfaction item asked teachers for their level of agreement with the statement, "If I could start over, I would choose teaching again as my career." While each area of teacher working conditions showed a significant correlation to teachers' responses to this question, seven areas of teacher working conditions exhibited a meaningful relationship (>.30) with this question. Principal communication, student behavior, student safety support, and staff cooperation were the only working conditions that did not have an association above .30 with teachers' likelihood of choosing a career in teaching again.

Administrative support, influence on school policy, and available time to perform work duties were the working condition areas that most influenced teachers' decisions to choose a teaching career again if they could start over. Interestingly, these are not all demands placed on teachers. These areas seem to have in common a lack of input into decisions and workload.

**Figure 10.** *Meaningful Correlations Between Current Working Conditions and Teachers' Interest in Choosing Teaching Again as a Career (n = 13,994)* 



Note. The darker shade represents resources, and the lighter shade represents demands.

The second job satisfaction item asked teachers for their level of agreement with the statement, "I am certain I am making a difference in the lives of the students I teach." Seven areas of working conditions showed a meaningful association (> .30) with teachers' ratings of the impact they make on student lives. Student engagement displayed the strongest relationship, while parent support, administrative support, and support for student safety were also above the cutoff of .30, showing that teachers' satisfaction with the position is highly related to support from others. Other areas that influence teacher satisfaction deal with the workplace. Teachers' influence on school policy, available resources, and classroom autonomy all appear to play a significant role in how teachers rated the difference they make in students' lives.





Note. The darker shade represents resources, and the lighter shade represents demands.

The third job satisfaction item asked teachers for their level of agreement with the statement, "I enjoy my present job." Again, every area of teacher working conditions displayed a significant relationship with this question, and all but one area (student safety support) matched our targeted threshold for a meaningful association (>.30).

Three areas of teacher working conditions had correlations greater than or equal to .5 with teachers' ratings of enjoyment of their jobs, indicating these areas play a large role in teachers' job satisfaction. These areas show that teachers enjoy their position more when supported by the administration and were able to have their input considered in policy decisions.



**Figure 12.** *Meaningful Correlations Between Current Working Conditions and Teachers Enjoying Their Job* (*n* = 14,021)

Note. The darker shade represents resources, and the lighter shade represents demands.

# Relationship Between South Carolina Teacher Working Conditions and Published Studies of Job Satisfaction

The SCTWCS defined job satisfaction as favorable or unfavorable assessments teachers make regarding their occupation (see Weiss, 2002). Sources of job satisfaction can be categorized into three areas: 1) the intrinsic rewards of teaching, 2) factors outside of the school setting, and 3) school-related factors (Dinham & Scott, 1998). Intrinsic rewards of teaching would include perceptions of making a difference in students' lives. The observed correlation with student engagement is validated by research that has shown teachers' intrinsic job satisfaction is associated with working with students and performing teaching duties (Watt & Richardson, 2008). The significant correlations across the other two items illustrate the role of school-related factors, echoing previous research results. The presence of encouraging school environments and favorable social connections with parents, colleagues, and administrators are indicative of job satisfaction among teachers (Day et al., 2007; Johnson & Birkeland, 2003; Skaalvik & Skaalvik, 2015). Additionally, studies have demonstrated that teacher autonomy in the classroom correlates with higher levels of job satisfaction, whereas the existence of time constraints and student discipline problems have been associated with decreased levels of job satisfaction (Day et al., 2007; Johnson & Birkeland, 2003; Koustelios et al., 2004; Skaalvik & Skaalvik, 2015).

#### + KEY QUESTION 3B:

# How do teacher working conditions relate to teachers' intentions to remain in the classroom?

To address Key Question 3b, we examined correlation coefficients between teachers' ratings of their working conditions and their responses to a single item regarding their intention to stay in the profession for the foreseeable future. Correlation values range from a low of 0 to a high of 1, with the sign of the coefficient (positive or negative) indicating the direction of the relationship. As the sample size is large, we focused on values of .30 or higher as demonstrating an important relationship between an aspect of teachers' working conditions and their level of job satisfaction.

#### Teacher Working Conditions With Intentions to Remain in the Classroom

Teachers were asked for their level of agreement with the statement, "I intend to remain in the profession for the foreseeable future." As with the job satisfaction questions, every area of teacher working conditions displayed a significant relationship with this question, and all but three areas (student safety support, student behavior, and staff cooperation) matched our targeted threshold (>.30) for describing a meaningful relationship.

The two areas of teacher working conditions with the largest correlations (both .40 or greater) were administrative support and influence over school policy issues, indicating these areas play a large role in teachers' decisions to remain in the profession. Among the demanding aspects of teachers' working conditions, the amount of time available to complete their work duties had the largest association with teachers' intentions to remain in the profession.

**Figure 13.** Meaningful Correlations Between Current Working Conditions and Teachers' Intention to Remain in the Profession (n = 13,981)



Note. The darker shade represents resources, and the lighter shade represents demands.

#### Relationship Between South Carolina Teacher Working Conditions and Published Studies With Teachers' Intention to Stay in Current Positions

The intention to stay refers to teachers' enthusiasm and intentional willingness to stay in their current position (Tett & Meyer, 1993). Teachers often make decisions about staying or leaving based on working conditions, such as administrative support, resources for teaching, and the amount of input they feel they have when making decisions (Ingersoll, 2001, 2002). The observed correlations in this report highlight the role of administrative support, policy influence, and available resources with intentions to stay for teachers in South Carolina. Empirical studies have shown that administrative support strongly affects the rate of teacher turnover in a school (Greiner & Smith, 2009; Sedivy-Benton & Boden-McGill, 2012). Furthermore, Darling-Hammond (2003) noted that school leadership can exert a magnetic influence, causing teachers to actively seek and remain in positive, supportive work environments.

## + KEY QUESTION 4: How do new teachers across South Carolina perceive their mentoring support?

In addition to the items on the SCTWCS, new teachers received an additional set of items relating to mentor proximity, support with teaching, and support outside of teaching. New teachers were considered as those who have been teaching for five years or fewer in the classroom and/or have been formally assigned a mentor during the 2022-2023 school year. Teachers meeting these qualifiers were routed to this set of questions following the working conditions items. For participating classroom teachers, 3,720 teachers had been teaching five years or less, and of those, 1,339 teachers had been formally assigned a mentor for the 2022-2023 school year.

To address Key Question 4, we examined the average responses for sets of questions. One set of questions focuses on items related to mentoring that supports their work within classrooms, and the other section addresses mentoring that supports new teachers' activities outside the classroom. Higher scores indicate a more positive view of mentoring. Table B8 describes the average scores within each mentoring section as well as the frequencies with which the mentors for new teachers worked in the same building and in a similar content area or grade level; detailed statistical results are provided in the Appendix.

# New Teachers' Mentoring Experiences Working Conditions With Intentions to Remain in the Classroom

The average scores for the two sections of questions regarding new teachers' mentoring experiences were slightly above the midpoint of each scale, indicating that new teachers agreed that the mentoring experiences were positive on average. The proximity of the two average scores and the high correlation between the two scales (.867) suggest that new teachers responded similarly to each set of questions. In other words, new teachers rated their mentors' ability to help with their teaching as well as duties outside the classroom similarly.

Figure 14. Average Score for Perceived Mentor Support by New Teachers



Looking at the proximity of the mentors assigned to new teachers, while almost all of the new teachers reported that their mentor worked in the same building as the new teacher, only a slight majority had a mentor who taught in the same content area or grade level as the new teacher.

#### Figure 15. Proximity of Mentors for New Teachers



*Note.* This figure shows the percentage of new teachers who selected "Yes" for their assigned mentor teaching in the same building, same grade level, and same content area.

# Relationship Between South Carolina New Teachers' Mentoring Experiences and Published Studies

Research has shown that new teachers who participated in a mentoring program demonstrated higher job commitment and satisfaction and were more likely to stay in the teaching profession (Ingersoll & Strong, 2012). Moreover, mentoring programs have been found to improve various aspects of teaching, including keeping students on task, designing effective lesson plans, tailoring classroom activities to students' interests, creating a positive classroom environment, and establishing successful classroom management (Ingersoll & Strong, 2012). New teachers in South Carolina experience similar proximity to their mentors as teachers in North Carolina (NCTWC Survey, 2022). In North Carolina, a little over half of new teachers had a mentor in the same content area and/or in the same grade level, and approximately 85% of new teachers had a mentor in the same building. However, when provided with support specific to the content they teach, mentors tend to have a greater impact on the teaching practices of new teachers (Callahan, 2016; Ingersoll & Strong, 2012).

