

Student and Staff Perceptions of School Facilities in California

California School Climate, Health, and Learning Surveys: 2018-2020

> Thomas Hanson and Cindy Zheng February 2021 *CM190315*

© 2021 WestEd. All rights reserved.

Suggested citation: Hanson, T., & Zheng, C. (2021). *Student and staff perceptions of school facilities in California: Californial School Climate, Health, and Learning Surveys, 2018-2020.* San Francisco, CA: WestEd.

WestEd is a nonpartisan, nonprofit agency that conducts and applies research, develops evidence-based solutions, and provides services and resources in the realms of education, human development, and related fields, with the end goal of improving outcomes and ensuring equity for individuals from infancy through adulthood. For more information, visit WestEd.org. For regular updates on research, free resources, solutions, and job postings from WestEd, subscribe to the E-Bulletin, our semimonthly e-newsletter, at <u>WestEd.org/subscribe</u>.





Table of Contents

Table of Contents	i
Summary	1
Introduction	2
Sample	4
Analytic Strategy	5
Frequency Distribution of Items	5
School Trends in Perceptions of the Quality of School Physical Environments	5
Relationships of Perceptions of School Facilities to Other School Characteristics.	5
Results	7
Student and Staff Reports of the Physical Environment of Schools	7
Quality of Physical Envronment	7
Classroom Crowding	8
School Lunch Time	8
Trends in Secondary Student and Staff Reports of the Quality of School Facilities	8
Quality of Physical Envronment	8
Relationship of Perceptions of School Physical Environment to Other School Characteristics	9
Student and Staff Reports of School Facilities – Tabular and Graphical Results	11
Trends in Perceptions of the Quality of School Facilities – Graphical Results	15
How Perceptions of the School Physical Environment are Related to Other School Characteristics – Tabular and Graphical Results	17
Elementary Student Reports	17
Secondary Student Reports	27
Staff Reports	36
References	50



LIST OF FIGURES

Figure 1. School building neat and clean (elementary student)	13
Figure 2. School usually clean and tidy (secondary student)	13
Figure 3. Classroom crowding (secondary student)	14
Figure 4. School has clean and well-maintained facilities and property (staff)	14
Figure 5. Within-school trends in perceptions of quality of school facilities (student)	15
Figure 6. Statewide trends in perceptions of quality of school facilities (student)	15
Figure 7. Within-school trends in perceptions of quality of school facilities (staff)	16
Figure 8. School enrollment by student-reported quality of school physical environment	18
Figure 9. Poverty by student-reported quality of school physical environment	18
Figure 10. Latinx enrollment by student-reported quality of school physical environment	19
Figure 11. Non-Hispanic, white enrollment by student-reported quality of school physical environment	19
Figure 12. Chronic absentee rate by student-reported quality of school physical environment	20
Figure 13. English Language Arts performance by student-reported quality of school physical environment	21
Figure 14. Mathematics performance by student-reported quality of school physical environment	21
Figure 15. Physical fitness by student-reported quality of school physical environment	22
Figure 16. School safety by student-reported quality of school physical environment	23
Figure 17. Fighting at school by student-reported quality of school physical environment	23
Figure 18. Weapons at school by student-reported quality of school physical environment	24
Figure 19. Violence victimization at school by student-reported quality of school physical environment	24
Figure 20. School connectedness by student-reported quality of school physical environment	25
Figure 21. Academic motivation by student-reported quality of school physical environment	25
Figure 22. Caring staff-student relationships by student-reported quality of school physical environment	26
Figure 23. School enrollment by student-reported quality of school physical environment	27
Figure 24. Poverty by student-reported quality of school physical environment	28
Figure 25. Latinx enrollment by student-reported quality of school physical environment	28
Figure 26. Non-Hispanic, white enrollment by student-reported quality of school physical environment	29
Figure 27. Chronic absentee rate by student-reported quality of school physical environment	30



