



An Introduction to 2021 Virginia School Survey Research Brief Series

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Key Findings

The 2021 Virginia School Survey of Climate and Working Conditions asked school employees (e.g., teachers, teacher's aides, licensed staff, and non-licensed staff) and students (grades 6th through 8th) about their overall satisfaction, retention intent, comfort returning to school buildings following COVID-19 closures, and recent changes in working conditions and school climate. In total, 101,691 educators and 102,519 students responded. We analyzed their responses and found:

- Most school employees viewed their schools as good places to work and learn.
- 85% of school employees intended to remain in the same school in the following year.
- Most students described the atmosphere of their schools as positive or very positive.
- Comparing schools with higher versus lower concentrations of Black and Hispanic and economically disadvantaged students, school employees expressed lower job satisfaction and greater intention to leave their jobs and students held less positive views of their school's atmosphere.
- Students and school employees reported a moderate level of comfort about returning to school buildings following the COVID-19

closures, with teachers being the least comfortable and students the most comfortable.

- Comfort levels among students and school employees were lower at schools with the highest concentrations of Black and Hispanic students compared to schools with the lowest concentrations.
- A plurality of school employees reported no changes in their working conditions over the last two years as did students regarding how school climate had changed.
- Teachers were meaningfully less positive than other school employees about how their working conditions changed as were school employees at schools serving the lowest versus the highest concentrations of economically disadvantaged students.

Background

This brief introduces a research brief series which will highlight results from the 2021 Virginia School Survey (VSS) of Climate and Working Conditions. The VSS was legislatively mandated and jointly administered by the Virginia Department of Education (VDOE) and the Virginia Department of Criminal Justice Services (DCJS). [1] Three versions of the survey were administered to classroom

Participation in the 2021 VSS



All 132 public school divisions and the Department of Juvenile Justice



Total of 1,920 schools – on each survey type this included:
Classroom instructors (99.4% of invited schools)
Staff (97.7%)
Students (99.2%)



Total of 101,691 school employees, including:
68,419 teachers (70.7% response rate)
12,416 teacher's aides (59.6%)
13,229 licensed staff (44.5%)
7,627 non-licensed staff (29.1%)



102,519 students in grades 6 through 8 (63.2% response rate)

Images: Virginia by Ted Grajeda, School by David Khai, Teacher by WEBECHOPS LLP, Student by design vector, and all available from NounProject.com

instructors (teachers and teacher's aides), staff (licensed and non-licensed), and students enrolled in grades 6, 7, and 8. [2]

Broad participation across Virginia's 132 public school divisions and the Department of Juvenile Justice provided valuable data about the working conditions and school climates experienced by more than 200,000 school employees and students. This research brief series aims to raise awareness about the importance of working conditions and climate in schools, which vary with school characteristics [3] and are essential for school employee retention [4], job satisfaction [5], and improved effectiveness [6] and student well-being and achievement [7]. The forthcoming briefs in this series will expand upon these findings and explore key dimensions of working conditions, including professional growth opportunities, instructional agency, and school leadership. An additional research brief will examine the associations between learning modality during the COVID-19 pandemic (i.e., remote, in-person, hybrid) and changes in school climate and working conditions. Given the timing of the administration of the 2021 VSS during the COVID-19 pandemic, these briefs will also highlight the context of

working conditions, climate, and learning modality amid a rapidly changing environment for teaching and learning and how school employees and students perceived those changes.

To introduce the research brief series, we focused on presenting results from survey items addressing perceptions of job and school satisfaction, school employee retention intentions, comfort returning to school buildings following COVID-19 closures, and changes in working conditions and school climate following those closures. We analyzed responses by topic, respondent group, and two school characteristics: the percent of the schools' enrollment that was Black or Hispanic and the percent that was economically disadvantaged. We assigned schools to four groups (i.e., quartiles) on each characteristic such that the first quartile had the lowest percentage, and the fourth quartile had the highest percentage. Descriptive statistics for these quartiles are presented in Table 1.

