



2022 No. 131

Analysis of the 2022 Quality of School Climate and Safety (QSCS) Survey

Final Report

Prepared for: Kentucky Department of Education
Office of Assessment and Accountability
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Prepared under: Contract #1900004339

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Date: December 15, 2022

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Analysis of the 2022 Quality of School Climate and Safety (QSCS) Survey

Introduction

In Spring 2022, the Kentucky Department of Education (KDE) administered Kentucky's Quality of School Climate and Safety (QSCS) Survey operationally, in conjunction with the spring summative assessment. The QSCS was administered operationally for the first time in 2021.

KDE, in collaboration with the Human Resources Research Organization (HumRRO), developed the QSCS Survey to meet the legislative mandate to incorporate into the state accountability system an indicator of school climate and safety that integrates “perception data from surveys that measure insight into the school environment” (703 KAR 5:270). Specifically, the QSCS Survey collects student perceptions of school climate and safety.

The purpose of this report is to provide item-level analyses to contribute to the body of validity evidence for the survey. The reports also present survey results by student subgroups, along with effect size statistics quantifying the magnitude of subgroup differences.

Methods and Results

Demographics of Participating Students

Tables 1 through 3 contain descriptive statistics for participating students. Table 1 presents the percentages of students classified as female and male. Across the grade spans, slightly more than half of surveyed students were male. These percentages are very similar to the Spring 2021 surveyed population.

Table 1. Student Demographics: Gender

Grade Span	% Female	% Male
3-5 (n=137,768)	48.39	51.61
6-8 (n=147,211)	48.45	51.54
10-11 (n=91,581)	48.91	51.08

Table 2 presents the percentages of students classified in each of the race/ethnicity categories. Across the grade spans, there are similar percentages of students in each category. These percentages are very similar to the Spring 2021 surveyed population, though there was a very small increase (1-2%) in the percentage of Black students and a very small decrease (2-3%) in the percentage of White students.

Table 2. Student Demographics: Race/Ethnicity

Grade Span	% Asian	% Black	% Hispanic	% American Indian/Alaska Native	% Multi-racial	% Native Hawaiian/Pacific Islander	% White
3-5 (n=137,768)	2.07	10.57	8.39	0.12	5.26	0.17	73.43
6-8 (n=147,211)	1.78	10.98	8.46	0.13	4.83	0.16	73.65
10-11 (n=91,581)	2.06	10.11	7.68	0.14	3.84	0.13	76.04

Table 3 presents the percentages of students qualifying for the national school lunch program designation, students with an Individualized Education Plan (IEP), and students classified as having limited English proficiency (LEP). Larger percentages of students are classified as qualifying for free or reduced lunch, having an IEP, or having limited English proficiency in the lower grades than in higher grades. These percentages are very similar to the Spring 2021 surveyed population, though there was a very small increase (1-2.5%) in the percentage of students classified as qualifying for free or reduced lunch at the middle and high school levels.

Table 3. Student Demographics: Lunch, IEP, and LEP Status

Grade Span	% Free/Reduced Lunch	% Paid Lunch	% IEP	% No IEP	% LEP	% Not LEP
3-5 (n=137,768)	61.74	38.26	16.41	83.59	6.99	93.01
6-8 (n=147,211)	60.25	39.75	13.58	86.42	3.84	96.16
10-11 (n=91,581)	53.05	46.95	10.27	89.73	3.26	96.74

School Climate and Safety

This section discusses the results from the portion of the survey measuring the school climate and safety constructs.

Item Responses

Table 5 on the following page presents item-level responses from the elementary grade band. Similar tables for the middle and high school grade bands are presented in Appendix A. Across all items, some percentage of students selected each of the possible response options, and fewer than 1% of students did not provide a response.

Table 4 presents the average percentage of item responses reflecting positive climate and safety perceptions across the grade spans. The higher the grade band, the lower the percentage of students expressing positive perceptions of school climate and safety.

Table 4. Comparison of Average Percentage of Positive Responses

Grade Span	Overall	Climate	Safety
Grades 3-5	86.1	89.9	81.9
Grades 6-8	78.1	82.9	73.0
Grades 10-11	74.7	78.7	70.4

Note. Cell values represent the average percentage of item responses reflecting a positive perception of school climate or safety.

There were four items for which 90% or more of students across the grade bands indicated a positive perception of school climate or safety. These were:

- Item 3. *All my teachers make me feel welcome in their class.*
- Item 8. *There is at least one adult from my school who listens to me when I have something to say.*
- Item 9. *When I need help with schoolwork, I can ask a teacher.*
- Item 11. *My teachers expect me to do my best all the time.*

Across the three grade bands, there were seven items for which 20% or more students indicated a negative perception of school climate or safety. These were:

- Item 4. *A teacher or some other adult from my school will care if I miss a day of school.*
- Item 7. *All students are treated the same if they break school rules/The consequences for breaking school rules are the same for all students.*
- Item 17. *Adults from my school stay calm when dealing with bad behavior.*
- Item 20. *I feel comfortable stating my opinion in class even if others disagree.*
- Item 21. *Students from this school respect each other's differences (such as gender, culture, race, religion, ability).*
- Item 23. *Students being mean or hurtful to other students is NOT a problem for this school/Bullying is NOT a problem for this school.*
- Item 25. *Students being mean or hurtful to other students online (such as websites and apps) is NOT a problem for my school/Internet bullying is NOT a problem for students from my school.*

It is important to note that items 23 and 25 are written to capture perceptions that something is not occurring, whereas all other survey items are written to capture perceptions that something is occurring. One concern about this difference in wording is that students would respond in the same pattern for all items (i.e., agreeing or disagreeing with all statements) without noting the unique language of these two items, thus yielding inaccurate data. If this were an issue, the percentage of students agreeing or strongly agreeing with items 23 and 25 would have percentages of agreement that are similar to other survey items. However, Table 5 shows that these two items have lower levels of agreement and higher levels of disagreement compared to other items. This indicates that students are in fact taking time to consider the specific content of survey items and are providing accurate information about their perceptions.