Figure 28. Student suspensions by student-reported quality of school physical environment	30
Figure 29. English Language Arts performance by student-reported quality of school physical environment	31
Figure 30. Mathematics performance by student-reported quality of school physical environment	31
Figure 31. School safety by student-reported quality of school physical environment	33
Figure 32. Weapons at school by student-reported quality of school physical environment	33
Figure 33. School connectedness by student-reported quality of school physical environment	34
Figure 34. Caring staff-student relationships by student-reported quality of school physical environment	34
Figure 35. School promotion of parental involvement by student-reported quality of school physic environment	cal 35
Figure 36. School enrollment by staff-reported quality of school physical environment	37
Figure 37. Poverty by staff-reported quality of school physical environment	37
Figure 38. Latinx enrollment by staff-reported quality of school physical environment	38
Figure 39. Non-Hispanic, white enrollment by staff-reported quality of school physical environment	nt 38
Figure 40. Chronic absentee rate by staff-reported quality of school physical environment	40
Figure 41. Student suspensions by staff-reported quality of school physical environment	40
Figure 42. English Language Arts performance by staff-reported quality of school physical environment	41
Figure 43. Mathematics performance by staff-reported quality of school physical environment	41
Figure 44. Staff working environment by staff-reported quality of school physical environment	43
Figure 45. Staff-collegiality by staff-reported quality of school physical environment	43
Figure 46. Staff-reported caring adult-student relationships by staff-reported quality of school physical environment	44
Figure 47. School promotion of parental involvement by staff-reported quality of school physical environment	44
Figure 48. Student social emotional learning supports by staff-reported quality of school physical environment	45
Figure 49. School disorder problems by staff-reported quality of school physical environment	45
Figure 50. Student school safety by staff-reported quality of school physical environment	47
Figure 51. Student school connectedness by staff-reported quality of school physical environment	: 47
Figure 52. Student-reported promotion of parental involvement by staff-reported quality of school physical environment	ol 48
Figure 53. Student peer relationships by staff-reported quality of school physical environment	49



Figure 54. Learning engagement climate by staff-reported quality of school physical environment 49

LIST OF TABLES

Table 1. CalSCHLS questions used to assess quality of school environment	3
Table 2. CHKS questions used to assess quality of school environment (student)	11
Table 3. CSSS question used to assess quality of school environment (staff)	12
Table 4. CHKS questions used to assess meal time at school (student)	12
Table 5. Demographic characteristics by quality of school physical environment (student)	17
Table 6. School discipline, dropout/graduation, test scores, and fitnessgram results by quality of school physical environment (student)	20
Table 7. School safety, school connectedness, school supports, parental involvement, student mer health, and peer relationship quality by quality of school physical environment (student)	ntal 22
Table 8. Demographic characteristics by quality of school physical environment (student)	27
Table 9. School discipline, dropout/graduation, test scores, and fitnessgram results by quality of school physical environment (student)	29
Table 10. School safety; school connectedness; school, parental, and peer supports; and disciplina environment by quality of school physical environment (student)	ary 32
Table 11. Student mental health and breakfast consumption by quality of school physical environment (student)	35
Table 12. Demographic characteristics by quality of school physical environment (staff)	36
Table 13. School discipline, dropout/graduation, test scores, and fitnessgram results by quality of school physical environment (staff)	39
Table 14. Staff reported outcomes by quality of school physical environment (staff)	42
Table 15. Student-reported school safety, connectedenss, supports, sadness, and breakfast consumption by quality of school physical environment (staff)	46
Table 16. Supports by quality of school physical environment (staff)	48



Summary

The report is a follow-up to Hanson and Austin's (2018) analysis of 2015-17 California Healthy Kids Survey (CHKS) data describing secondary students' perceptions of the physical environment in their schools. The analyses are updated with 2018-20 CHKS data collected from secondary students, as well as never-before-analyzed school facilities survey data collected from elementary students and school staff. The report has three purposes :

- to describe student and staff perceptions of the school physical environment in the 2018-20 time period,
- to describe trends in student and staff perceptions of school facilities between 2015/16 and 2019/20, and
- to examine how student and staff reports of the quality of the school physical environment are related to demographic, disciplinary, academic performance, and other school climate characteristics of schools.