Table 1. Enrollment of Black and Hispanic Students and Economically Disadvantaged Students by Quartile

Quartile	# Schools	Mean	SD	Min	Max
Black and Hispanic Student Enrollment (%)					
First	462	9.3	4.0	0.0	15.1
Second	462	23.2	5.1	15.1	33.0
Third	464	43.9	7.3	33.2	59.0
Fourth	460	75.0	10.9	59.0	98.9
Economically Disadvantaged Student Enrollment (%)					
First	455	17.3	7.0	1.2	29.0
Second	460	37.9	4.9	29.0	45.7
Third	462	52.2	3.8	45.7	58.8
Fourth	460	69.5	9.0	58.8	100.0

Note: 63 schools were not assigned to BH quartiles due to lack of data, 74 for ED quartiles.

Job Satisfaction

School employees were asked to rate their degree of agreement with the statement, "Overall, my school is a good place to work and learn" on a 6-point scale, ranging from strongly disagree (1) to strongly agree (6). More than 80% either agreed or strongly agreed while 7% somewhat disagreed, disagreed, or strongly disagreed. Although it varied somewhat across respondent group (40% of teachers strongly agreed compared to 52% of licensed staff), these differences were not meaningful (see Figure 1). Job satisfaction was meaningfully lower among employees at schools with the highest concentrations of Black and

Defining Meaningful Differences Across Groups

When comparing responses to the survey items across respondent groups or across types of schools, we needed a way to determine if the observed differences were meaningful. We adopted the commonly used definition of a meaningful difference: a difference greater than or equal to 0.2 standard deviations. The survey item responses were standardized on the pooled sample to allow comparisons both across and within respondent groups.