### + KEY FINDINGS AND RECOMMENDATIONS

The overarching goal of the survey was to measure teacher working conditions and workplace satisfaction to better understand and enhance the factors that impact South Carolina teachers' decisions to remain in their teaching positions. Based on classroom teachers' responses, there were several important findings:

- The most highly rated aspects of teachers' workplace conditions were not the most important factors related to job satisfaction and intention to stay in the profession. Staff cooperation, principal communication, and a sense of classroom autonomy were the most positively rated areas of teacher work conditions in this survey. While each of those areas was significantly related to teacher satisfaction and intention to remain in the profession, they were not the factors most highly associated with those outcomes.
- Similarly, the lowest-rated component of teacher workplace conditions, student behavior, had one of the lower relationships to job satisfaction and intention to stay in the profession. Teachers' estimation of their available time to complete their duties was among the lowest-rated areas. It was highly associated with teachers' intention to stay in the profession as well as the likelihood that they would choose a teaching career again.
- Looking at how teachers' perceptions tended to differ among types of schools, student engagement was the area that most often varied depending on the school context. Student engagement was rated highest in elementary schools, schools with lower levels of student poverty, and in suburban and rural schools.
- The two aspects of teacher working conditions that were most consistently associated with teachers' job satisfaction and intention to remain in the profession were the levels of administrative support at their school and the degree to which they perceived they had some level of influence over the policies at their school. While administrative support was perceived positively on average among South Carolina teachers, their sense of influence on school policy was rated much lower.

The SCTWCS was developed specifically for South Carolina teachers to better understand the relationship among their working conditions, their job satisfaction, and intentions to stay in the profession. Besides the survey development process, important lessons were also learned about the process of implementing such a large-scale project. More than two-thirds of teachers in South Carolina were invited to participate in the survey, and more than 17,000 teachers provided feedback. However, many districts and teachers did not elect to participate. To be able to reflect the needs of the South Carolina teaching workforce, more participation in future implementations of the survey is needed, especially within the 38 school districts that chose not to participate. Efforts to build relationships and improve communication with the districts, largely located in the upstate regions of South Carolina, can be made before the next administration of the survey. One specific recommendation would be to work more closely with the South Carolina School Improvement Councils and other support organizations in these districts to help build connections, provide more communication, and address questions about the survey process. Other recommendations include publicizing the benefits of participation for districts and schools involved in the survey through incentives (toolkits, specialized reports, etc.).

Participation is also likely to increase as more is learned about this project. Some districts may have been unsure how these results would be used or how this survey differed from data collected for accountability purposes, such as the School Climate Survey. The administrations of SCTWCS and the School Climate Survey overlapped in March, which may have caused confusion about the purpose of the two surveys. Varying the time points to keep the two surveys from overlapping will help avoid confusion, as will a greater understanding of the purpose of the surveys.

# + HOW SCTWCS DATA COULD BE USED

Statewide data can provide the overall perspective of South Carolina teachers to allow for individual district and/or school comparisons. The comparisons to state averages may allow different groups of stakeholders to compare more "local" perspectives of teachers to identify areas of strengths and areas for change.

For the SCTWCS, a data dashboard will be made available (summer 2023) through Qualtrics (ed tech partner). Superintendents will be provided access to view results across the state, their district, and their schools with at least a 50% participation rate and ten teachers. The intent is to provide school districts access to data specific to their district as well as access to a toolkit that will help guide them on how to best use the data to develop self-directed plans for improving the working conditions for teachers.

Schools with more than 10 teachers and a participation rate greater than 50% will also be able to view data specific to their school. The data dashboard will focus on individual items from the survey so that districts/ schools can be specific in their attempts to better understand their workplace environment. For example, we can consider a particular school in the Midlands that had a 65% response rate. In looking at how items from the survey were rated by their teachers, school and district administrators would see that two items related to communications with the principal ("listens to your concerns" and "seems interested in your ideas") were the most highly rated items and that an item related to available time ("complete most of the job-related work at school") was rated the lowest. As schools and districts begin to utilize this data for improvement, other schools and districts will see the benefits of greater participation.

### + FUTURE WORK

Reporting these initial results is only the first step in how this data can and will be used. The next step in the development of any new survey is to investigate the psychometric properties of the instrument. Examining how different items performed in relation to one another, how well items appeared to relate to their intended categories, and how well items related to certain outcomes will help improve the quality of data from future implementations of the survey.

Data from this survey can also be integrated with other sources of South Carolina teacher data to provide more insight into the South Carolina teacher workforce. Linking these findings about teacher working conditions to our databases that provide demographic, preparation, and assessment information about teachers will allow us to better understand the individual needs and career trajectories of teachers in our state. Similarly, integrating this data with the information provided by the SC School Report Cards and the School Climate Survey will reveal more about how school contexts impact teachers and how teachers shape their schools in return.

Finally, it will be important to study how teachers' perceptions of their working conditions correlate with results from the annual Teacher Exit Survey given to teachers leaving their schools, providing more evidence to determine if the Teacher Working Conditions Survey is describing valid relationships between school factors and teachers' decisions to leave their schools.

#### + REFERENCES

- Alarcon, G. M. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior, 79*(2), 549-562.
- Bakker, A. B., & Demerouti, E. (2007). The job demands resources model: State of the art. *Journal* of Managerial Psychology, 22(3), 309-328.
- Bean, J. A. (2017). A literature review of the role of self-efficacy in alleviating teacher burnout. (ProQuest Number 10745471) [Doctoral dissertation, Biola University]. ProQuest Dissertations and Theses Global.
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: a primer. *Frontiers in Public Health*, 6, 1-18.
- Callahan, J. (2016). Encouraging retention of new teachers through mentoring strategies. *Delta Kappa Gamma Bulletin*, 83(1), 6.
- Carver-Thomas, D., & Darling-Hammond, L. (2017). Teacher turnover: Why it matters and what we can do about it. *Learning Policy Institute*. https://learningpolicyinstitute.org/sites/default/files/product-files/ Teacher\_Turnover\_REPORT.pdf
- Clunies-Ross, P., Little, E., & Kienhuis, M. (2008). Self-reported and actual use of proactive and reactive classroom management strategies and their relationship with teacher stress and student behavior. *Educational Psychology*, *28*(6), 693-710.
- Collie, R. J. (2021). A multilevel examination of teachers' occupational commitment: The roles of job resources and disruptive student behavior. *Social Psychology of Education*, 24(2), 387-411.
- Corkin, D.M., Ekmekci, A., & Parr, R. (2018). The effects of the school-work environment on mathematics teachers' motivation for teaching; a self-determination theoretical perspective. *Australian Journal of Teacher Education*, 43(6), 50-66.
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, *60*(8), 6-13.
- Day, C., Sammons, P., Stobart, G., Kington, A., & Gu, Q. (2007). *Teachers Matter: Connecting Work, Lives and Effectiveness*. Maidenhead: Open University Press.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands- resources model of burnout. *Journal of Applied Psychology, 86*(3), 499.
- Dinham, S., & Scott, C. (1998). A three domain model of teacher and school executive career satisfaction. *Journal of Educational Administration, 36*(4), 362-378.
- Dotterer, A. M., & Wehrspann, E. (2016). Parent involvement and academic outcomes among urban adolescents: Examining the role of school engagement. *Educational Psychology*, *36*(4), 812-830.
- Gonzalez-DeHass, A. R., & Willems, P. P. (2003). Examining the underutilization of parent involvement in the schools. *School Community Journal*, *13*(1), 85.
- Greiner, C. S., & Smith, B. (2009). Analyses of selected specific variables and teacher attrition. *Education*, *129*(4), 579-584.
- Gross, B., & Hamilton, L. (2023). Student Mental Health and Well-Being: A Review of Evidence and Emerging Solutions. Center on Reinventing Public Education. https://crpe.org/student-mental-healthand-well-being-a-review-of-evidence-and-emerging-solutions/

- Harmsen, R., Helms-Lorenz, M., Maulana, R., & van Veen, K. (2018). The relationship between beginning teachers' stress causes, stress responses, teaching behavior and attrition. *Teachers and Teaching*, *24*(6), 626-643.
- Herman, K., Hickmon-Rosa, J., & Reinke, W. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated teacher outcomes. *Journal of Positive Behavioral Interventions*, *20*(2), 90-100.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal, 38*(3), 499-534. http://dx.doi.org/10.3102/0002831203800 3499
- Ingersoll, R. (2002). Out-of-field teaching, educational inequality, and the organization of schools: An exploratory analysis. *CPRE Research Reports*. https://repository.upenn.edu/cgi/viewcontent. cgiarticle=1057&context=cpre\_researchreports
- Ingersoll, R. M., & Strong, M. (2012). What the research tells us about the impact of induction and mentoring programs for beginning teachers. *Teachers College Record, 114*(14), 466-490.
- Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. *American Educational Research Journal*, 40(3), 581-617.
- Koustelios, A. D., Karabatzaki, D., & Kousteliou, I. (2004). Autonomy and job satisfaction for a sample of Greek teachers. *Psychological Reports*, *95*(3), 883-886.
- Larson, K. E., Pas, E. T., Bottiani, J. H., Kush, J., & Bradshaw, C. P. (2020). A multidimensional and multilevel examination of student engagement and secondary school teachers' use of classroom management practices. *Journal of Positive Behavior Interventions*, *23*(3), 149-162.
- Lee, S. J., York, P. M., Williams III, J. A., Richardson, S. C., Davis, A. W., Williams, B. K., & Lewis, C. W. (2020). Teachers' psychological distress in North Carolina: An analysis of urban versus non-urban school districts. Urban Education, 0042085920948955. https://doi.org/10.1002/CL2.177
- Malone, D. (2017). Socioeconomic status: a potential challenge for parental involvement in schools. *The Delta Kappa Gamma Bulletin: International Journal for Professional Educators*, 83(3), 58-62.
- Marshik, T., Ashton, P.T., & Algina, J. (2017). Teachers' and students' needs for autonomy, competence, and relatedness as predictors of students' achievement. *Social Psychology of Education: An International Journal*, 20(1), 39-67.
- North Carolina Survey. (2022). *Teacher Working Conditions Survey*. https://adincsurvey.azurewebsites. net/#/nctwcs/2022\_NCTWCS
- Prieto, L. L., Soria, M. S., Martínez, I. M., & Schaufeli, W. (2008). Extension of the Job Demands-Resources model in the prediction of burnout and engagement among teachers over time. *Psicothema, 20*(3), 354-360.
- Reeves, C., Emerick, S., & Hirsch, E. (2006). Creating Non-Instructional Time for Elementary School Teachers: Strategies from Schools in North Carolina. *Center for Teaching Quality*. https://eric. ed.gov/?id=ED498767
- Sedivy-Benton, A. L., & Boden-McGill, C. J. (2012). Unpacking the Effects: Identifying School and Teacher Factors and Their Influence on Teachers' Intentions to Stay or Leave the Profession. *Research in the Schools, 19*(2) 75-89.
- Suggested citation: Starrett, A., Barth, S., Gao, R., & DiStefano, C. (2023). South Carolina teacher retention rates for the 2020-2021 academic year: One-year and three-year averages. *SC TEACHER*. https://sc-teacher.org/documents/educator-pipeline-report/