Table 5. QSCS Survey Item Responses: Grades3-5 (n= 137,678)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Did Not Answer
1. My school is a caring place.	1.2	2.6	34.7	61.4	0.1
2. I feel like I am part of my school.*	1.9	6.3	46.5	45.2	0.1
3. All my teachers make me feel welcome in their class.	1.1	4.9	33.7	60.2	0.1
4. A teacher or some other adult from my school will care if I miss a day of school.*	4.6	16.1	48.3	30.7	0.2
5. Adults from my school care about me.*	1.0	2.9	37.0	59.1	0.1
6. The school rules are fair.	4.3	11.5	45.2	38.9	0.1
7. All students are treated the same if they break school rules. *	10.1	24.8	37.4	27.5	0.2
8. There is at least one adult from my school who listens to me when I have something to say.*	3.1	5.0	33.3	58.4	0.1
9. When I need help with schoolwork, I can ask a teacher.	1.3	3.6	44.3	50.7	0.1
10. If I have a problem, there is an adult from school that I can talk to.*	1.5	3.8	37.7	56.9	0.1
11. My teachers expect me to do my best all the time.	1.1	3.7	26.9	68.2	0.1
12. When I want to give up, my teacher says I should keep trying. *	1.3	4.1	40.0	54.5	0.1
13. Adults from my school make sure all students get what they need to be successful.*	1.2	4.5	39.1	55.0	0.1
14. My school is a place where students feel encouraged.*	3.0	8.8	46.8	41.2	0.3
15. Adults from my school work hard to make sure students are safe.*	0.7	1.6	24.6	73.0	0.1
16. Adults from my school handle safety concerns quickly.	1.3	6.2	45.0	47.2	0.3
17. Adults from my school stay calm when dealing with bad behavior.*	7.1	19.9	47.9	24.8	0.3

Table 5. (Continued)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Did Not Answer
18. I feel safe in my classes.	2.3	5.5	35.3	56.7	0.2
19. Adults from my school care about my physical safety.	1.0	2.8	38.1	57.9	0.2
20. I feel comfortable stating my opinion in class even if others disagree.	8.6	18.1	43.6	29.5	0.3
21. Students from this school respect each other's differences (gender, culture, race, religion, ability).*	6.2	13.6	39.3	40.5	0.4
22. Adults from this school respect students' differences (gender, culture, race, religion, ability).*	2.0	4.1	29.4	64.3	0.3
23. Students being mean or hurtful to other students is NOT a problem for this school	37.5	26.7	22.3	13.2	0.3
24. We are taught ways to stop mean or hurtful behavior when we see it happen.*	2.4	6.2	40.5	50.7	0.2
25. Students being mean or hurtful to other students online (such as websites and apps) is NOT a problem for my school.	26.0	22.3	26.6	24.7	0.4
26. If students are mean or hurtful to other students during school, there is a safe way to report it to an adult.*	1.5	3.3	34.3	60.7	0.2
27. If a student reports being treated in a mean or hurtful way during school, the adults will do something to help.*	1.4	3.4	32.3	62.7	0.2

Note. Asterisked survey questions were not included on the Alternate QSCS Survey. Items 1 through 14 measure student perceptions of school climate. Items 15-27 measure student perceptions of school safety.

Scale Reliability

Next, we calculated the internal consistency reliability (Cronbach’s alpha) for the overall set of items and for the climate and safety items separately. As Table 6 shows, all reliability coefficients are good to excellent (Kline, 2005) thereby indicating that the set of survey items relate closely to one another and are measuring a common construct.

Table 6. Internal Consistency Reliability

Grade Band	Overall	School Climate	Safety
Grades 3-5	.90	.84	.82
Grades 6-8	.94	.90	.89
Grades 10-11	.94	.91	.90

Confirmatory Factor Analysis

We conducted a confirmatory factor analysis to document the appropriateness of reporting an overall score as well as climate and safety subscores. We evaluate the model fit using the Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). The Comparative Fit Index (CFI) is an incremental fit index that reflects the relative improvement in model fit of the tested model over a model that hypothesizes no relationships among the variables and is not contingent upon sample size. Commonly applied rules of thumb suggest that good model fit is indicated by CFI values above .90 (Hooper, Coughlan, & Mullen, 2008). The Root Mean Square Error of Approximation (RMSEA) is an absolute fit index that indicates the amount of discrepancy between the model and observed data, but it also accounts for model complexity. The SRMR is another absolute measure of fit that reflects the standardized difference between the observed correlation and the predicted correlation. RMSEA values less than .05 and SRMR values of less than .08 indicate good model fit (Hu & Bentler, 1999).

As in prior analyses of field test and operational administrations (Lee, Dickinson, & Thacker, 2020; Dickinson, Thacker, & Paulsen, 2021), all statistics generally indicate appropriate model fit (see Table 7), thereby continuing to support the intended reporting design.

Table 7. Robust Model Goodness of Fit Statistics for the Bifactor CFA Model by Grade Band

Grade Band	N	CFI	RMSEA	SRMR
Grade 3-5	137,676	.95	.04	.02
Grade 6-8	147,210	.95	.05	.03
Grade 10-11	91,578	.93	.06	.03

Overall and Subgroup Mean Scores

In this section we present means and standard deviations for the overall, climate, and safety scores for each grade band. First, we present the values for all students. Then we present a

series of subgroup comparisons of overall score.¹ Subgroup comparisons for climate and safety subscores are presented in Appendix B.

Item level scores were assigned by KDE. Responses of *strongly disagree* were scored 0, *disagree* responses were scored 33.33, *agree* responses were scored 66.67, and *strongly agree* responses were scored 100. We calculated overall scores for students by averaging across all the item scores. We calculated climate and safety scores by averaging across the relevant items.

Table 8 presents the mean overall, climate, and safety scores for all students within each grade band. For all three score types, mean values decrease as grade bands become higher.

Table 8. Mean Overall, Climate, and Safety Scores: All Students

Grade Span	Overall Score Mean	Overall Score S.D	Climate Score Mean	Climate Score S.D	Safety Score Mean	Safety Score S.D
3-5 (n=137,676)	76.00	13.77	78.70	14.22	73.08	14.85
6-8 (n=147,210)	65.52	16.08	68.68	16.22	62.14	17.48
10-11 (n=91,578)	60.94	15.77	63.58	16.06	58.13	17.17

Note. S.D.= standard deviation.

In the next several tables we compare the mean scores of several student subgroups. For each mean score comparison, we also present the Cohen's *d* statistic. Cohen's *d* is interpreted as the difference in means presented in standardized units, and can be evaluated using the following benchmarks (Cohen, 1988):

- Less than 0.2= slight effect
- 0.2 - 0.49 = small effect
- 0.5 - 0.79 = moderate effect
- Greater than 0.8 = large effect

Table 9 presents a comparison of mean overall QSCS scores between females and males within each grade band. At the elementary level, the Cohen's *d* value indicates a slight effect in which females on average indicated slightly more positive perceptions of school climate and safety than males. This pattern was reversed at the middle and high school levels.

Table 9. Comparison of Mean Overall Scores: Females and Males

	Female Mean	Female SD	Male Mean	Male SD	Cohen's <i>d</i>
Grades 3-5	76.57	13.16	75.44	14.30	0.08
Grades 6-8	64.50	15.54	66.47	16.52	-0.12
Grades 10-11	59.93	14.97	61.91	16.44	-0.13

Note. S.D.= standard deviation.

¹ See Lee, Dickinson, & Thacker (2020) for evaluation of measurement invariance across student subgroups.

Table 10 presents a comparison of mean overall QSCS scores between Asian students and non-Asian students within each grade band. At the elementary level, the Cohen's d value indicates no difference between Asians and non-Asians in terms of perceptions of school climate and safety. At the middle and high school levels, there is a slight effect in which Asian students indicated slightly more positive perceptions of school climate and safety compared to non-Asians.