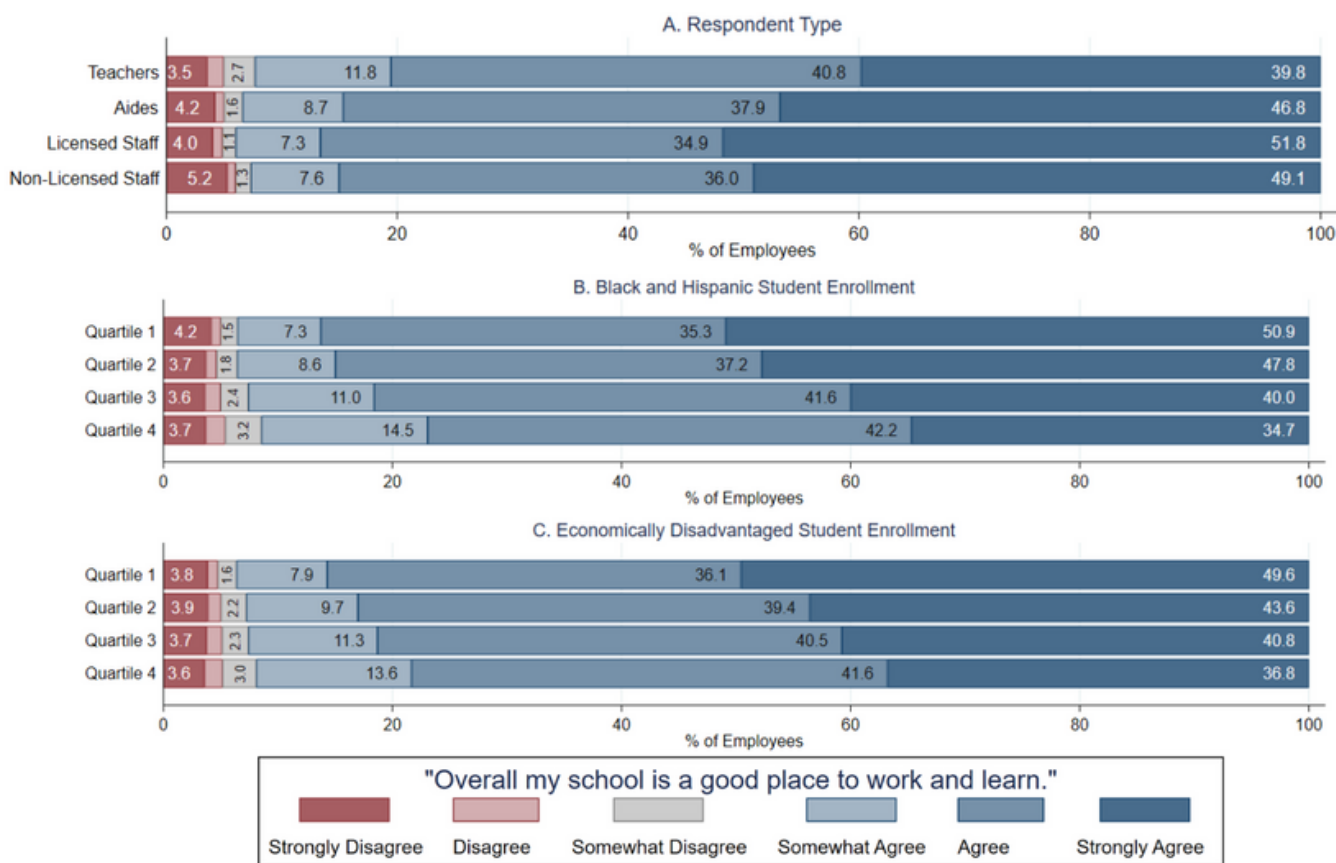


Figure 1. Job Satisfaction by Respondent Type, School Enrollment of Black and Hispanic Students, and School Enrollment of Economically Disadvantaged Students

Hispanic students compared to employees with the lowest concentration (35 versus 51% strongly agreed). The slightly smaller difference between schools with the highest and lowest concentrations of ED students just missed the cut off for meaningful difference (37 versus 50% strongly

agreed, a 0.19 standardized difference).

Retention Intent

The survey asked school employees to indicate whether their immediate professional plans were

to remain at current school, move to a different school within Virginia, or exit the Virginia public school workforce. Almost 85% of school employees reported that they intended to remain at their current school, 6% intended to move to another school, and 9% intended to exit. While the percent intending to remain at their current school varied across respondent group and schools, none of these differences were meaningful, but two were close (see Figure 2). Teachers were the least likely to intend to remain and non-licensed school staff the most likely (83 versus 90%, a 0.17 standardized difference). Employees at schools with the lowest concentrations of Black and Hispanic students were 7 percentage point more likely than employees in schools with the highest concentration to intend to remain at their current school (88% versus 81%, a 0.19 standardized difference). The pattern with respect to the concentrations of economically disadvantaged students was similar but smaller (a 0.09 standardized difference).

School Satisfaction

Students were asked to respond to the question “How positive or negative is the atmosphere of the school?” on a 4-point scale, ranging from very negative (1) to very positive (4). Most students described the atmosphere of their schools as either positive (68%) or very positive (15%). Fourteen percent described it as negative and 3% described it as very negative. The manner in which student perceptions of school atmosphere differed across schools mirrored the pattern among school employees regarding their job satisfaction; however, among students, both differences were meaningfully large (see Figure 3). Seventeen percent of students in schools with the lowest concentrations of Black and Hispanic students described the atmosphere as very positive compared to 12% of students in schools with the highest concentrations. This difference was even larger between students at schools with the lowest and highest concentration of economically disadvantaged students (20 versus 12% responded “very positive”, respectively).

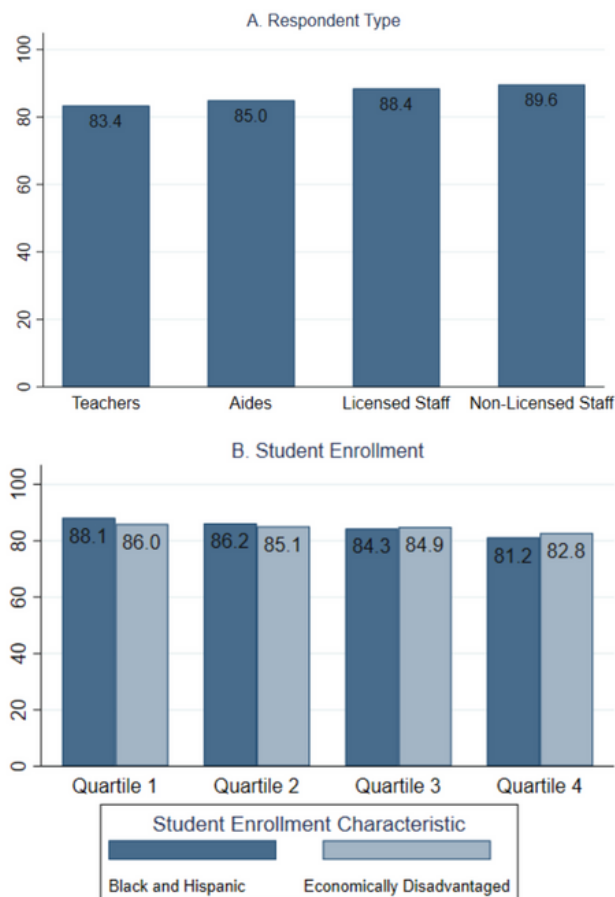


Figure 2. Percent of School Employees Intending to Remain at Current School by Respondent Type, School Enrollment of Black and Hispanic Students, and School Enrollment of Economically Disadvantaged Students