- Starrett, A., Barth, S., & Go, J. Educator workforce profile in South Carolina for 2020-2021. (2022). SC TEACHER. https://sc-teacher.org/our-focus/educator-workforce-profile/
- Skaalvik, E. M., & Skaalvik, S. (2015). Job Satisfaction, Stress and Coping Strategies in the Teaching Profession-What Do Teachers Say?. *International Education Studies, 8*(3), 181-192.
- SC General Assembly. (2022). South Carolina Legislature. https://www.scstatehouse.gov/sess124\_2021-2022/prever/3081\_20201209.htm
- Schleifer, D., Rinehart, C., & Yanisch, T. (2017). Teacher Collaboration in Perspective: A Guide to Research. *Public Agenda*.
- Taris, T. W., Leisink, P. L., & Schaufeli, W. B. (2017). Applying occupational health theories to educator stress: Contribution of the job demands-resources model. *Educator Stress: An Occupational Health Perspective*, 237-259.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta analytic findings. *Personnel Psychology*, *46*(2), 259-293.
- Tinubu Ali, T., & Cherukumilli, S. (2020). A Snapshot of Student Support Systems across the South. Distance Learning Equity Dashboard. *Southern Education Foundation*.
- Watt, H. M., & Richardson, P. W. (2008). Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction*, *18*(5), 408-428.
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, *12*(2), 173-194.
- Wright, K. B., Shields, S. M., Black, K., Banerjee, M., & Waxman, H. C. (2018). Teacher perceptions of influence, autonomy, and satisfaction in the early Race to the Top era. *Education Policy Analysis Archives, 26*, 62-62.

# + APPENDIX A: SURVEY DEVELOPMENT AND ADMINISTRATION

#### **Survey Construction**

Measuring teachers' working conditions (SCTWCS) is a complex goal, as SCTWCS is influenced by multiple factors surrounding the work environment. To achieve trustworthy and useful data for decision-making, surveys need to be carefully and thoughtfully constructed. We first detail the processes used in survey construction to provide evidence that the survey can accurately reflect teacher working conditions in South Carolina. The survey was constructed using best practices of the survey design field (Boateng et al., 2018). The procedures are explained in this section as well as documented in Figure 1 in the report.

Overall, the decision was made to keep the focus of the SCTWCS on a teacher's day-to-day working experiences. This was done for teachers to be able to respond to the items and relay their personal perspectives and not have to make judgments about feelings, thoughts, or perspectives of other teachers or educators (e.g., recognizing your accomplishment instead of recognizing all teachers' accomplishments at the school). In addition, to increase participation, the SCTWCS would be administered in an online format and sent to a teacher's school email address; no paper versions were available as all teachers in South Carolina have access to the Internet and email through their school.

The target population for the survey is classroom teachers across South Carolina. Teachers with professional certification positions in prekindergarten, kindergarten, classroom, special education (i.e., itinerant, self-contained, and resource), and retired teachers returning to teach make up the survey population, approximately 55,000 in total. We recognize that many other important educators in schools, such as administrators, assistant teachers, staff positions, counselors, psychologists, and many more educators, help with the overarching goal of providing high-quality education. Future surveys from SC TEACHER will expand the survey to understand these groups' working conditions and specific needs.

#### **Conceptualization and Definition of Areas of Concern**

Constructing a sound survey requires a thorough review of the target areas to be measured. This helps ensure that the items can be considered good representatives of their respective areas. Reviews of existing scales, prior studies of working conditions in the education literature, and alternative definitions were conducted over a two-month period (See Figure 1 in the report).

The first step included examining the areas of interest noted by the South Carolina General Assembly (Section 59-25-52 – amendment). Areas to be included in the survey were listed and needed to be defined and supported by related studies. The Job Demands-Resources (JD-R) model was identified as an optimal theoretical framework for designing the SCTWCS. The JD-R model was first published with employees in different occupational fields (e.g., medicine, industry, and transport) to understand the relationships between job characteristics and employment well-being by Demerouti and colleagues (2001). Job characteristics refer to various physical and social organizational aspects (Demerouti et al., 2001). Specifically, job demands refer to the requirement of effort and energy from the working conditions, while job resources indicate the aspects employees receive support from to help achieve positive work outcomes (e.g., personal growth and development). Further, the review showed that the JD-R model was relevant to different areas, with adaptations of the model tested in different occupations (e.g., Australia, Finland, and China) (Bakker & Demerouti, 2007; Schaufeli & Taris, 2014).

A crosswalk was conducted using the areas of interest noted by the General Assembly and constructs defined in the JD-R literature. This ensured that all areas the South Carolina Legislature noted were included with a sound definition. The areas of the two resources overlap with each other. For instance, the JD-R literature in the teaching profession frequently examined teacher autonomy as a type of job resource (Taris et al., 2017). The General Assembly noted "control in the classroom." We developed an area titled "autonomy in the classroom that supports state and local standards."

The SCTWCS used in the 2023 administration included 11 areas, eight under resources and three under demands (Table A1). SC Legislative Act 185 also stated the need to measure the extent and quality of mentoring available to new teachers. Additionally, the SC TEACHER team included items measuring job satisfaction and intentions to stay in teaching, which are commonly used as outcomes with the JD-R model (Skaalvik & Skaalvik, 2015). A few areas have slightly different wording than those covered in the bill; however, all areas of interest are included.

Areas in Bill	Survey areas (Number of Items)	Operational Definitions	Example item		
Resources (7 areas)					
(1) administrative support	Administrative support (6 items)	Satisfaction with the extent that administrators (e.g., principals) assist teachers in their emotional, instrumental, and appraisal support and by providing information	Administrators at your school show fairness in your teaching evaluation.		
(7) communication with principal	Communication with principal (4 items)	Amount and quality of interactions with principal	Your principal listens to your concerns.		
(6) availability of resources	Availability of resources (5 items)	Agreement with the extent to which the resources (materials, PD) for teaching are acceptable and beneficial	You have access to professional development that deepens your content knowledge.		
(4) parental support	Parent support (4 items)	Teachers' feeling of being supported and trusted by parents	Parents of your students show you respect.		
(8) cooperation among the staff; (9) staff recognition;	Cooperation and recognition among staff (5 items)	The perceived availability of support in the workplace and interest and willingness to collaborate with other teachers	You and your colleagues work together as a team.		
(3) decision-making roles; (11) influence over school policy	Influence over school policy and decision-making roles (8 items)	Extent to which administration allows input for school/ teaching	Administrators at your school include your input in decision- making on establishing student discipline procedures.		
(10) control in classroom	Autonomy in the classroom that supports state and local standards (8 items)	The ability of teachers to select activities and materials, control instructional planning and sequencing of material, control classroom standards of conduct, and the ability for on- the-job decision-making	In your classroom, you are able to adapt the pace and progression of your instruction.		
Demands (4 areas)					
(5) amount of paperwork and routine duties	Amount of paperwork and routine duties (4 items)	Agreement to the extent spent on paperwork/routine parts of teaching workload	You have enough time to complete required administrative work/forms.		
(12) student absenteeism (13) student apathy	Student engagement (5 items)	Extent to which students' attitudes, efforts, engagements support teaching	In your classroom, your students show interest in completing schoolwork.		
(14) violence	Student safety and health (5 items)	Extent to which the teacher feels prepared to recognize troubling behavior	You feel prepared to recognize students exhibiting early warning signs of violent behavior.		
(2) student behavior	Student behavior (5 items)	Level of agreement of extent to which student misbehavior, tardiness, absenteeism, and mobility interfere with teaching, placing greater demands on the teacher.	Student misbehavior (e.g., noise, horseplay, or fighting) in your classroom frequently interferes with your teaching.		