Table 10. Comparison of Mean Overall Scores: Asians and Non-Asian Students

	Asian Mean	Asian SD	Non-Asian Mean	Non-Asian SD	Cohen's d
Grades 3-5	75.95	12.58	75.99	13.80	0.00
Grades 6-8	66.33	14.80	65.50	16.11	0.05
Grades 10-11	63.38	13.93	60.87	15.81	0.17

Note. S.D.= standard deviation.

Table 11 presents a comparison of mean overall QSCS scores between black students and nonblack students within each grade band. Across the grade bands, there is a slight to small effect indicating that black students on average report fewer positive perceptions of school climate and safety. The effect sizes are similar for elementary and middle grades, but smaller for high school.

Table 11. Comparison of Mean Overall Scores: Black and Non-Black Students

	Black Mean	Black SD	Non-Black Mean	Non-Black SD	Cohen's d
Grades 3-5	72.92	14.32	76.56	13.59	-0.26
Grades 6-8	61.67	16.11	66.23	15.98	-0.28
Grades 10-11	59.11	15.81	61.23	15.74	-0.13

Note. S.D.= standard deviation.

Table 12 presents a comparison of mean overall QSCS scores between Hispanic and non-Hispanic students within each grade band. At the elementary and middle school levels, the Cohen's d value indicates a slight effect in which Hispanic students on average indicated slightly fewer positive perceptions of school climate and safety than non-Hispanic students. This pattern was reversed at the high school level, though there was essentially no difference between the groups.

Table 12. Comparison of Mean Overall Scores: Hispanic and Non-Hispanic Students

	Hispanic Mean	Hispanic SD	Non-Hispanic Mean	Non-Hispanic SD	Cohen's d
Grades 3-5	75.34	12.72	76.05	13.86	-0.05
Grades 6-8	64.79	14.95	65.59	16.18	-0.05
Grades 10-11	61.10	14.65	60.93	15.86	0.01

Note. S.D.= standard deviation.

Table 13 presents a comparison of mean overall QSCS scores between nonwhite students and white students within each grade band. At the elementary and middle levels, the Cohen's d value indicates a small effect in which whites on average indicated more positive perceptions of school climate and safety than nonwhites. This effect was much smaller at the high school level.

Table 13. Comparison of Mean Overall Scores: White and Non-White Students

	White Mean	White SD	Non-White Mean	Non-White SD	Cohen's d
Grades 3-5	76.46	13.66	73.10	14.10	0.24
Grades 6-8	66.04	16.04	62.33	15.98	0.23
Grades 10-11	61.07	15.79	60.15	15.58	0.06

Note. S.D.= standard deviation.

Table 14 presents a comparison of mean overall QSCS scores between students qualifying for free or reduced lunch and students qualifying for paid lunch within each grade band. At the elementary level, the Cohen's d value indicates a slight effect in which students qualifying for paid lunch on average indicated more positive perceptions of school climate and safety than those who did not qualify. This pattern was common across the grade bands.

Table 14. Comparison of Mean Overall Scores: Free/Reduced Lunch and Paid Lunch

	F/R Lunch Mean	F/R Lunch SD	Paid Lunch Mean	Paid Lunch SD	Cohen's d
Grades 3-5	75.35	14.20	77.02	12.99	-0.12
Grades 6-8	64.69	16.38	66.78	15.54	-0.13
Grades 10-11	59.79	16.23	62.25	15.12	-0.16

Note. S.D.= standard deviation.

Table 15 presents a comparison of mean overall QSCS scores between students with an IEP and students without an IEP within each grade band. At the elementary and high school levels, the Cohen's d values indicate a slight effect in which students without an IEP on average indicated more positive perceptions of school climate and safety than students with an IEP. This pattern was reversed at the middle school level, with students with IEPs indicating slightly more positive perceptions.

Table 15. Comparison of Mean Overall Scores: IEP and No IEP

	IEP Mean	IEP SD	No IEP Mean	No IEP SD	Cohen's d
Grades 3-5	73.70	18.06	76.44	12.71	-0.18
Grades 6-8	66.50	19.44	65.36	15.48	0.06
Grades 10-11	60.10	19.90	61.04	15.22	-0.05

Note. S.D.= standard deviation.

Table 16 presents a comparison of mean overall QSCS scores between students identified as having limited English proficiency and students not identified as having limited English proficiency within each grade band. At the elementary level, the Cohen's d value indicates a slight to small effect in which students not identified as having limited English proficiency on average indicated slightly more positive perceptions of school climate and safety than students identified as having limited English proficiency. This pattern was reversed at the high school level, and there was no effect at the middle school level.

Table 16. Comparison of Mean Overall Scores: LEP and Non-LEP

	LEP Mean	LEP SD	Non-LEP Mean	Non-LEP SD	Cohen's d
Grades 3-5	74.85	12.48	76.07	13.86	-0.09
Grades 6-8	65.56	14.98	65.52	16.12	0.00
Grades 10-11	63.90	14.85	60.84	15.79	0.20

Note. S.D.= standard deviation.

Opportunity to Learn (OTL)

As in 2021, KDE administered a supplemental set of items designed to measure Opportunity to Learn (OTL), to capture student perceptions related to their experiences of temporary non-traditional instruction (NTI) due to the ongoing COVID-19 pandemic. These items were treated as a separate scale. This section summarizes analysis of these OTL items.

Item Responses

Table 17 presents item-level responses from the elementary grade band. Similar tables for the middle and high school grade bands are presented in Appendix B. Across all items, some percentage of students selected each of the possible response options, and fewer than 1% of students did not provide a response.

At the elementary, middle, and high school levels, the average percentage of item responses reflecting positive perceptions of OTL was 60%, 55%, and 55%, respectively. Across the grade spans, 20%- 35% of items were rated as “Does Not Apply.” As grade span increases, the percentage of negative responses to OTL items increases (see Appendix C).

Table 17. Opportunity to Learn Survey Item Responses: Grades3-5 (n= 137,678)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Does Not Apply	% Did Not Answer
1. When I was out of school because of COVID-19, I was able to work with my teacher and classmates online.	2.8	6.0	24.7	31.8	34.1.	0.5
2. It was easy to use my device (such as computer, Chromebook, or smartphone) to do assignments, quizzes, and other schoolwork when I was out of school because of COVID-19 this year.	4.6	8.1	25.1	32.5	29.2	0.5
3. When I was out of school because of COVID-19, my teacher taught lessons almost every day using video (Zoom, Microsoft Teams, Google Meet/Classroom, or another program).	2.8	6.3	24.0	36.1	30.3	0.5
4. When I was out of school because of COVID-19, I watched a video recording from my teacher almost every day.	5.7	14.3	23.5	21.0	34.9	0.6
5. When I was out of school because of COVID-19, my teachers were available when I needed help (such as through virtual office hours, email, chat).	2.8	6.8	28.6	32.3	29.1	0.5
6. I was able to keep up with my schoolwork when I was out of school because of COVID-19.	4.5	11.2	31.4	30.9	21.7	0.3
7. When I returned to school after being out because of COVID-19, I was ready to work on what the rest of the class was learning.	3.0	6.6	29.1	40.9	20.2	0.3
8. When I was out of school this year because of COVID-19, I learned new things.	3.9	8.7	28.9	32.3	25.7	0.5
9. I feel good about what I learned when I was out of school because of COVID-19 this year.	3.0	6.7	28.5	36.2	25.1	0.6

Scale Reliability

Table 18 presents the internal consistency reliability (Cronbach’s alpha) for the set of OTL items. Across the grade bands, all reliability coefficients are good (Kline, 2005) thereby indicating that the set of survey items are measuring a common construct.