Comfort Returning to School after COVID-19 Building Closures

Given the timing of the 2021 VSS and the COVID-19 pandemic, all respondents were asked about how comfortable they were returning to school buildings following the COVID-19 closures. School employees responded on a scale ranging from strongly disagree (1) to strongly agree (6), and students responded on a scale ranging from very uncomfortable (1) to very comfortable (4). [8] Students were meaningfully more comfortable returning than were school employees with 18% of students and 14% of school employees strongly agreeing that they felt comfortable (see Figure 4). Teachers were the least comfortable and meaningfully less comfortable than either licensed or non-licensed staff (12, 19, and 22% strongly agreed, respectively).

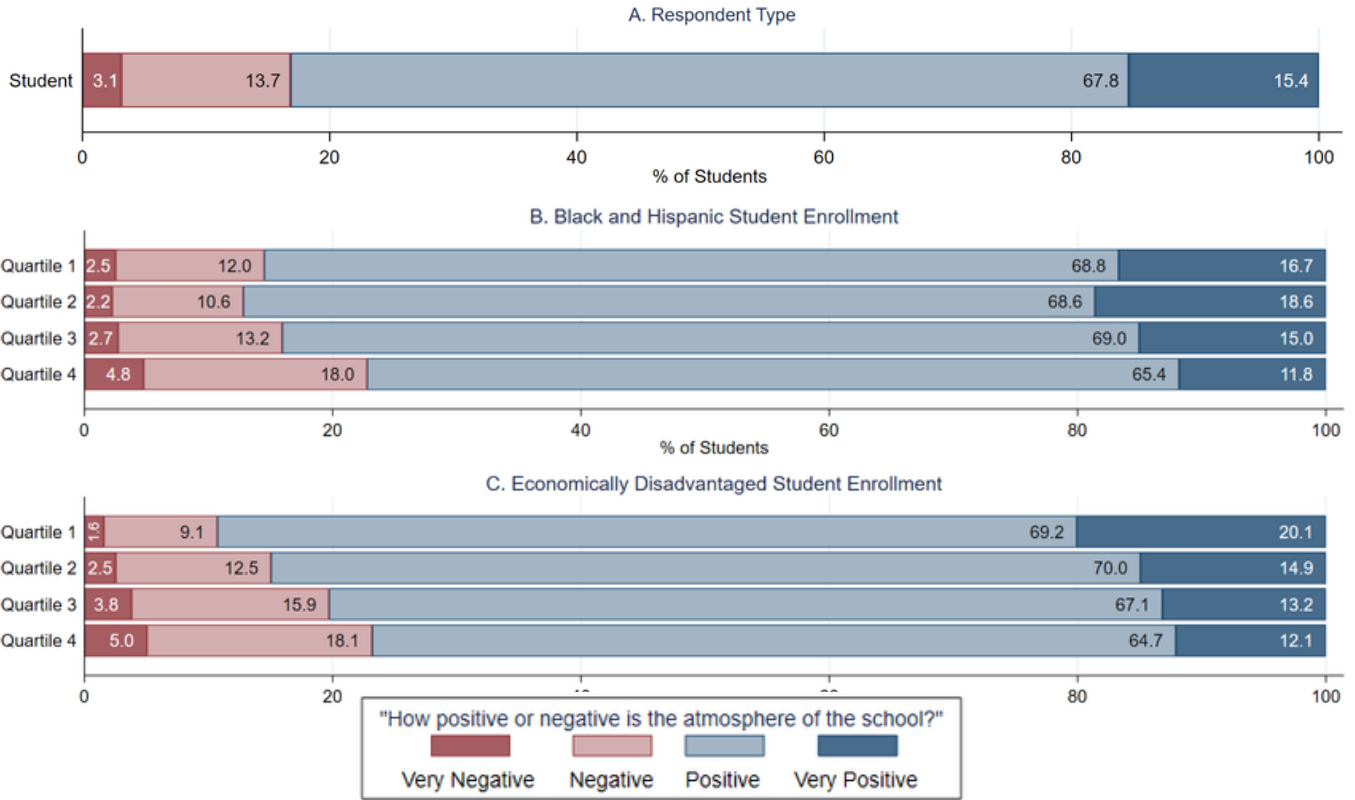


Figure 3. Students' Satisfaction with Their School Overall and by School Enrollment of Black and Hispanic Students and School Enrollment of Economically Disadvantaged Students