Table A1. Survey Areas included in the SCTWCS of South Carolina Teachers, 2023
	Mentor Support (3 areas)					
	Mentor support for teaching (14 items)	New teachers' support from the assigned mentor for teaching-related tasks	With regards to your classroom, your assigned mentor helps you develop your lesson plans.			
	Mentor support outside of teaching (6 items)	New teachers' support from the assigned mentor for non- teaching-related tasks	Outside of your classroom, your assigned mentor helps you complete administrative paperwork.			
Mentor proximity (3 yes/no items)		The proximity of the mentor to the new teacher	Your mentor and you teach the same grade level.			
	Outcome	s (4 items)				
	Job satisfaction (3 items)	Satisfaction with the teaching career	If you could start over, you would choose teaching again as your career.			
	Intentions to stay in teaching (1 item)	Intentions to stay in current teaching position	You intend to remain in the profession for the foreseeable future.			

#### **Item Construction**

A pool of survey items was drafted, where items were written by drawing from other sources including prior literature (e.g., empirical studies on relevant areas) and pre-existing survey scales (e.g., North Carolina Teacher Working Condition Surveys). The focus in item construction was to: a) select and write items aligned with the definition of a particular area and b) ensure that a minimum of three to four items could be constructed for each area.

For each content area, the SC TEACHER team reviewed items for clarity and relevance to the target area (Boateng et al., 2018). Multiple rounds of editing were conducted prior to pilot testing with a small sample of teachers. The item pool consisted of 136 items, including 44 resource items, 52 demand items, 23 mentor support items (i.e., support for teaching, support outside of teaching, and proximity), and 17 outcome items (i.e., emotional exhaustion, dedication, job satisfaction, and intentions to stay in the classroom). Stems were drafted for each construct to align with the area operationalization. For example, "you have access to..." was the stem for items related to the Availability of Resources.

Teachers were asked to respond to the items by considering their experiences during the current school year (Note: as this was the first administration conducted in February 2023, teachers would reflect on the past six months of the 2022-2023 academic year). For resource items, a five-point Likert scale was used where teachers were asked to report their level of agreement with the survey items. Teachers rated items using categories of Strongly Agree = 5, Agree = 4, Neither Disagree nor Agree = 3, Disagree = 2, and Strongly Disagree = 1. For Demand items and outcome statements, a seven-point frequency scale was used, where teachers rated items using categories of Never = 0, Up to a few times a year = 1, Once a month = 2, A few times a month = 3, Once a week = 4, A few times a week = 5, and Every Day = 6.

#### **Item Refinement**

A pilot of SCTWCS was administered to 30 South Carolina teachers through an online administration. Additional comments were provided through email. Teachers noted confusing items, wording/grammar concerns, and suggested items or areas to measure that might be missing. Teachers also noted the need to include a *Not Applicable* (N/A) response option. Multiple items were removed or revised based on the pilot results.

After editing, the revised SCTWCS was shared with experts (e.g., SC TEACHER project team members and policymakers) for additional feedback. Changes included reducing the length of the survey and rewording items to better align with the South Carolina education system. Additionally, all areas were adapted to use the five-point agreement scale. The final version of the SCTWCS administered to South Carolina teachers consisted of 59 items for working conditions, with 40 items measuring the resources area and 19 items measuring the demands area, 23 items for mentor support for new teachers, and four items for outcomes (i.e., job satisfaction and intentions to stay in the classroom). Two open-ended questions were asked so that teachers could provide additional feedback on support and challenges sources, respectively.

#### **Survey Participation**

Prior to data collection, the Institutional Review Board at the University of South Carolina approved all survey content and administration procedures. In mid-December 2022, the SC TEACHER team sent emails to every South Carolina district's school superintendent and personnel administrator to request their approval for teacher participation in the first administration of the SCTWCS. The emails detailed the purpose of the survey, the charge from the state through Act 185, and the benefits for participating, including tailored reports and access to targeted tools to support school improvement planning and recruitment and retention efforts.

In early January 2023, the emails were printed and mailed to superintendents and personnel administrators in all 82 school districts to ensure communication with district personnel regarding SCTWCS. In mid-January, the SC TEACHER team began sending reminder emails and making phone calls to superintendents and personnel administrators. Districts were given until February 20th to agree to participate and provide the necessary data (i.e., SC Educator ID and email address) for the administration of the SCTWCS. The SCTWCS is confidential; however, individual teacher identification information (i.e., SC Educator ID) was used only to calculate school response rates.

#### **Survey Administration**

For participating districts, SC TEACHER emailed each classroom teacher describing the overarching goals for SCTWCS. Distinctions were made between the SCTWCS and the School Climate Survey to show how schools and districts may benefit from participation. Incentives for participation included tailored reports and tools to support improvement planning.

After district approval, all teachers within a participating district were contacted. As teachers' certification numbers were requested, SC TEACHER noted concerns around confidentiality. Teachers were assured that their responses would be kept confidential within the SC TEACHER Research Team and that responses would be de-identified and aggregated for reporting. Teachers were also given a contact person within SC TEACHER, as well as the phone number for the University of South Carolina's Office of Research Compliance. The email concluded with a unique link to SCTWCS in Qualtrics (ed tech partner).

For teachers clicking the survey link in the email, they were taken to a landing page for SCTWCS in Qualtrics that reiterated how confidentiality would be protected, that participation was voluntary, and how clicking "Next" in the survey denoted their consent to participate. A total of 44 school districts out of the 83 in South Carolina elected to participate (53% response rate). Invitations were sent to South Carolina teachers in two cycles. On February 13th, emails were sent to teachers in 36 school districts, and then on February 23rd, emails were sent to another eight school districts.

In total, 36,873 classroom teachers across 855 public schools were sent an email to complete the SCTWCS. From February through mid-March, teachers who had not started the survey were sent a reminder email twice a week (Tuesday morning and Thursday afternoon) to encourage completion. Beginning March 17th through 24th, teachers who had not started or completed the survey were sent reminder emails Monday morning, Wednesday afternoon, and Friday morning. During this period, the SC TEACHER team also contacted district personnel, encouraging them to communicate with teachers to promote participation in SCTWCS. Sending batch emails to roughly 36,000 teachers can result in server inefficiency, and it is possible that some teachers may not have received the original email or some reminders. The SC TEACHER website offered a form where teachers could request their unique SCTWCS link. The survey was open for participation for six weeks and was officially closed on March 31st.

## + APPENDIX B: DETAILED TECHNICAL ANALYSIS RESULTS

This appendix details the research study and data analysis procedures. All relevant statistical methods, hypothesis tests, tests of assumptions, and measures of results are detailed.

#### **Data Sources**

This study used data collected from the SCTWCS from the 2022-2023 school year. The analyses included 17,952 teachers. We included all 17,952 available teachers for analyzing Key Questions 1 and 3. To analyze Key Questions 2a through 2c, we included only those teachers with available information (i.e., organizational level, poverty level, and school location). We used only the new teacher sample (n = 1,325) for analyzing key question 4.

Table B1 provides detailed teacher participation rates for all 44 school districts, with percentages ranging from 5% to 81%.

	Teachers Eligible	Teachers Participated	
	Ν	n	%
Aiken	1,235	517	42%
Anderson 1	737	462	63%
Berkeley	2,170	1194	55%
Calhoun	102	48	47%
Charleston	3,629	2415	67%
Cherokee	585	270	46%
Chesterfield	494	225	46%
Clarendon	270	201	74%
Colleton	272	179	66%
Dillon 4	255	116	45%
Dorchester 2	1,410	401	28%
Dorchester 4	199	109	55%
Fairfield	225	148	66%
Florence 1	1,089	652	60%
Florence 2	79	9	11%
Florence 3	200	161	81%
Florence 5	95	49	52%
Georgetown	632	276	44%
Greenville	5,036	2088	41%
Hampton	188	77	41%
Horry	2,993	1303	44%
Kershaw	664	388	58%
Lancaster	568	28	5%
Lee	89	58	65%
Lexington 1	2,303	1268	55%
Lexington 2	669	456	68%
Lexington 3	158	49	31%
Lexington 4	224	137	61%

#### Table B1. District Participation

Lexington-Richland 5	1,404	964	69%
Marlboro	203	139	68%
Newberry	430	277	64%
Oconee	746	38	5%
Orangeburg	824	387	47%
Pickens	1,199	315	26%
Richland 1	1,684	713	42%
Richland 2	1,794	1137	63%
Williamsburg	158	73	46%
York 1	342	75	22%
York 3 (Rock Hill)	1,236	433	35%
Governor's School for Agriculture	13	7	54%
Governor's School for Arts & Humanities	70	30	43%
Palmetto Unified	67	33	49%
SC Department Juvenile Justice	26	16	62%
SC School for the Deaf and the Blind	79	22	28%
TOTAL	36,873	17,952	53%

#### Measures

#### WORKING CONDITIONS

Investigation of teachers' perceptions of their working conditions was composed of 59 items. For these items, teachers reported their level of agreement on a five-point scale: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. SCTWCS measured two general areas (i.e., resources and demands) and eleven specific areas related to either demands or resources. Resources were composed of seven areas, including administrative support (e.g.," Administrators at your school recognize your accomplishments"), communication with principal (e.g., "Your principal has positive interactions with you"), availability of resources (e.g., "You have access to professional development that deepens your content knowledge"), parent support (e.g., "Parents of your students recognize you as an educational expert"), cooperation and recognition among staff (e.g., "You and your colleagues work together as a team"), influence over school policy and decision-making roles (e.g., "Administrators at your school include your input in decision-making on school improvement planning"), and autonomy in the classroom that supports state and local standards (e.g., "In your classroom, you are able to adapt the learning material in order for your students to master the content"). Demands consisted of four areas, including amount of paperwork and routine duties (e.g., "You have enough time to create lesson plans"), student engagement (e.g., "In your classroom, your students put effort into doing their schoolwork"), student behavior (e.g., "Student tardiness frequently interferes with your teaching"), and student safety and health (e.g., "You feel prepared to recognize students exhibiting physical, social, and verbal bullying behavior").