Table 18. OTL Survey Reliability Coefficients

Survey Version	OTL
Grades 3-5	.82
Grades 6-8	.85
Grades 10-11	.88

Overall and Subgroup Mean Scores

In this section we present means and standard deviations for the OTL scores for each grade band. First, we present the values for all students. Then we present a series of subgroup comparisons of overall score. We present subgroup comparisons of OTL scores in Appendix D.

Table 19 presents the OTL score for all students within each grade band. Average OTL scores decrease as grade band increases, indicating that students in higher grades tended to express fewer positive perceptions of opportunity to learn.

Table 19. Mean OTL: All Students

Grade Span	OTL Score Mean	OTL Score Standard Deviation
3-5 (n=119,946)	61.23	24.39
6-8 (n=127,031)	55.08	23.08
10-11 (n=82,673)	52.83	22.24

Correlations with Academic and Other Data

To document the association between QSCS scores and KSA scores, we examined the correlations between these two variables at the student level. Table 20 provides the means and standard deviations for the variables included in the correlational analysis. These include reading, mathematics, and science scale scores, as well as overall QSCS score.

Table 20. Average Reading, Math, and Science KSA and Overall QSCS Scores, by Grade

Grade	Reading Mean	Reading Std. Dev.	Math Mean	Math Std. Dev.	Science Mean	Science Std. Dev.	QSCS Mean	QSCS Std. Dev.
3	505.74	54.34	510.33	55.81	NA	NA	76.51	13.30
4	508.00	56.11	510.47	57.24	502.09	54.37	76.61	13.66
5	513.31	56.03	504.75	55.61	NA	NA	74.89	14.26
6	509.55	52.41	498.22	51.53	NA	NA	68.94	15.93
7	503.71	53.48	497.19	52.34	492.75	51.79	64.81	15.83
8	506.53	54.05	496.47	53.62	NA	NA	63.02	15.93
10	505.50	55.45	495.67	53.94	NA	NA	60.71	15.41
11	NA	NA	NA	NA	490.12	53.51	61.19	16.13

Note. NA indicates that content area was not tested at that grade level.

Table 21 presents the correlational results between student level overall QSCS score and KSA scores in reading, math, and science. Across content areas, correlations were positive and tended to decrease as grade level increased.

Table 21. Correlation Between Student-Level Overall QSCS Scores and KSA Scores in Reading, Math, and Science, by Grade

Grade	Reading	Math	Science
3	.42	.42	NA
4	.41	.40	.40
5	.36	.37	NA
6	.27	.28	NA
7	.26	.26	.26
8	.25	.26	NA
10	.25	.25	NA
11	NA	NA	.24

Note. NA indicates that content area was not tested at that grade level.

Next, we aggregated students' scores to produce a mean school-level score for both overall QSCS scores and mean KSA reading, mathematics, and science scores. Table 22 presents correlational results among those school-level scores, by grade band. Similar to the student-level correlations, the magnitude of the association between QSCS and KSA scores tends to decrease as grade level increases, with the exception of science.

Table 22. Correlation Between School-Level Overall QSCS Scores and KSA Reading, Math, and Science Scores, by Grade Band

Grade Band	Reading	Math	Science
3–5	.40	.43	.29
6–8	.45	.37	.21
10–11	.30	.26	.36

Finally, we computed the correlation between other school-level characteristics and school-level overall QSCS score. For the 3–5 grade band, there was a very small negative correlation between school-level overall QSCS score and the percentage of students qualifying for free/reduced lunch. There were small negative correlations between school-level overall QSCS score and school size, percentage of Hispanic students, percentage of LEP students, and number of behavior events. There is a moderate negative correlation between school-level overall QSCS score and percentage of black students. There was a moderate positive correlation between school-level overall QSCS scores and the percentage of white students. For the 6–8 grade band, there were moderate negative correlations between school-level overall QSCS score, school size, percentage of black students, percentage of Hispanic students, and number of behavior events. There was a small negative correlation between school-level overall QSCS score and percentage of LEP students. There was a moderate positive correlation between school-level overall QSCS scores and the percentage of white students. For the 10–11 grade band, there were small negative correlations between school-level overall QSCS score, school size, percentage of black students, percentage of Hispanic students, percentage of LEP students, and number of behavior events. There was a small positive correlation between school-level overall QSCS scores and the percentage of white students.

Table 23. Correlation Between School-Level Overall QSCS Scores and School-Level Characteristics, by Grade Band

Grade Band	Size	%FRL	%Black	% Hispanic	%White	% LEP	Behavior events
3–5	-.16	-.09	-.45	-.22	.42	-.20	-.18
6–8	-.47	**	-.48	-.36	.45	-.17	-.37
10–11	-.16	**	-.25	-.24	.26	-.16	-.19

Note. ** indicates the correlation was not statistically significantly different from 0. Free and reduced lunch students combined due to small size of reduced lunch group.

Discussion

In this section we discuss our analyses from two perspectives. First, we focus on evidence of survey quality. Next, we discuss noteworthy patterns in the survey results.

Survey Quality

All items included in the survey demonstrated variance; all response options were selected by some percentage of students. This is key for ensuring that items provide information about student perceptions of school climate and safety. Reliability analysis indicates that the set of school climate and safety items are measuring a common construct. Across the grade spans, all school climate and safety items had reliability coefficients ranging from .90 to .94, indicating very strong reliability. School climate items had reliability coefficients ranging from .84 to .91, and safety items had reliability coefficients ranging from .82 to .90. These values indicate strong reliability among the subsets of items. Confirmatory factor analysis of the school climate and safety items continues to support both an overall survey score and climate and safety subscores. Taken together, these results support the continued use of the QSCS survey.

Opportunity to Learn items were administered again in 2022 to account for temporary COVID-related school closures that may have required students to participate in non-traditional instruction (NTI) for some period of time. These items functioned appropriately and reflected a reliable scale. Across the nine OTL items, 20% or fewer students expressed negative perceptions of OTL, whereas 20%-35% students expressed that the item did not apply to them. KDE has not planned to continue administering the OTL items in future, and these patterns support that OTL issues related to long-term or temporary NTI participation may not warrant inclusion on the annual survey.