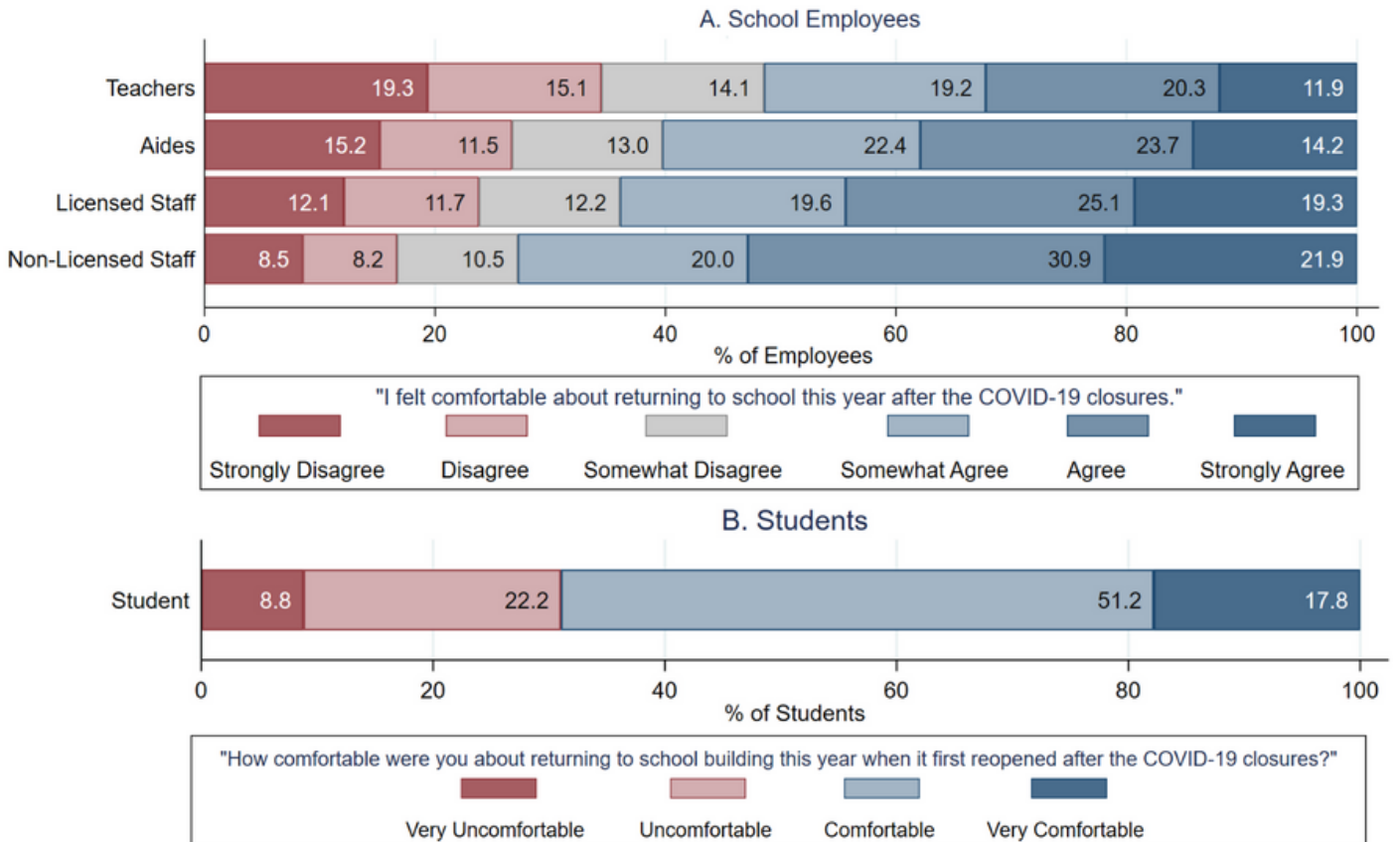


Figure 4. Comfort Returning to School Buildings After COVID-19 Closures by Respondent Type

Comfort levels also differed meaningfully across schools (see Figure 5). Both students and employees at schools serving the highest concentrations of Black and Hispanic students felt meaningfully less comfortable returning to schools than those at schools serving the lowest concentrations of Black and Hispanic students (14 vs. 19% of students strongly agreed; 10 vs. 18% of school employees strongly agreed). The comfort of students, but not school employees, was also meaningfully lower at schools with the highest concentration of economically disadvantaged students than at schools with the lowest concentrations (16 vs. 20% of students strongly agreed).