A high score indicates a more positive view of teachers' working conditions. The reliability of these 11 areas of the SCTWCS ranged from 0.82 to 0.95 (median = 0.93), indicating that the items from each area consistently assess each aspect of the teacher's working conditions. Correlations among most areas of the teacher working conditions were below 0.50, indicating that items from most areas measure the specific area they intended to. There was a higher correlation between administrative support and communication with the principal (r = 0.79) and between administrative support and influence over school policy and decision-making roles (r = 0.76). As the number of items in each area differed, we used the average scores for each area of the SCTWCS for all the analyses for cross-area comparison purposes.

#### TEACHER JOB SATISFACTION

Teachers' job satisfaction was measured with four items. The items use a five-point Likert Scale with anchors of strongly disagree, strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. The first three items measured the levels of teachers' satisfaction with their teaching positions (e.g., "If I could start over, I would choose teaching again as my career"). The last item measured teachers' intention to stay in the profession (i.e., "I intend to remain in the profession for the foreseeable future"). A higher score indicated a higher level of teachers' job satisfaction. The reliability of the scale was 0.82, indicating high internal consistency among items.

#### MENTORING SUPPORT

New teachers' perceptions of their mentoring support were measured with a mentoring support scale. The scale consisted of 23 Items; 20 items were five-point Likert scale items with anchors of strongly disagree, disagree, neither agree or disagree, agree, and strongly agree. These 20 items measured two areas of mentoring support, including mentor support for teaching (e.g., "With regards to your classroom, your assigned mentor helps you develop your lesson plans") and mentor support outside of teachers (e.g., "Outside of your classroom, your assigned mentor helps you get parents and caregivers involved"). The reliability of these two areas was 0.98 and 0.94, indicating that the items consistently measured these two areas. The average score of the items on each area was used in the analysis for comparison purposes. The remaining three items measured mentor proximity with dichotomous responses of yes or no. The questions measured whether mentors teach in the same building, the same content area, or the same grade level.

#### SCHOOL-LEVEL FACTORS

School-level factors, including school organizational level, geographic location, and percentage of pupilsin-poverty (PIP), were also measured.

For the school organization level, schools were categorized into three main types (elementary, middle, and high schools). Of the sample of 15,648 teachers, 7,603 (48.6%) were from elementary schools, 3,619 (23.1%) were from middle schools, and 4,426 (28.3%) were from high schools.

Concerning student poverty status, the South Carolina Department of Education (SCDE) classifies a child as living in poverty if the student is enrolled in Medicaid, Temporary Assistance for Needy Families (TANF), and/or enrolled in the Supplemental Nutrition Assistance Program (SNAP) or the foster system. Using these markers, the SCDE identified the percentage of pupils-in-poverty (PIP) at the school level. Using the SCDE PIP designation, all schools in South Carolina were then ranked, and quartiles were obtained to create a poverty designation. Teachers at schools in the upper 25% of South Carolina schools in terms of PIP were categorized as teaching in high-poverty schools, and teachers at schools in the lowest quartile of PIP were categorized as teaching in low-poverty schools. Teachers at schools in the middle (25% - 75% of PIP rankings) were categorized as teaching at moderate-poverty schools. Of the sample of 15,605 teachers with reported school PIP information, 5,273 (33.8%) were from low-poverty schools, 7,638 (48.9%) were from moderate-poverty schools.

For the geographic location, schools were categorized according to census-defined geographic designations (city, suburb, town, or rural) assigned by the National Center for Educational Statistics (NCES) (NCES, 2006). Of the sample of 15,625 teachers with school location information, 2,896 (18.5%) were from schools in cities, 6,995 (44.8%) from suburban schools, 936 (6.0%) from schools in towns, and 4,798 (30.7%) from schools in rural areas (Table B2).

School-level Variable	Levels	Number	Percentage
School Type	Elementary Schools	7603	48.6%
	Middle schools	3619	23.1%
	High schools	4426	28.3%
School Poverty	Low	5273	33.8%
	Medium	7638	48.9%
	High	2694	17.3%
School Location	City	2896	18.5%
	Suburbs	6995	44.8%
	Town	936	6.0%
	Rural	4798	30.7%

#### Table B2. Teacher Characteristics Across School-Level Variables

#### **Data Analysis**

First, this study examined South Carolina teachers' perceptions of their working conditions. We conducted the descriptive analysis (i.e., average score by area) to explore teachers' perceptions of different aspects of their working conditions (i.e., administrative support, communication with principal, availability of resources, parent support, cooperation and recognition among staff, influence over school policy and decision-making roles, autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties, student engagement, student behavior, and student safety and health).

Second, this study investigated the associations between teachers' perceptions of different areas of their working conditions and school-level factors, including school type (i.e., elementary, middle, high), PIP (i.e., low-poverty, medium-poverty, and high-poverty), and geographic location (i.e., city, suburb, town, and rural). We conducted descriptive analyses and analyses of variance (ANOVA) to examine the differences in each area of teacher working conditions by several variables, including school type, school poverty, and geographic location. ANOVA is used when examining the difference between multiple categories on a variable of interest, defined here as different dimensions of teacher working conditions.

Before conducting ANOVAs, we examined the assumptions required for the analysis, including normality and homogeneity of variances. The homogeneity of variance assumption was checked with Levene's test, and the normality assumption was checked with skewness and kurtosis values. Nonparametric tests were conducted if assumptions for parametric testing were not met. Effect size measures were calculated in lieu of significance testing to measure the magnitude of the differences in different areas of teacher working conditions.

Third, this study explored the association between teachers' perceptions of different areas of their working conditions and their job satisfaction. As we used the average scores in each area of teacher working conditions rather than raw scores measured on an interval scale, we used Spearman correlations to examine the association. Correlation rates can range from a low of zero to a high of 1, with the sign of the coefficient (positive or negative) indicating the direction of the relationship. As the sample size is large, we focused on values of .30 or higher (irrespective of sign), demonstrating a meaningful relationship.

Fourth, this study examined new teachers' perceptions of their mentoring support. We conducted a descriptive analysis for each of the two areas of mentoring support. We also used Spearman correlations to examine the association among three items of mentor proximity and two aspects of mentor support (i.e., mentor support for teaching and mentor support outside of teaching).

#### Results

#### TEACHERS' PERCEPTIONS OF WORKING CONDITIONS

Teachers' perceptions of their working conditions are presented in Table B3. We compared the mean scores in each aspect of teacher working conditions. The results showed that teachers' perceptions of different dimensions of the working conditions varied. Overall, teachers showed a more positive view of their working conditions related to resource areas than the areas of demand.

Specifically, regarding available resources, teachers showed more positive views of the following areas, including cooperation and recognition among staff (M = 4.18. SD = 0.83), communication with the principal (M = 4.08, SD = 1.02), and autonomy in the classroom (M = 4.06, SD = 0.85) but less positive views of parent support (M = 3.74, SD = 0.88). Within the demands domain, teachers demonstrated more positive views of student safety and health (M = 3.77, SD = 0.85) but less positive views of student behavior (M = 2.76, SD = 0.96).

Major Areas	Sub-Areas	Mean (M)	Standard Deviation (SD)
Resources	Cooperation and recognition among staff	4.18	0.83
	Communication with principal	4.08	1.02
	Autonomy in the classroom that supports state and local standards	4.06	0.85
	Administrative Support	3.83	0.93
	Availability of resources	3.77	0.94
	Parent support	3.74	0.88
	Influence over school policy and decision-making roles	3.38	1.02
Demands	Student safety and health	3.77	0.85
	Student engagement	3.34	0.95
	Amount of paperwork and routine duties	2.96	1.20
	Student behavior	2.76	0.96

#### TEACHERS' PERCEPTIONS OF THE WORKING CONDITIONS BY SCHOOL TYPE

Before running the ANOVAs, we examined appropriate assumptions. The normality assumptions were met for all analyses, with item skewness values < |2| and kurtosis values < |7|. The homogeneity of variance assumption was met for the analysis of four dimensions of the working conditions across school types. This allowed for the use of Tukey's honestly significant difference test (HSD) for pairwise differences between the school types. To analyze the seven dimensions of the working conditions across school types that did not meet the equal variance assumptions, we conducted a Welch one-way ANOVA and then used Games-Howell post hoc tests for pairwise comparisons. Both Tukey's HSD and Games-Howell adjust *p*-values to control for Type I errors.