The results are consistent with those reported in 2018. The vast majority of elementary students and school staff reported that their schools are wellmaintained (74-85%) and a significant plurality of secondary students rated their school facilities highly (39-43%). Most students did not report that classroom crowding interferes with learning, although about 15 percent of students did report this problem. Student and staff ratings of facilities declined since 2015/16 in middle schools but held study in elementary and high schools. Finally, although a plurality of students reported that their school facilities are in good condition, there was substantial variation in ratings across schools, and this variation tracks the racial and socio-economic disparities present in the educational system. Ratings of the quality of school facilities were lowest in schools with greater percentages of African American and Latinx students, schools with greater percentages of



students eligible for free/reduced-price meals, and schools with lower percentages of Asian and white students. Moreover, schools with lowerrated facilities exhhibited lower levels of academic performance, school safety, availability of school supports, and pupil engagement. They also exhibited higher chronic absentee rates, higher suspensions rates, and higher levels of student- and staff-reported violence victimization and disorder. Overall, student and staff perceptions of the quality of the school climate mirror other aspects of school climate.

Introduction

The California Department of Education's (CDE) School Climate, Health, and Learning Surveys (CalSCHLS) are comprised of three interrelated surveys: the elementary and secondary California Healthy Kids Survey (CHKS), the California School Staff Survey (CSSS), and the California School Parent Surveys (CSPS). The survey system was designed to assess every domain of school climate identified by the US Department of Education, including (a) student engagement and bonding to school; (b) caring and respectful relationships among and between students, staff, and parents; (c) safety and order, and (d) a well-maintained physical environment (Jennings, 2010; O'Malley, Renshaw, Ritchey, & Furlong, 2011). The physical environment is a critical, but often overlooked, aspect of school climate. The physical environment is the physical space of the school, including facility quality and upkeep, ambient noise, density of students, and classroom temperature. These aspects of a school's physical environment are associated with academic performance and other school climate domains (Evans, 2006; Plank, Bradshaw, & Young, 2009). Students who attend schools that are crowded, and/or unkempt and in disrepair report less positive relationships with teachers and other students, lower perceptions of safety, and higher perceptions of social disorder (e.g., fighting, verbal abuse, substance use) at school (Plank et al. 2009).

Starting in the 2015/16 academic year, WestEd worked with the CDE Facilities Management Office staff to add to the secondary CHKS Core Module one question to assess students' perceptions of the physical environment of their school. Two questions assessing the school physical environment were also retained on the supplementary School Climate Module (SCM). In addition, three other questions were added to the SCM, one that assesses overcrowding in school classrooms and two questions that assess student perceptions of the school lunch schedule. A school facilities question was also added to the CSSS in 2015, and an item was added to the elementary CHKS to assess student perceptions of school facilities in 2018.¹

¹ The California School Parent Survey (CSPS) has been assessing parent perceptions of the school facility since 2017. Analyses of parent perceptions are not conducted in this report because of the relatively low response rates on the CSPS.



Table 1. CalSCHLS questions used to assess quality of school environment

Survey Item	Survey (Module)	Student/ Staff (18-20)	Schools (18-20)	Years on Survey
Is your school building neat and clean? (Q14)	Elementary-CHKS	170,090	2,585	2018-2020
My school is usually clean and tidy. (A29)	Secondary-CHKS	536,111	2,262	2015-2020
The schoolyard and buildings are clean and in good condition. (SC40)	Secondary-CHKS ¹	157,495	720	2015-2020
The school grounds are kept clean. (SC44)	Secondary-CHKS ¹	157,019	720	2015-2020
My classroom is so crowded it is hard to concentrate and learn. (SC41)	Secondary-CHKS ¹	157,174	720	2015-2020
I eat my lunch at the right time of day. (SC42)	Secondary-CHKS ¹	157,487	720	2015-2020
I have plenty of time to eat my lunch. (SC43)	Secondary-CHKS ¹	157,387	720	2015-2020
This school has clean and well-maintained facilties and property. (Q32)	CSSS (Staff Survey)	98,186	2,650	2015-2020

Source : Local administration of the CHKS and CSSS.