Changes in Working Conditions and School Climate

With all the pandemic-related changes to school operations, the survey asked respondents to compare the current school year’s working conditions and climate to what they were two years prior, i.e., the year before the pandemic shut down schools. Change in working conditions were captured by asking school employees to complete the statement, “Over the last two years, the working conditions for teachers/staff in this school have…” with one of five statements, ranging from become much worse (1) to become much better (5). The plurality of employees (43%) indicated that their working conditions had stayed the same while 37% felt they had become somewhat or much

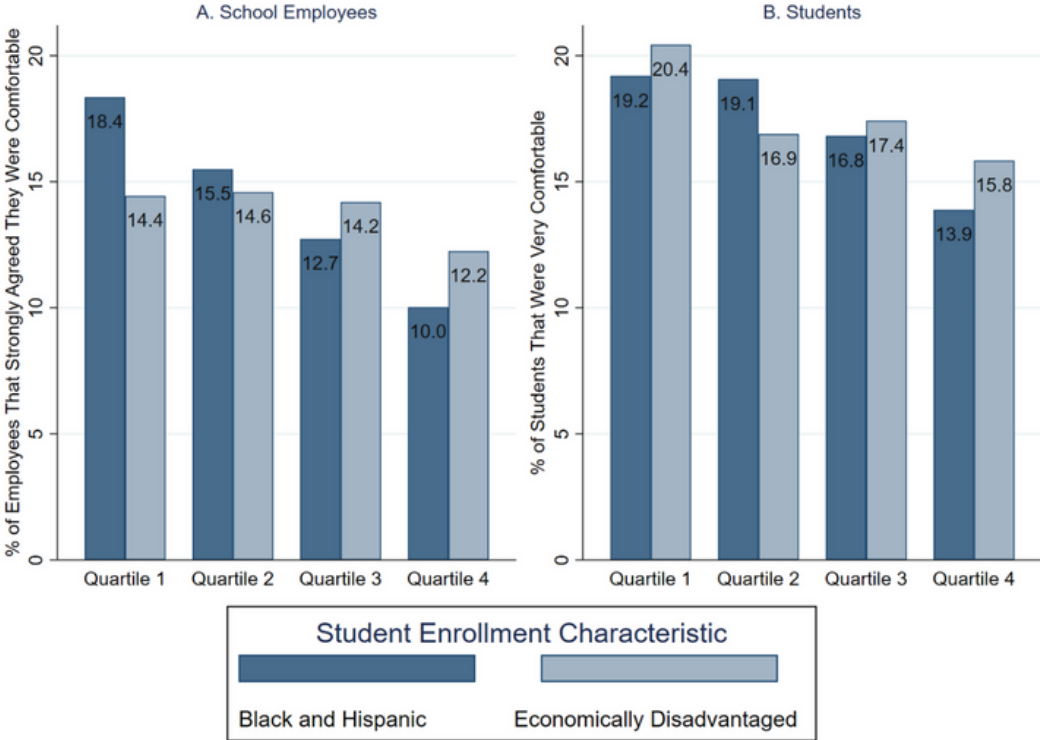


Figure 5. Percent of Respondents Strongly Agreeing that They Felt Comfortable Returning to School Buildings Following COVID-19 Closures by Respondent Group and School Enrollment of Black and Hispanic Students and School Enrollment of Economically Disadvantaged Students

better and 20% felt they had become somewhat or much worse (see Figure 6). [9] Teachers’ perceptions, however, were less positive than other employee groups. Thirty-three percent of teachers said working conditions had become somewhat or much better compared to 40% of teacher’s aides, 48% licensed staff, and 50% non-licensed staff. School employees’ perceptions of how working conditions had changed were meaningfully more positive at schools with the *highest* concentration versus *lowest* concentration of economically disadvantaged students. A similar pattern existed in terms of the schools’ concentrations of Black and Hispanic students however these differences were not meaningful.