To understand similarities and differences in teachers' perceptions of different areas of the working conditions for elementary, middle, and high schools, the average score in teachers' perception of each area of working condition was calculated as shown in Table B4. An omnibus ANOVA test of variance was conducted for each area of teacher working conditions to determine if these mean scores in each area differed significantly between organizational levels. Partial  $\eta^2$  was calculated to measure the magnitude of the overall differences in teachers' perceptions of each area of their working conditions due to school organizational levels.

Areas	School Type	n	Mean	<i>p</i> -value effect size
Administrative support	Elementary Schools	6494	3.86 <sup>a,b</sup>	ρ < .001*** η² = .002
	Middle Schools	3107	3.79ª	
	High Schools	3812	3.78 <sup>b</sup>	
Communication with principal	Elementary Schools	6622	4.08	<i>p</i> = .365 η² = .0002
	Middle Schools	3176	4.05	
	High Schools	3870	4.08	
Availability of resources	Elementary Schools	6546	3.84 <sup>a,b</sup>	ρ < .001*** η² = .009
	Middle Schools	3133	3.72ª	
	High Schools	3855	3.70 <sup>b</sup>	
Parent support	Elementary Schools	6576	3.84 <sup>a,b</sup>	ρ < .001*** η² = .031
	Middle Schools	3152	3.60ª	
	High Schools	3828	3.64⁵	
Cooperation and recognition among staff	Elementary Schools	6591	4.19	<i>p</i> = .243 η² = .0002
	Middle Schools	3163	4.18	
	High Schools	3894	4.16	
Influence over school policy and decision-	Elementary Schools	6095	3.40	ρ = .152 η² = .3e-4
making roles	Middle Schools	2966	3.38	
	High Schools	3637	3.36	
Autonomy in the classroom that	Elementary Schools	6371	3.90 <sup>a,b</sup>	ρ < .001*** η² = .057
supports state and local standards	Middle Schools	3100	4.12 <sup>a,c</sup>	
	High Schools	3793	4.25 <sup>b,c</sup>	
Amount of paperwork and routine duties	Elementary Schools	6054	2.74 <sup>a,b</sup>	ρ < .001*** η² = .052
	Middle Schools	2917	3.04 <sup>a,c</sup>	
	High Schools	3608	3.21 <sup>b,c</sup>	
Student engagement	Elementary Schools	6095	3.57 <sup>a,b</sup>	ρ < .001*** η² = .129
	Middle Schools	2968	3.00 <sup>a,c</sup>	
	High Schools	3679	3.14 <sup>b,c</sup>	
Student behavior	Elementary Schools	5894	2.74 <sup>a,b</sup>	ρ < .001*** η² = .005
	Middle Schools	2919	2.66 <sup>a,c</sup>	
	High Schools	3593	2.80 <sup>b,c</sup>	
Student safety and health	Elementary Schools	5673	3.78 <sup>b</sup>	ρ < .001*** η² = .002
	Middle Schools	2965	3.81°	
	High Schools	3671	3.73 <sup>b,c</sup>	

#### Table B4. Teacher Working Condition Areas by School Type

*Note.*\*\*\*Result is significant at the 0.001 level; <sup>a</sup>significant results between elementary and middle schools; <sup>b</sup>significant results between elementary and high schools; <sup>c</sup>significant results between middle and high schools

Overall, eight out of the 11 omnibus tests were significant (<.001), indicating there was a difference across school organizational levels in how teachers perceived their working conditions, specifically administrative support, availability of resources, parent support, autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties, student engagement, student behavior, and student safety and health. The magnitude of these differences varied. Organization level accounts for a negligible portion of the variance in administrative support, student safety and health, student behavior, availability of resources, a small portion of the variance in parent support and amount of paperwork and routine duties, and a medium portion of the variance in autonomy in the classroom that supports state and local standards and student engagement. Teachers' perceptions of communication with the principal, cooperation and recognition among staff, and influence over school policy and decision-making roles did not differ across school organizational levels.

Pairwise comparisons between organizational levels revealed that elementary teachers rated administrative support (elementary vs. middle: p < .001, d = .075; elementary vs. high: p < .001, d = .079), availability of resources (elementary vs. middle: p < .001, d = .119; elementary vs. high: p < .001, d = .142), and parent support (elementary vs. middle: p < .001, d = .249; elementary vs. high: p < .001, d = .207) higher than teachers in middle and high school. However, no significant differences existed between middle and high school teachers' ratings of these three aspects of teacher working conditions.

Relative to elementary and middle school teachers, high school teachers rated the following areas higher, including autonomy in the classroom that supports state and local standards (elementary vs. high: p < .001, d = .349; middle vs. high: p < .001, d = .130), and the amount of paperwork and routine duties (elementary vs. high: p < .001, d = .466; middle vs. high: p < .001, d = .172). Middle school teachers rated the autonomy in the classroom that supports state and local standards (elementary vs. middle: p < .001, d = .219) and the amount of paperwork and routine duties (elementary vs. middle: p < .001, d = .219) and the amount of paperwork and routine duties (elementary vs. middle: p < .001, d = .294) higher than elementary school teachers. Elementary school teachers rated student engagement higher than middle school and high school teachers (elementary vs. middle: p < .001, d = .437). High school teachers rated student engagement (middle vs. high: p < .001, d = .437). High school teachers rated student engagement (middle vs. high: p < .001, d = .437).

High school teachers rated student behavior higher than elementary and middle school teachers (elementary vs. high: p < .05, d = .058; middle vs. high: p < .001, d = .134). Relative to middle school teachers, elementary school teachers gave higher ratings for student behavior (elementary vs. middle: p < .01, d = .076).

Regarding student safety and health, high school teachers perceived that they were less prepared to recognize students exhibiting safety and health issues than elementary school teachers and middle school teachers (elementary vs. high: p < .05, d = .046; middle vs. high: p < .01, d = .081). Elementary and middle school teachers did not differ in their perceptions of student safety and health.

#### TEACHERS' PERCEPTIONS OF THE WORKING CONDITIONS BY SCHOOL POVERTY

To gain a greater understanding of how poverty at the school level is associated with teacher perceptions of the different areas of the teacher working conditions, the average scores in teachers' perceptions of each area of the working conditions were calculated for three categories of school poverty: schools in the highest quartile of school PIP (high poverty), schools in the middle 50% of school PIP (moderate poverty), and schools in the lowest quartile of school PIP (low poverty). Table B5 provides the teachers' perceptions of each aspect of teacher working conditions by school poverty level.

Before running the ANOVAs, we examined the necessary assumptions. For all the analyses, the assumption of normality was met. The homogeneity of variance assumption was met for the analysis of the five dimensions of the teacher working conditions by poverty level. When the homogeneity of variance was satisfied, we used Tukey's honestly significant difference test (HSD) for pairwise differences. For the analyses which did not meet the equal variance assumption, we conducted Welch one-way ANOVA tests and utilized Games-Howell post hoc tests for pairwise comparison.

An omnibus ANOVA test of variance was conducted to determine if the mean score in teachers' perceptions of each area of working conditions differed significantly across school poverty levels. Partial  $\eta^2$  was calculated to measure the magnitude of the overall differences in teachers' perceptions of each area of working conditions due to school poverty levels.

Areas	School Poverty	n	Mean	Sig.
Administrative support	Low	4521	3.88ª	ρ < .001*** η² = .003
	Moderate	6504	3.77 <sup>a,c</sup>	
	High	2351	3.84°	
Communication with principal	Low	4590	4.16 <sup>a,b</sup>	ρ < .001*** η² = .004
	Moderate	6651	4.02ª	
	High	2389	4.06 <sup>b</sup>	
Availability of resources	Low	4556	3.80ª	$p < .001^{***}$ $\eta^2 = .005$
	Moderate	6568	3.73 <sup>a,c</sup>	
	High	2374	3.84°	
Parent support	Low	4568	3.88 <sup>a,b</sup>	ρ < .001*** η² = .032
	Moderate	6594	3.65ª	
	High	2357	3.67 <sup>b</sup>	
Cooperation and recognition among staff	Low	4595	4.27 <sup>a,b</sup>	ρ < .001*** η² = .013
	Moderate	6635	<b>4.14</b> ª	
	High	2382	4.11 <sup>b</sup>	
Influence over school policy and decision-	Low	4271	3.43ª	ρ < .001*** η² = .002
making roles	Moderate	6182	3.34 <sup>a,c</sup>	
	High	2209	3.4°	
Autonomy in the classroom that	Low	4465	<b>4.11</b> <sup>a,b</sup>	ρ < .001*** η² = .005
supports state and local standards	Moderate	6440	4.03ª	
	High	2321	4.01 <sup>b</sup>	
Amount of paperwork and routine duties	Low	4247	2.96 <sup>a,b</sup>	ρ < .001*** η² = .002
	Moderate	6100	2.90 <sup>b,c</sup>	
	High	2198	3.05 <sup>a,c</sup>	
Student engagement	Low	4293	3.49 <sup>a,b</sup>	$p < .001^{***}$ $\eta^2 = .038$
	Moderate	6186	3.22ª	
	High	2228	3.24 <sup>b</sup>	
Student behavior	Low	4178	3.00 <sup>a,b</sup>	ρ < .001*** η² = .080
	Moderate	6045	2.63 <sup>a,c</sup>	
	High	2149	2.52 <sup>b,c</sup>	
Student safety and health	Low	4153	3.79	<i>p</i> =0.174 η² = .0003
	Moderate	5979	3.76	
	High	2142	3.75	