Notes: ¹ Assessed on the secondary CHKS School Climate Module only.



Sample

The report has three purposes, each requiring a different set of CalSCHLS data. The three purposes are as follows:

- to describe student and staff perceptions of the school phyiscial environment in 2018-20,
- **2.** to estimate trends in student and staff perceptions of the school physical environment between 2015/16 and 2019/20, and
- **3.** to examine how student and staff reports of the qualty of the school physical environment are related to demographic, disciplinary, academic performance, and other school climate characteristics of schools.

Student and staff perceptions of the school phyiscial environment in 2018-20. The 2018-20 descriptive analyses were based on three data sources. For elementary students and school staff, the results were based on data collected in 2018/19 and 2019/20 via local administration of the CHKS and the CSSS. Approximately 170,000 5th graders from 2,585 schools participated in the Elementary CHKS between 2018 and 2020. The CSSS was administered to 98,186 staff members in 2,650 schools during the same time period.

For middle and high school students, the results were based on a random sample of schools that participated in the 2017-19 Biennial State CHKS (Austin, Hanson, Zhang, and Zheng, 2020). A total of 109 randomly-selected schools and 45,848 students participated. Tabular and graphical results are presented showing the frequency distributions of the physical environment questions for students in 5th, 7th, 9th, and 11th grades and staff in traditional elementary, middle, and high schools.

Trends in student and staff perceptions of the school phyiscial environment. School-level trends in student and staff perceptions of the quality of school facilities were examined using data collected between 2015/16 and 2019/20 from local administration of the secondary CHKS and the CSSS. Secondary CHKS data were collected from 2,662 schools over multiple years during this period. Approximately 2,712 schools participated in the CSSS. Data are also presented from the 2015-17 and 2017-19 Biennial State CHKS data to assess the extent to which the school-level changes are consistent with state-wide changes during this shorter period. Because the facilities item was only added to the the elementary CHKS in 2018/19, trends in elementary students' perceptions of school facilities were not examined.

Relationhip of student and staff reports of the qualty of the school physical environment to other school characterstics. To examine how student and staff reports of the quality of the school physical environment are related to other characteristics of schools, data from the 2018-20 local administration of the elementary and secondary CHKS and the CSSS were aggregated



and merged with demographic, disciplinary, academic performance, and other data distributed by CDE. To simplify presentation, 9th graders were excluded from the analytic sample. Student responses from 2,370 schools serving 5th graders, 1,318 schools serving 7th graders, and 823 schools serving 11th graders were examined. The analysis of CSSS data was based on staff who completed the CSSS in 1,914 elementary, middle, and high schools

Analytic Strategy

Frequency Distribution of Items

Simple tabulations of each school physical environment item by school grade or school type were conducted to describe the distribution of item responses for 5th, 7th, 9th, and 11th graders and for staff in elementary, middle, and high schools. The results from the Biennial CHKS are weighted to account for the sampling design and the grade, gender, and racial/ethnic composition of the state. The results based on local CHKS and CSSS data are not weighted. Frequency distribution results are presented in tables (Tables 1, 2, 3, and 4) and in histograms (Figures 1, 2, 3, 4).

School Trends in Perceptions of the Quality of School Physical Environments

Trends were examined separately for secondary students and staff. For secondary students, data were further disaggregated for 7th, 9th, and 11th graders. The sample of schools used for the analysis of respondents' reports of the quality of school facilities included all schools that completed the local CHKS in at least two years between 2015/16 and 2019/20. Fixed-effects regression models were estimated to calculate that average annual change in perceptions of school facilities across time.² By including fixed effects for schools, the estimates represent average within-school changes in respondents' perceptions of school facilities.

In addition to estimating within-school trends in perceptions of school facilities, Biennial State CHKS data were used to show statewide trends between 2015-17 and 2017-19. School trends are presented in Figures 5, 6, and 7.

Relationships of Perceptions of School Facilities to Other School Characteristics.