Survey Results

The most notable pattern seen across the set of school climate and safety items was the increase in negative responses at the higher grade bands. This fits with prior research suggesting that students' perceptions of school climate decline as students advance through the grade levels (e.g., Roeser, Eccles, & Sameroff, 2000; Way, Reddy, & Rhodes, 2007).

Subgroup differences in school climate and safety scores tended to be slight to small. Several school level characteristics were related to school-level overall QSCS score, most notably at the middle school level. Compared to the elementary and high school levels, school size and number of behavior events had larger negative correlations with QSCS scores at the middle school level, indicating that at this grade span, school size and student behavior may have a larger impact on students' perceptions of the climate and safety of their school.

Future Research

This report provides general reliability and validity evidence for the QSCS survey. However, additional evidence is needed to support the validity of school- and district-level QSCS scores as an accountability indicator. HumRRO is currently conducting research to explore the quality of school- and district- level scores and the appropriateness of their use in Kentucky's accountability model. This research will further expand the body of validity evidence for the QSCS survey.

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Appendix A

Table A-1. QSCS Survey Item Responses: Grades3-5 (n= 137,678)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Did Not Answer
1. My school is a caring place.	1.2	2.6	34.7	61.4	0.1
2. I feel like I am part of my school.*	1.9	6.3	46.5	45.2	0.1
3. All my teachers make me feel welcome in their class.	1.1	4.9	33.7	60.2	0.1
4. A teacher or some other adult from my school will care if I miss a day of school.*	4.6	16.1	48.3	30.7	0.2
5. Adults from my school care about me.*	1.0	2.9	37.0	59.1	0.1
6. The school rules are fair.	4.3	11.5	45.2	38.9	0.1
7. All students are treated the same if they break school rules. *	10.1	24.8	37.4	27.5	0.2
8. There is at least one adult from my school who listens to me when I have something to say.*	3.1	5.0	33.3	58.4	0.1
9. When I need help with schoolwork, I can ask a teacher.	1.3	3.6	44.3	50.7	0.1
10. If I have a problem, there is an adult from school that I can talk to.*	1.5	3.8	37.7	56.9	0.1
11. My teachers expect me to do my best all the time.	1.1	3.7	26.9	68.2	0.1
12. When I want to give up, my teacher says I should keep trying. *	1.3	4.1	40.0	54.5	0.1
13. Adults from my school make sure all students get what they need to be successful.*	1.2	4.5	39.1	55.0	0.1
14. My school is a place where students feel encouraged.*	3.0	8.8	46.8	41.2	0.3
15. Adults from my school work hard to make sure students are safe.*	0.7	1.6	24.6	73.0	0.1

Table A-1. (Continued)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Did Not Answer
16. Adults from my school handle safety concerns quickly.	1.3	6.2	45.0	47.2	0.3
17. Adults from my school stay calm when dealing with bad behavior.*	7.1	19.9	47.9	24.8	0.3
18. I feel safe in my classes.	2.3	5.5	35.3	56.7	0.2
19. Adults from my school care about my physical safety.	1.0	2.8	38.1	57.9	0.2
20. I feel comfortable stating my opinion in class even if others disagree.	8.6	18.1	43.6	29.5	0.3
21. Students from this school respect each other's differences (gender, culture, race, religion, ability).*	6.2	13.6	39.3	40.5	0.4
22. Adults from this school respect students' differences (gender, culture, race, religion, ability).*	2.0	4.1	29.4	64.3	0.3
23. Students being mean or hurtful to other students is NOT a problem for this school	37.5	26.7	22.3	13.2	0.3
24. We are taught ways to stop mean or hurtful behavior when we see it happen.*	2.4	6.2	40.5	50.7	0.2
25. Students being mean or hurtful to other students online (such as websites and apps) is NOT a problem for my school.	26.0	22.3	26.6	24.7	0.4
26. If students are mean or hurtful to other students during school, there is a safe way to report it to an adult.*	1.5	3.3	34.3	60.7	0.2
27. If a student reports being treated in a mean or hurtful way during school, the adults will do something to help.*	1.4	3.4	32.3	62.7	0.2

Note. Asterisked survey questions were not included on the Alternate QSCS Survey. Items 1 through 14 measure student perceptions of school climate. Items 15-27 measure student perceptions of school safety.

Table A-2. QSCS Survey Item Responses: Grades 6-8 (n= 147,211)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Disagree	% Did Not Answer
1. My school is a caring place.	2.4	10.3	61.0	26.2	0.1
2. I feel like I am part of my school.*	2.8	12.5	60.9	23.7	0.1
3. All my teachers make me feel welcome in their class.	1.7	8.1	57.3	32.8	0.1
4. A teacher or some other adult from my school will care if I miss a day of school.*	5.3	22.1	52.6	19.9	0.2
5. Adults from my school care about me.*	2.0	8.4	61.2	28.3	0.2
6. The school rules are fair.	10.7	29.1	46.9	13.1	0.1
7. The consequences for breaking school rules are the same for all students.*	10.6	25.8	41.0	22.4	0.1
8. There is at least one adult from my school who listens to me when I have something to say.*	1.9	5.2	51.1	41.7	0.1
9. When I need help with schoolwork, I can ask a teacher.	1.5	5.5	58.0	34.9	0.1
10. If I have a problem, there is an adult from school that I can talk to.*	2.6	8.3	55.2	33.7	0.1
11. My teachers expect me to do my best all the time.	0.8	4.3	47.2	47.5	0.1
12. When I want to give up, my teacher says I should keep trying.*	2.6	12.2	58.5	26.5	0.2
13. Adults from my school make sure all students get what they need to be successful.*	2.6	11.9	56.6	28.8	0.1
14. My school is an encouraging place.*	6.4	19.4	55.4	18.6	0.2
15. Adults from my school work hard to make sure students are safe.*	1.8	6.6	53.3	38.2	0.1
16. Adults from my school handle safety concerns quickly.	3.0	12.2	55.1	29.5	0.2

Table A-2. (Continued)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Did Not Answer
17. Adults from my school stay calm when dealing with bad behavior.*	10.7	28.2	47.5	13.5	0.2
18. I feel safe in my classes.	3.5	10.0	58.1	28.2	0.2
19. Adults from my school care about my physical safety.	2.1	7.4	60.5	29.8	0.2
20. I feel comfortable stating my opinion in class even if others disagree.	13.6	27.0	40.4	18.8	0.2
21. Students from this school respect each other's differences (gender, culture, race, sexual orientation, religion, ability)*	21.9	28.2	36.5	13.1	0.2
22. Adults from this school respect students' differences (gender, culture, race, sexual orientation, religion, ability).*	4.0	9.0	50.8	36.0	0.2
23. Bullying is NOT a problem for this school.	24.8	33.9	32.2	9.0	0.2
24. During school, we are taught ways to stop bullying when we see it happen.*	5.5	17.0	53.9	23.4	0.2
25. Internet bullying is NOT a problem for students from my school.	20.3	29.9	36.3	13.2	0.4
26. If a student is bullied during school, there is a safe way to report it to an adult.*	3.3	9.2	56.8	30.6	0.2
27. If a student reports bullying during school, the adults will do something to help.*	3.7	12.2	56.0	27.9	0.2

Note. Asterisked survey questions were not included on the Alternate QSCS Survey. Items 1 through 14 measure student perceptions of school climate. Items 15-27 measure student perceptions of school safety.