### Table B5. Teacher Working Condition Areas by School Poverty

*Note.* \*\*\*Result is significant at the 0.001 level. <sup>a</sup>significant results between Low and Moderate; <sup>b</sup>significant results between Low and High; <sup>c</sup>significant results between Moderate and High

Overall, all but one omnibus tests were significant (<.001), indicating there was a difference across school poverty levels in teachers' perceptions of the working conditions, regarding administrative support, communication with the principal, availability of resources, parent support, cooperation and recognition among staff, influence over school policy and decision-making roles, autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties, student engagement, and student behavior. The magnitude of these differences varied. School poverty level accounts for a negligible portion of the variance in administrative support, communication with the principal, availability of resources, influence over school policy and decision-making roles, autonomy in the classroom that supports state and local standards, amount of paperwork, and routine duties, student behavior for a negligible portion of the variance in administrative support, communication with the principal, availability of resources, influence over school policy and decision-making roles, autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties, a small portion of the variance in parent support and cooperation and recognition among staff, and a medium portion of the variance in student engagement and student behavior. Teachers' perceptions of student safety and health did not differ across school poverty levels.

Pairwise comparisons among school poverty levels revealed that teachers from the moderate-poverty school perceived administrative support (low vs. moderate: p < .001, d = .108; moderate vs. high: p < .01, d = .071), availability of resources (low vs. moderate: p < .001, d = .070; moderate vs. high: p < .001, d = .118), and influence over school policy and decision-making roles (low vs. moderate: p < .01, d = .090; moderate vs. high: p < .001, d = .090; moderate vs. high: p < .05, d = .067) less favorably than teachers from low-poverty and high-poverty schools. Teachers from low-poverty and high-poverty schools did not differ in their perceptions of these three areas.

Relative to teachers from moderate-poverty and high-poverty schools, teachers from low-poverty schools gave higher ratings for communication with principal (low vs. moderate: p < .001, d = .136; low vs. high: p < .001, d = .096), parent support (low vs. moderate: p < .001, d = .228; low vs. high: p < .001, d = .205), cooperation and recognition among staff (low vs. moderate: p < .001, d = .127; low vs. high: p < .001, d = .158), autonomy in the classroom that supports state and local standards (low vs. moderate: p < .001, d = .082; low vs. high: p < .001, d = .104), and student engagement (low vs. moderate: p < .001, d = .270; low vs. high: p < .001, d = .251). Teachers at moderate-poverty and high-poverty schools did not differ in their perceptions of these five areas.

Teachers at the moderate-poverty schools rated the amount of paperwork and routine duties lower than teachers from low-poverty and high-poverty schools (low vs. moderate: p < .05, d = .066; moderate vs. high: p < .001, d = .151). Relative to teachers at low-poverty schools, teachers at high-poverty schools gave higher ratings to the amount of paperwork and routine duties (low vs. high: p < .05, d = .085).

Teachers from low-poverty schools gave lower ratings to student behavior than those from moderate and high-poverty schools (low vs. moderate: p < .001, d = .363; low vs. high: p < .001, d = .473). Relative to teachers from high-poverty schools, teachers from moderate-poverty schools rated student behavior higher (moderate vs. high: p < .001, d = .111).

#### TEACHERS' PERCEPTIONS OF THE WORKING CONDITIONS BY SCHOOL LOCATION

To investigate teachers' perceptions of working conditions from different school locations, we calculated the mean scores of teachers' perceptions of different areas of their working conditions by the school's census-defined geographic designation: city, suburb, town, or rural. Table B6 provides teachers' perceptions of different areas of their working conditions by school location.

Before running the ANOVAs, we examined the necessary assumptions. For all the analyses, the assumption of normality was met. The homogeneity of variance assumption was met for the analyses of seven areas by school locations. When the homogeneity of variance was satisfied, we used Tukey's honestly significant difference test (HSD) for pairwise differences. For the analyses which did not meet the equal variance assumption, we conducted Welch one-way ANOVA tests and utilized Games-Howell post hoc tests for pairwise comparison.

An omnibus ANOVA test of variance was conducted to determine if the mean scores in different areas of working conditions differed significantly across school locations. Partial  $\eta^2$  was calculated to measure the magnitude of the overall differences in teachers' perceptions of different areas of working conditions due to school location.

Areas	School Location	n	Mean	Sig.
Administrative support	City	2464	3.71 <sup>a,b,c</sup>	<i>p</i> < .001*** η² = .005
	Suburb	5949	3.81ª.e	
	Town	839	3.83⁵	
	Rural	4141	3.90 <sup>c,e</sup>	
Communication with principal	City	2500	3.98 <sup>a,c</sup>	ρ < .001*** η² = .003
	Suburb	6088	4.07 <sup>a,e</sup>	
	Town	842	4.05 <sup>f</sup>	
	Rural	4218	4.14 <sup>c,e,f</sup>	
Availability of resources	City	2486	3.73°	ρ < .05* η² = 8e-4
	Suburb	6007	3.77	
	Town	843	3.75	
	Rural	4179	3.80°	
Parent support	City	2488	3.68°	<i>p</i> < .001*** η² = .009
	Suburb	6014	3.73 <sup>d,e</sup>	
	Town	839	3.64 <sup>d,f</sup>	
	Rural	4196	3.78 <sup>c,e,f</sup>	
Cooperation and recognition among staff	City	2510	4.13 <sup>a,c</sup>	<i>p</i> < .001*** η² = .001
	Suburb	6080	4.20 <sup>a,d</sup>	
	Town	842	<b>4.11</b> <sup>d,f</sup>	
	Rural	4197	4.20 <sup>c,f</sup>	
Influence over school policy and decision- making roles	City	2329	3.29 <sup>a,b,c</sup>	<i>p</i> < .001*** η² = .004
	Suburb	5625	3.37 <sup>a,e</sup>	
	Town	784	3.42 <sup>b,e</sup>	
	Rural	3940	3.46 <sup>c,e</sup>	
Autonomy in the classroom that	City	2427	3.89 <sup>a,b,c</sup>	<i>p</i> < .001*** η² = .033
supports state and local standards	Suburb	5898	4.06 <sup>a,d,e</sup>	
standards	Town	829	<b>4.17</b> <sup>b,d</sup>	
	Rural	4090	4.12 <sup>c,e</sup>	
Amount of paperwork and routine duties	City	2308	2.88 <sup>b,c</sup>	<i>p</i> < .001*** η² = .025
	Suburb	5583	2.88 <sup>d,e</sup>	
	Town	790	<b>3.18</b> <sup>b,d,f</sup>	
	Rural	3879	3.04 <sup>c,e,f</sup>	
Student engagement	City	2339	3.25 <sup>a,b,c</sup>	<i>p</i> < .001*** η <sup>2</sup> = .014
	Suburb	5662	3.35 <sup>a,d</sup>	
	Town	797	3.14 <sup>b,d,f</sup>	
	Rural	3924	3.34 <sup>c,f</sup>	

### Table B6. Teacher Working Condition Areas by School Location

Student behavior	City	2267	2.61 <sup>a,c</sup>	<i>p</i> < .001*** η² = .008
	Suburb	5522	2.75 <sup>a,d,e</sup>	
	Town	781	2.56 <sup>d,f</sup>	
	Rural	3817	2.82 <sup>c,e,f</sup>	
Student safety and health	City	2238	3.76	<i>p</i> = 0.173 η² = 4e-04
	Suburb	5470	3.77	
	Town	776	3.71	
	Rural	3805	3.78	

*Note.*\*\*\*Result is significant at the 0.001 level; \*Result is significant at the 0.05 level. <sup>a</sup>significant results between City and Suburb; <sup>b</sup>significant results between City and Town; <sup>c</sup>significant results between City and Rural; <sup>d</sup>significant results between Suburb and Town; <sup>e</sup>significant results between Suburb and Rural; <sup>f</sup>significant results between Town and Rural

Overall, all but one omnibus tests were significant (<.001 or <0.05), indicating there was a difference across school location in teachers' perceptions of the working conditions, regarding administrative support, communication with principal, availability of resources, parent support, cooperation and recognition among staff, influence over school policy and decision-making roles, autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties, student engagement, and student behavior. The magnitude of these differences was negligible or small. School location accounts for a negligible portion of the variance in administrative support, communication with the principal, availability of resources, parent support, cooperation and recognition among staff, influence over school policy and decision-making roles, and student behavior, and a small portion of the variance in autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties and student behavior, and a small portion of the variance in autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties and student engagement.