To assess how students felt their school climate was impacted by the pandemic, the survey asked them to complete the statement, “Since you have been at this school, the overall school atmosphere has …” with one of five statements, ranging from become much worse (1) to become much better

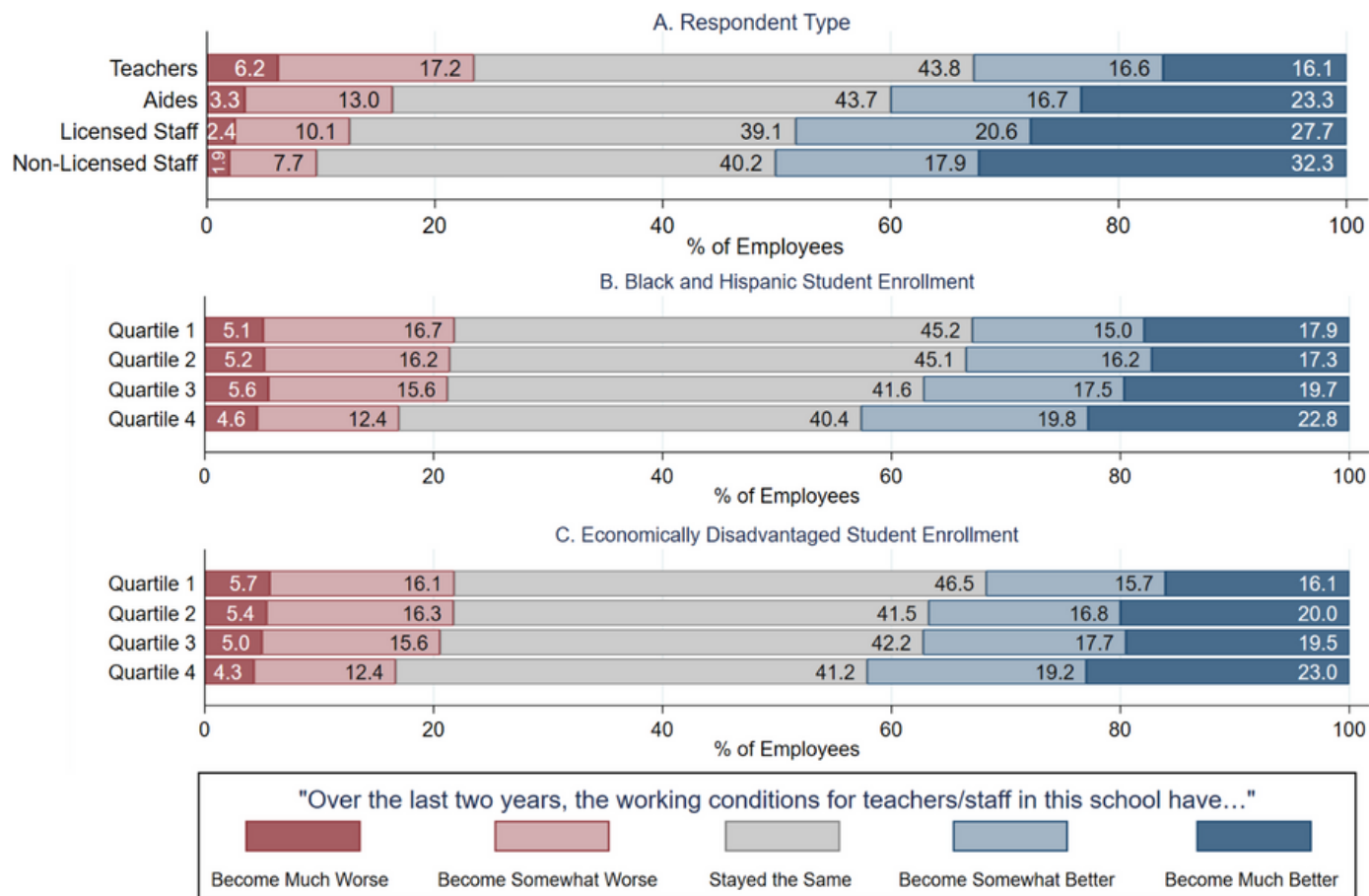


Figure 6. School Employee Perceptions of How Working Conditions Changes Over the Last Two Years by Employee Type, School Enrollment of Black and Hispanic Students, and School Enrollment of Economically Disadvantaged Students

(5). [10] Most students perceived changes in school climate to have stayed the same (57%) with 29% reporting it had become somewhat or much better and 14% reporting it has become somewhat or much worse. There were no meaningful differences across schools in terms of the enrollment of Black and Hispanic students or economically disadvantaged students (results not shown).