Table A-3. QSCS Survey Item Responses: Grades 10-11 (n= 91,581)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Did Not Answer
1. My school is a caring place.	3.5	15.7	66.1	14.6	0.1
2. I feel like I am part of my school.*	4.6	18.5	62.1	14.7	0.1
3. All my teachers make me feel welcome in their class.	1.7	7.6	67.5	23.1	0.1
4. A teacher or some other adult from my school will care if I miss a day of school.*	6.3	24.2	52.7	16.7	0.1
5. Adults from my school care about me.*	2.6	11.8	68.6	16.9	0.2
6. The school rules are fair.	11.1	31.1	49.7	7.9	0.1
7. The consequences for breaking school rules are the same for all students.*	15.2	31.1	42.0	11.5	0.2
8. There is at least one adult from my school who listens to me when I have something to say.*	2.0	5.6	59.6	32.7	0.1
9. When I need help with schoolwork, I can ask a teacher.	1.9	6.2	65.6	26.2	0.1
10. If I have a problem, there is an adult from school that I can talk to.*	3.2	10.5	62.8	23.4	0.1
11. My teachers expect me to do my best all the time.	1.4	7.3	62.5	28.7	0.1
12. When I want to give up, my teacher says I should keep trying.*	3.3	14.9	64.8	16.9	0.2
13. Adults from my school make sure all students get what they need to be successful.*	4.7	19.8	60.1	15.3	0.2
14. My school is an encouraging place.*	7.2	23.9	58.2	10.5	0.2
15. Adults from my school work hard to make sure students are safe.*	3.2	10.8	65.3	20.5	0.2
16. Adults from my school handle safety concerns quickly.	4.0	14.4	62.6	18.8	0.2

Table A-3. (Continued)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Did Not Answer
17. Adults from my school stay calm when dealing with bad behavior.*	7.4	24.1	57.0	11.2	0.2
18. I feel safe in my classes.	3.3	9.7	67.6	19.2	0.2
19. Adults from my school care about my physical safety.	2.6	8.8	69.5	18.9	0.2
20. I feel comfortable stating my opinion in class even if others disagree.	10.8	24.3	46.9	17.8	0.2
21. Students from this school respect each other's differences (gender, culture, race, sexual orientation, religion, ability)*	21.7	28.4	39.6	10.0	0.2
22. Adults from this school respect students' differences (gender, culture, race, sexual orientation, religion, ability).*	6.0	13.1	60.5	20.2	0.2
23. Bullying is NOT a problem for this school.	18.2	33.0	40.7	7.7	0.3
24. During school, we are taught ways to stop bullying when we see it happen.*	9.2	27.6	53.1	9.9	0.2
25. Internet bullying is NOT a problem for students from my school.	21.3	35.4	36.4	6.5	0.4
26. If a student is bullied during school, there is a safe way to report it to an adult.*	4.8	13.7	66.5	14.7	0.3
27. If a student reports bullying during school, the adults will do something to help.*	6.1	19.8	61.2	12.6	0.4

Note. Asterisked survey questions were not included on the Alternate QSCS Survey. Items 1 through 14 measure student perceptions of school climate. Items 15-27 measure student perceptions of school safety.

Appendix B

Table B-1. Comparison of Mean Overall Scores: Females and Males

	Female Mean	Female SD	Male Mean	Male SD	Cohen's d
Grades 3-5	76.57	13.16	75.44	14.30	0.08
Grades 6-8	64.50	15.54	66.47	16.52	-0.12
Grades 10-11	59.93	14.97	61.91	16.44	-0.13

Table B-2. Comparison of Mean Climate Scores: Females and Males

	Female Mean	Female SD	Male Mean	Male SD	Cohen's d
Grades 3-5	79.55	13.51	77.91	14.81	0.12
Grades 6-8	68.39	15.48	68.95	16.89	-0.03
Grades 10-11	63.53	15.12	63.64	16.91	-0.01

Table B-3. Comparison of Mean Safety Scores: Females and Males

	Female Mean	Female SD	Male Mean	Male SD	Cohen's d
Grades 3-5	73.37	14.35	72.81	15.30	0.04
Grades 6-8	60.34	17.10	63.83	17.65	-0.20
Grades 10-11	56.08	16.56	60.09	17.52	-0.24

Table B-4. Comparison of Mean Overall Scores: Asian and Non-Asian Students

	Asian Mean	Asian SD	Non-Asian Mean	Non-Asian SD	Cohen's d
Grades 3-5	75.95	12.58	75.99	13.80	0.00
Grades 6-8	66.33	14.80	65.50	16.11	0.05
Grades 10-11	63.38	13.93	60.87	15.81	0.17

Table B-5. Comparison of Mean Climate Scores: Asian and Non-Asian Students

	Asian Mean	Asian SD	Non-Asian Mean	Non-Asian SD	Cohen's d
Grades 3-5	79.11	13.14	78.69	14.24	0.03
Grades 6-8	69.20	15.10	68.67	16.25	0.03
Grades 10-11	65.62	14.28	63.53	16.10	0.14

Table B-6. Comparison of Mean Safety Scores: Asian and Non-Asian Students

	Asian Mean	Asian SD	Non-Asian Mean	Non-Asian SD	Cohen's d
Grades 3-5	72.54	13.63	73.10	14.88	-0.04
Grades 6-8	63.27	15.96	62.11	17.51	0.07
Grades 10-11	60.96	15.31	58.05	17.21	0.18

Table B-7. Comparison of Mean Overall Scores: Black and Nonblack Students

	Black Mean	Black SD	Non-Black Mean	Non-Black SD	Cohen's d
Grades 3-5	72.92	14.32	76.56	13.59	-0.26
Grades 6-8	61.67	16.11	66.23	15.98	-0.28
Grades 10-11	59.11	15.81	61.23	15.74	-0.13

Table B-8. Comparison of Mean Climate Scores: Black and Nonblack Students

	Black Mean	Black SD	Nonblack Mean	Nonblack SD	Cohen's d
Grades 3-5	75.82	14.95	79.23	14.01	-0.24
Grades 6-8	64.73	16.52	69.40	16.06	-0.29
Grades 10-11	61.49	16.21	63.91	16.01	-0.15

Table B-9. Comparison of Mean Safety Scores: Black and Nonblack Students

	Black Mean	Black SD	Nonblack Mean	Nonblack SD	Cohen's d
Grades 3-5	69.83	15.41	73.69	14.67	-0.26
Grades 6-8	58.44	17.43	62.82	17.40	-0.25
Grades 10-11	56.66	17.19	58.36	17.16	-0.10