Pairwise comparisons between school locations revealed teachers from cities rated administrative support (city vs. suburb: p < .001, d = .093; city vs. town: p < .05, d = .112; city vs. rural: p < .001, d = .182) and influence over school policy and decision-making roles (city vs. suburb: p < .01, d = .082; city vs. town: p < .05, d = .130; city vs. rural: p < .001, d = .173) lower than teachers from suburban, town, or rural areas. Relative to teachers from suburban areas, teachers from rural areas rated higher in administrative support (suburb vs. rural: p < .001, d = .089) and influence over school policy and decision-making roles (suburb vs. rural: p < .001, d = .091).

Relative to teachers from suburban and rural areas, teachers from city areas gave lower ratings for communication with the principal (city vs. suburb: p < .01, d = .091; city vs. rural: p < .001, d = .157). Teachers from rural areas rated the communication with the principal higher than those from suburbs (suburb vs. rural: p < .01, d = .067).

Teachers from rural areas perceived the availability of resources higher than teachers from cities (city vs. rural: p < .01, d = 0.077).

Teachers from rural areas rated parent support higher than teachers from city, suburban, or town areas (city vs. rural: p < .001, d = 0.105; suburb vs. rural: p < .05, d = 0.052; town vs. rural: p < .001, d = 0.141). Relative to teachers from town areas, teachers from suburban areas gave higher ratings to parent support (town vs. suburb: p < .05, d = 0.088).

Teachers from city areas rated cooperation and recognition among staff lower than those from suburban and rural areas (city vs. suburb: p < .01, d = 0.070; city vs. rural: p < .01, d = 0.066). Relative to teachers from suburban and rural areas, teachers from town areas gave lower ratings for cooperation and recognition among staff (town vs. suburb: p < .05, d = 0.090; town vs. rural: p < .05, d = 0.086).

Teachers from city areas perceived the autonomy in the classroom that supports state and local standards as lower than those from suburban, town, and rural areas (city vs. suburb: p < .001, d = 0.167; city vs. town: p < .001, d = 0.271; city vs. rural: p < .001, d = 0.224). Relative to teachers from town and rural areas, teachers from suburban areas gave higher ratings to the cooperation and recognition among staff (town vs. suburb: p < .01, d = 0.103; suburb vs. rural: p < .01, d = 0.057).

Teachers from cities or suburbs rated the amount of paperwork and routine duties lower than teachers from town and rural areas (city vs. town: p < .001, d = 0.298; city vs. rural: p < .001, d = 0.162; town vs. suburb: p < .001, d = 0.302; suburb vs. rural: p < .01, d = 0.166). Relative to teachers from town, teachers from rural areas gave lower ratings for the amount of paperwork and routine duties (town vs. rural: p < .05, d = 0.136).

Teachers from cities rated student engagement lower than teachers from suburban and rural areas (city vs. suburb: p < .01, d = 0.100; city vs. rural: p < .01, d = 0.087). Relative to teachers from city and suburban areas, teachers from town areas gave lower ratings for student engagement (city vs. town: p < .05, d = 0.112; town vs. suburb: p < .001, d = 0.213). Teachers from rural areas had perceived student engagement as higher than those from town areas (town vs. rural: p < .001, d = 0.199).

Teachers from cities rated student behavior lower than teachers from suburban and rural areas (city vs. suburb: p < .001, d = 0.144; city vs. rural: p < .001, d = 0.216). Relative to teachers from suburban and rural areas, teachers from town areas gave lower ratings to student behavior (town vs. suburb: p < .001, d = 0.195; town vs. rural: p < .001, d = 0.266). Teachers from suburbs perceived student behavior as lower than those from rural areas (suburb vs. rural: p < .01, d = 0.071).

# ASSOCIATIONS BETWEEN TEACHER WORKING CONDITIONS AND TEACHERS' JOB SATISFACTION

The associations between different areas of teacher working conditions and teachers' job satisfaction are shown in Table B7. All areas of teacher working conditions demonstrated significant and positive relationships with individual items on teacher job satisfaction, indicating that the higher teachers' perceptions of their working conditions were, the more satisfied they were with their job.

Specifically, the administrative support, availability of resources, parent support, influence over school policy and decision-making roles, autonomy in the classroom that supports state and local standards, amount of paperwork and routine duties, and student engagement showed medium strength of the correlation with teacher's interest in choosing teaching again as a career and their intention to stay in the profession. The rest areas (i.e., student behavior, student safety and health, and cooperation and recognition among staff) showed a weak correlation with teachers' interest in choosing again to teach as a career and their intention to stay in the profession. Communication with the principal showed a stronger correlation with teachers' intention to stay in the profession than teachers' interest in choosing teaching again as a career.

The administrative support, availability of resources, parent support, influence over school policy and decision-making roles, autonomy in the classroom that supports state and local standards, student engagement, and student safety and health showed medium strength of the correlation with teachers' view on whether they made a difference in student's lives.

The rest of the areas (i.e., communication with the principal, cooperation and recognition among staff, amount of paperwork and routine duties, and student behavior) showed a weak correlation with teachers' views on whether they made a difference in students' lives.

Student safety and health showed a weak correlation with whether teachers enjoyed their job as a teacher. The remaining ten areas of teacher working conditions showed a medium correlation with whether teachers enjoyed their job as a teacher.

 Table B7. Correlations Between Teacher Working Conditions and Teachers' Job Satisfaction

	Choosing teaching again	Making a difference in student's Lives	Enjoying present job	Intending to stay in the teaching profession
Administrative support	0.36**	0.36**	0.55**	0.42**
Communication with principal	0.29**	0.29**	0.50**	0.35**
Availability of resources	0.33**	0.33**	0.44**	0.36**
Parent support	0.33**	0.40**	0.43**	0.34**
Cooperation and recognition among staff	0.22**	0.28**	0.35**	0.27**
Influence over school policy and decision- making roles	0.36**	0.33**	0.51**	0.40**
Autonomy in the classroom that supports state and local standards	0.32**	0.35**	0.46**	0.37**
Amount of paperwork and routine duties	0.35**	0.24**	0.44**	0.37**
Student engagement	0.31**	0.45**	0.44**	0.33**
Student behavior	0.20**	0.20**	0.31**	0.23**
Student safety and health	0.19**	0.30**	0.25**	0.23**

*Note.* Choosing teaching again = If I could start over, I would choose teaching again as my career; Making a difference in students' lives = I am certain I am making a difference in the lives of the students I teach; Enjoying present job = I really enjoy my present teaching job; Intending to stay in the present job = I intend to remain in the profession for the foreseeable future. Principal communication = communication with principal; Available resources = availability of resources; Staff cooperation = cooperation and recognition among staff; Policy influence = influence over school policy and decision-making roles; Classroom autonomy = autonomy in the classroom that supports state and local standards; Available time = Amount of paperwork and routine duties; \*\*Correlation is significant at the 0.01 level.

### NEW TEACHERS' PERCEPTIONS OF THEIR MENTORING SUPPORT

New teachers' perceptions of their mentoring support are presented in Table B8. The mean scores in new teachers' perceptions of mentor support for teaching and mentor support outside of teaching were similar. Approximately 91.7% of the new teachers had mentors who taught in the same building. The numbers of new teachers with mentors who taught in the same content area (59.5%) and the same grade level (56.4%) were similar.

Construct	n	Mean	SD
Mentor support for teaching	1145	3.86	1.01
Mentor support outside of teaching	1174	3.87	1.00
	Yes	Percentage	
Mentor teaches in same building	1215	91.7%	
Mentor teaches in same content area	788	59.5%	
Mentor teaches in same grade level	747	56.4%	

 Table B8. Descriptive Analysis of Mentor Support

Overall, as shown in Table B9, whether new teachers had mentors teaching in the same building, the same content area, or the same grade level were significantly and positively associated with their perceptions of the mentor support for teaching or mentor support outside of teaching, indicating that the more mentors who taught in the same building, in the same content area, or the same grade level with new teachers, the more positive view new teachers had for their mentor support.

Specifically, whether new teachers had mentors who taught in the same building showed weak correlation with their perceptions of the mentor support for teaching (r = 0.07) and mentor support outside of teaching (r = 0.09). Relative to whether teachers had mentors teaching in the same building, whether new teachers had mentors who taught in the same content area showed a stronger correlation with mentor support for teaching (r = 0.20) and mentor support outside of teaching (r = 0.16). Whether new teachers had mentors who taught the same grade levels showed similar strength of correlation with the mentor support for teaching (r = 0.17) and the mentor support outside of teaching (r = 0.19).

Table B9. Correlation Between Mentor Proximity and Mentor Support

	Correlation Coefficient	
Mentor Proximity	Mentor support for teaching	Mentor support outside of teaching
Mentors teach in the same building	.07*	.09**
Mentors teach in the same content area	.20**	.16**
Mentors teach the same grade level	.17**	.19**

Note. \*\*correlation is significant at the 0.01 level; \*correlation is significant at the 0.05 level



## TEACHER WORKING CONDITIONS



## SC-TEACHER.ORG