Closing

Findings from the 2021 VSS offer school and division leaders valuable insights into how their employees and students feel about their schools. Most school employees agreed that their schools were good places to work and learn and most students described their schools' atmosphere as positive; however, a sizeable proportion of respondents felt the opposite, particularly at schools with the highest concentrations of Black

and Hispanic and economically disadvantaged students. An encouraging finding was that, at least through March 2021, most employees and students did not feel that the pandemic had worsened their working conditions and school climate; however, many, especially teachers, felt conditions had worsened. It will be vital to track the evolution of these opinions in subsequent VSS administrations as the pandemic continues to have an impact on schools.

Each of the remaining four briefs in this series further examine responses to the 2021 VSS. Three briefs explore a specific working condition – professional growth opportunities, instructional agency, and school leadership – as experienced by school employees and how these working conditions are associated with job satisfaction and retention intentions. The fourth brief will highlight how the modality in which employees worked and

students learned (remote, hybrid, or in-person) is associated with the themes explored here: satisfaction, retention intentions, and perceived changes in school climate and working conditions. Collectively, the responses to the VSS and our analyses of those responses can inform local conversations and efforts to improve working conditions and school climate in every Virginia public school for all employees and students.

End Notes

[1] VDOE's Teacher and Staff Working Conditions Surveys is required by Item 143.G of the 2020 Appropriation Act; and the DCJS Secondary School Climate Surveys is required by the Code of Virginia §22.1-279.8.B.

[2] Licensed staff include principals, assistant principals, guidance counselors and other student facing employees who hold a state professional license. Non-licensed staff include secretaries and other staff members who do not hold a state professional license and whose primary responsibilities are not student facing. Also see Joint Report by the Virginia Department of Criminal Justice Services and Virginia Department of Education on the 2021 Virginia School Survey of Climate and Working Conditions: State Technical Report (p. 37). (2021). Virginia Department of Criminal Justice Services and Virginia Department of Education. <https://www.doe.virginia.gov/support/school-climate/vss-tech-report.pdf>

[3] Horng, E. L. (2009). Teacher tradeoffs: Disentangling teachers' preferences for working conditions and student demographics. *American Educational Research Journal*, 46(3), 690–717. <https://doi.org/10.3102/0002831208329599>;

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Allessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83(3): 357-385. doi:10.3102/0034654313483907

[4] Johnson, S. M., Kraft, M. A., & Papay, J. P. (2012). How Context Matters in High-Need Schools: The Effects of Teachers' Working Conditions on Their Professional Satisfaction and Their Students'

Achievement. *Teachers College Record*, 114(10), 1–39. <https://doi.org/10.1177/016146811211401004>;

Ladd, H. F. (2011). Teachers' Perceptions of Their Working Conditions: How Predictive of Planned and Actual Teacher Movement? *Educational Evaluation and Policy Analysis*, 33(2), 235–261. <https://doi.org/10.3102/0162373711398128>

[5] Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review*, 73(1), 71–97. <https://doi.org/10.1080/00131911.2019.1705247>

[6] Kraft, M. A., & Papay, J. P. (2014). Can Professional Environments in Schools Promote Teacher Development? Explaining Heterogeneity in Returns to Teaching Experience. *Educational Evaluation and Policy Analysis*, 36(4), 476–500. <https://doi.org/10.3102/0162373713519496>

[7] Kutsyuruba, B., Klinger, D. A., & Hussain, A. (2018). The impact of positive school climate on student well-being and achievement. In S. Cherkowski & K. Walker (Eds.), *Perspectives on Flourishing Schools* (pp. 69-90). New York: Lexington Books.

[8] The student 4-point scale was converted to a 6-point scale to facilitate comparisons between students and school employees. This question was asked of all school employees but only the 42% of students (N = 43,491) who had attended classes in-person.

[9] We exclude the 18,070 school employees who responded "I have no opinion" (N teachers = 11,185, N aides = 2,944, N licensed staff = 2,338, and N non-licensed staff = 1,603).

[10] This question was asked only of those students (N = 62,964) who had been at the school for at least two years.

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