Table B-10. Comparison of Mean Overall Scores: Hispanic and Non-Hispanic Students

	Hispanic Mean	Hispanic SD	Non-Hispanic Mean	Non-Hispanic SD	Cohen's d
Grades 3-5	75.34	12.72	76.05	13.86	-0.05
Grades 6-8	64.79	14.95	65.59	16.18	-0.05
Grades 10-11	61.10	14.65	60.93	15.86	0.01

Table B-11. Comparison of Mean Climate Scores: Hispanic and Non-Hispanic Students

	Hispanic Mean	Hispanic SD	Non-Hispanic Mean	Non-Hispanic SD	Cohen's d
Grades 3-5	78.30	13.43	78.74	14.28	-0.03
Grades 6-8	67.62	15.23	68.78	16.31	-0.07
Grades 10-11	63.07	15.03	63.63	16.14	-0.04

Table B-12. Comparison of Mean Safety Scores: Hispanic and Non-Hispanic Students

	Hispanic Mean	Hispanic SD	Non-Hispanic Mean	Non-Hispanic SD	Cohen's d
Grades 3-5	72.19	13.54	73.17	14.96	-0.07
Grades 6-8	61.79	16.22	62.17	17.59	-0.02
Grades 10-11	59.01	15.99	58.06	17.26	0.06

Table B-13. Comparison of Mean Overall Scores: White and Nonwhite Students

	White Mean	White SD	Non-White Mean	Non-White SD	Cohen's d
Grades 3-5	76.46	13.66	73.10	14.10	0.24
Grades 6-8	66.04	16.04	62.33	15.98	0.23
Grades 10-11	61.07	15.79	60.15	15.58	0.06

Table B-14. Comparison of Mean Climate Scores: White and Nonwhite Students

	White Mean	White SD	Nonwhite Mean	Nonwhite SD	Cohen's d
Grades 3-5	79.13	14.07	76.06	14.79	0.21
Grades 6-8	69.24	16.12	65.28	16.40	0.24
Grades 10-11	63.77	16.06	62.39	16.01	0.09

Table B-15. Comparison of Mean Safety Scores: White and Nonwhite Students

	White Mean	White SD	Nonwhite Mean	Nonwhite SD	Cohen's d
Grades 3-5	73.59	14.74	69.94	15.14	0.24
Grades 6-8	62.62	17.46	59.22	17.25	0.20
Grades 10-11	58.18	17.21	57.81	16.92	0.02

Table B-16. Comparison of Mean Overall Scores: Free/Reduced Lunch and Paid Lunch

	F/R Lunch Mean	F/R Lunch SD	Paid Lunch Mean	Paid Lunch SD	Cohen's d
Grades 3-5	75.35	14.20	77.02	12.99	-0.12
Grades 6-8	64.69	16.38	66.78	15.54	-0.13
Grades 10-11	59.79	16.23	62.25	15.12	-0.16

Table B-17. Comparison of Mean Climate Scores: Free/Reduced Lunch and Paid Lunch

	F/R Lunch Mean	F/R Lunch SD	Paid Lunch Mean	Paid Lunch SD	Cohen's d
Grades 3-5	78.12	14.70	79.64	13.35	-0.11
Grades 6-8	67.91	16.56	69.84	15.61	-0.12
Grades 10-11	62.44	16.53	64.88	15.41	-0.15

Table B-18. Comparison of Mean Safety Scores: Free/Reduced Lunch and Paid Lunch

	F/R Lunch Mean	F/R Lunch SD	Paid Lunch Mean	Paid Lunch SD	Cohen's d
Grades 3-5	72.39	15.22	74.20	14.16	-0.12
Grades 6-8	61.24	17.75	63.49	16.96	-0.13
Grades 10-11	56.97	17.63	59.43	16.53	-0.14

Table B-19. Comparison of Mean Overall Scores: LEP and Non-LEP

	LEP Mean	LEP SD	Non-LEP Mean	Non-LEP SD	Cohen's d
Grades 3-5	74.85	12.48	76.07	13.86	-0.09
Grades 6-8	65.56	14.98	65.52	16.12	0.00
Grades 10-11	63.90	14.85	60.84	15.79	0.20

Table B-20. Comparison of Mean Climate Scores: LEP and Non-LEP

	LEP Mean	LEP SD	Non-LEP Mean	Non-LEP SD	Cohen's d
Grades 3-5	77.95	13.27	78.76	14.28	-0.06
Grades 6-8	68.20	15.70	68.70	16.24	-0.03
Grades 10-11	65.98	15.49	63.50	16.07	0.16

Table B-21. Comparison of Mean Safety Scores: LEP and Non-LEP

	LEP Mean	LEP SD	Non-LEP Mean	Non-LEP SD	Cohen's d
Grades 3-5	71.53	13.31	73.20	14.95	-0.12
Grades 6-8	62.79	15.81	62.11	17.54	0.04
Grades 10-11	61.74	15.84	58.01	17.20	0.23

Table B-22. Comparison of Mean Overall Scores: IEP and No IEP

	IEP Mean	IEP SD	No IEP Mean	No IEP SD	Cohen's d
Grades 3-5	73.70	18.06	76.44	12.71	-0.18
Grades 6-8	66.50	19.44	65.36	15.48	0.06
Grades 10-11	60.10	19.90	61.04	15.22	-0.05

Table B-23. Comparison of Mean Climate Scores: IEP and No IEP

	IEP Mean	IEP SD	No IEP Mean	No IEP SD	Cohen's d
Grades 3-5	75.91	18.84	79.25	13.05	-0.21
Grades 6-8	69.35	20.07	68.57	15.53	0.04
Grades 10-11	62.50	20.62	63.71	15.44	-0.07

Table B-24. Comparison of Mean Safety Scores: IEP and No IEP

	IEP Mean	IEP SD	No IEP Mean	No IEP SD	Cohen's d
Grades 3-5	71.36	18.45	73.42	14.01	-0.13
Grades 6-8	63.48	20.12	61.93	17.01	0.08
Grades 10-11	57.56	20.49	58.19	16.75	-0.03

Appendix C

Table C-1. Opportunity to Learn Survey Item Responses: Grades 3-5 (n= 137,678)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Does Not Apply	% Did Not Answer
When I was out of school because of COVID-19, I was able to work with my teacher and classmates online.	2.8	6.0	24.7	31.8	34.1.	0.5
It was easy to use my device (such as computer, Chromebook, or smartphone) to do assignments, quizzes, and other schoolwork when I was out of school because of COVID-19 this year.	4.6	8.1	25.1	32.5	29.2	0.5
When I was out of school because of COVID-19, my teacher taught lessons almost every day using video (Zoom, Microsoft Teams, Google Meet/Classroom, or another program).	2.8	6.3	24.0	36.1	30.3	0.5
When I was out of school because of COVID-19, I watched a video recording from my teacher almost every day.	5.7	14.3	23.5	21.0	34.9	0.6
When I was out of school because of COVID-19, my teachers were available when I needed help (such as through virtual office hours, email, chat).	2.8	6.8	28.6	32.3	29.1	0.5
I was able to keep up with my schoolwork when I was out of school because of COVID-19.	4.5	11.2	31.4	30.9	21.7	0.3
When I returned to school after being out because of COVID-19, I was ready to work on what the rest of the class was learning.	3.0	6.6	29.1	40.9	20.2	0.3
When I was out of school this year because of COVID-19, I learned new things.	3.9	8.7	28.9	32.3	25.7	0.5
I feel good about what I learned when I was out of school because of COVID-19 this year.	3.0	6.7	28.5	36.2	25.1	0.6

Table C-2. Opportunity to Learn Survey Item Responses: Grades 6-8 (n= 147,211)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Does Not Apply	% Did Not Answer
When I was out of school because of COVID-19, I was able to work with my teacher and classmates online.	4.2	9.3	36.2	21.3	28.6	0.5
It was easy to use my device (such as computer, Chromebook, or smartphone) to do assignments, quizzes, and other schoolwork when I was out of school because of COVID-19 this year.	5.3	10.4	34.2	26.2	23.5	0.4
When I was out of school because of COVID-19, my teacher taught lessons almost every day using video (Zoom, Microsoft Teams, Google Meet/Classroom, or another program)	5.0	10.8	33.0	22.6	28.2	0.5
When I was out of school because of COVID-19, I watched a video recording from my teacher almost every day.	8.2	20.3	28.3	13.1	29.7	0.5
When I was out of school because of COVID-19, my teachers were available when I needed help (such as through virtual office hours, email, chat).	3.3	9.0	40.0	22.9	24.4	0.4
I was able to keep up with my schoolwork when I was out of school because of COVID-19.	10.5	18.6	33.0	17.6	20.2	0.1
When I returned to school after being out because of COVID-19, I was ready to work on what the rest of the class was learning.	5.6	13.5	38.0	21.4	21.3	0.2
When I was out of school this year because of COVID-19, I learned new things.	7.4	15.9	35.6	16.2	24.6	0.4
I feel good about what I learned when I was out of school because of COVID-19 this year.	7.1	15.4	35.5	17.4	24.2	0.5

Table C -3. Opportunity to Learn Survey Item Responses: Grades 10-11 (n= 91,581)

Survey Question	% Strongly Disagree	% Disagree	% Agree	% Strongly Agree	% Does Not Apply	% Did Not Answer
When I was out of school because of COVID-19, I was able to work with my teacher and classmates online.	5.3	11.1	46.1	18.2	18.9	0.4
It was easy to use my device (such as computer, Chromebook, or smartphone) to do assignments, quizzes, and other schoolwork when I was out of school because of COVID-19 this year.	7.0	12.0	41.3	23.2	16.1	0.4
When I was out of school because of COVID-19, my teacher taught lessons almost every day using video (Zoom, Microsoft Teams, Google Meet/Classroom, or another program)	7.7	16.0	39.9	16.5	19.5	0.4
When I was out of school because of COVID-19, I watched a video recording from my teacher almost every day.	10.5	24.5	33.9	10.5	20.2	0.5
When I was out of school because of COVID-19, my teachers were available when I needed help (such as through virtual office hours, email, chat).	4.3	10.7	49.4	18.2	17.0	0.4
I was able to keep up with my schoolwork when I was out of school because of COVID-19.	15.1	19.5	35.2	15.3	14.7	0.2
When I returned to school after being out because of COVID-19, I was ready to work on what the rest of the class was learning.	8.6	17.9	41.7	13.7	17.8	0.2
When I was out of school this year because of COVID-19, I learned new things.	11.0	20.3	38.2	11.6	18.4	0.4
I feel good about what I learned when I was out of school because of COVID-19 this year.	12.6	22.3	35.4	10.8	18.3	0.5

Appendix D

Table D-1. Comparison of Mean OTL Scores: Females and Males

	Female Mean	Female SD	Male Mean	Male SD	Cohen's d
Grades 3-5	61.36	24.24	61.10	24.54	0.01
Grades 6-8	55.11	22.43	55.04	23.68	0.00
Grades 10-11	53.58	21.36	52.09	23.04	0.07

Table D-2. Comparison of Mean OTL Scores: Asian and Non-Asian Students

	Asian Mean	Asian SD	Non-Asian Mean	Non-Asian SD	Cohen's d
Grades 3-5	61.39	23.55	61.22	24.42	0.01
Grades 6-8	57.32	22.47	55.02	23.09	0.10
Grades 10-11	56.04	20.46	52.74	22.28	0.15

Table D-3. Comparison of Mean OTL Scores: Black and Nonblack Students

	Black Mean	Black SD	Nonblack Mean	Nonblack SD	Cohen's d
Grades 3-5	60.76	23.78	61.32	24.51	-0.02
Grades 6-8	53.45	22.64	55.39	23.15	-0.08
Grades 10-11	51.76	22.26	53.00	22.23	-0.06

Table D-4. Comparison of Mean OTL Scores: Hispanic and Non-Hispanic Students

	Hispanic Mean	Hispanic SD	Non-Hispanic Mean	Non-Hispanic SD	Cohen's d
Grades 3-5	62.36	23.44	61.12	24.48	0.05
Grades 6-8	55.35	22.21	55.05	23.16	0.01
Grades 10-11	53.20	21.57	52.79	22.29	0.02

Table D-5. Comparison of Mean OTL Scores: White and Nonwhite Students

	White Mean	White SD	Nonwhite Mean	Nonwhite SD	Cohen's d
Grades 3-5	61.22	24.53	61.29	23.59	0.00
Grades 6-8	55.18	23.15	54.45	22.67	0.03
Grades 10-11	52.79	22.30	53.03	21.81	-0.01

Table D-6. Comparison of Mean OTL Scores: Free/Reduced Lunch and Paid Lunch

	F/R Lunch Mean	F/R Lunch SD	Paid Lunch Mean	Paid Lunch SD	Cohen's d
Grades 3-5	61.11	24.37	61.43	24.44	-0.01
Grades 6-8	54.26	23.25	56.35	22.76	-0.09
Grades 10-11	51.81	22.42	54.00	21.96	-0.10

Table D-7. Comparison of Mean OTL Scores: LEP and Non-LEP

	LEP Mean	LEP SD	Non-LEP Mean	Non-LEP SD	Cohen's d
Grades 3-5	63.50	22.84	61.04	24.51	0.10
Grades 6-8	57.76	21.52	54.96	23.14	0.13
Grades 10-11	58.00	20.91	52.64	22.26	0.25

Table D-8. Comparison of Mean OTL Scores: IEP and No IEP

	IEP Mean	IEP SD	No IEP Mean	No IEP SD	Cohen's d
Grades 3-5	62.92	24.55	60.88	24.35	0.08
Grades 6-8	57.57	23.98	54.67	22.91	0.12
Grades 10-11	54.67	23.29	52.61	22.10	0.09