To ascertain the extent to which student perceptions of the quality of their school's physical environment are related to other school characteristics, schools were classified into four groups based on the average percentage of students selecting the top two categories on the items shown in Box 1. Data were aggregated to the school level. For example, in schools serving 7th

² Quadratic terms were added to the model if inclusion increased the fit of the model to the data.



grade students, the percentage of 7th graders who agreed or strongly agreed on each item was used to classify schools by level (see Box 1). The same procedure was used to classify schools serving 5th graders, 11th graders, and school staff..

Box 1. Classification of Schools by Perceptions of Quality of School Facilities Elementary CHKS

Q14. Is your school building neat and clean?

- < 55% of students reported most of the time or all of the time (low quality)
- 55-75% of students reported most of the time or all of the time
- 75-88% of students reported most of the time or all of the time
- > 88% of students reported most of the time or all of the time (high quality)

Secondary CHKS

A29. My school is usually clean and tidy.

- < 20% of students reported most of the time or all of the time (low quality)
- 20-45% of students reported most of the time or all of the time
- 45-70% of students reported most of the time or all of the time
- > 70% of students reported most of the time or all of the time (high quality)

Staff CSSS

Q32. This school has clean and well-maintained facilities and property.

- < 10% of staff agreed or strongly agreed (low quality)
- 10-30% of staff agreed or strongly agreed
- 30-65% of staff agreed or strongly agreed
- > 65% of staff agreed or strongly agreed (high quality)

Once aggregated at the school level, the CHKS and CSSS datasets were matched with a variety of CDE school-level data sets, including collections of demographic data, chronic absenteeism rate information, expulsion and suspension rate data, graduation and dropout rate data, physical fitness (Fitnessgram) data, and Smarter Balanced test score data. In addition, other CHKS and CSSS data were aggregated at the school level and merged with the school-level physical environment data to examine the extent to which schools with more- and less positive student-reported physical environments differed on other aspects of student-reported school climate. These other aspects of school climate include school safety and violence, school



connectedness, caring relationships with staff, exposure to high expectations messages from staff, parent involvement in school, teacher respect, the quality of student peer relationships, chronic sadness, staff collegiality, and staff-reported school problems. Tabular results showing the relationship of student and staff perceptions of the school physical environment to other school characteristics are presented in tables (Tables 5-16) and in bar graphs (Figures 8-55).

Results

Detailed results are provided in the tables and figures that follow. Selected results are briefly highlighted below.

Student and Staff Reports of the Physical Environment of Schools

Quality of Physical Envronment

- The vast marjority of elementary students (74%) and school staff (80-85%) reported that their schools are well-maintained. Fewer secondary students rated their school facilities as high, although between 39% and 43% agreed or strongly agreed that their school is usually clean and tidy, that their schoolyards and buildings are clean and in good condition, and that their school grounds are kept clean (Tables 2 and 3, Figures 1-4).
- Although a plurality of staff and students report that their school facilities are in good condition, a non-trivial minority were dissatisfied with the condition of their school facilities. Between 16% and 28% of students disagreed or strongly disagreed on the quality of the physical environment items (Tables 2 and 3, Figures 1-4). Aproximately 26% or elementary students reported the their school building is neat and clean some of the time or never.
- Student and staff perceptions of the quality of their schools' physical environment varied substantially across schools, particulary for school staff and secondary students.
 - Ranking schools by perceptions of the quality of the physical environment, in the bottom 25% of elementary schools, less than one-quarter of staff agreed or strongly agreed that their school had clean and well-maintained facilities; while in the top 25% of middle schools, more than 57 percent of staff agreed or strongly agreed on this item. Similar variation was present in middle and high schools, except ratings were lower. (These results are not shown in tables.)
 - Based on the criteria described in the previous bullet, in the bottom 25% of schools serving 11th graders, about 30 percent of students agreed or strongly agreed that their school is usually clean and tidy compared to more than 60 percent in the top 25% of schools (not shown in tables).



Classroom Crowding

- Similar to the 2015-17 results (Hanson & Austin, 2018), most secondary students³ did not report that classroom crowding is a problem – but still a substantial minority of students perceived that classroom crowding interfered with their learning.
- Between 15% and 17% of secondary students agreed or strongly agreed that their classrooms are so crowded that it is hard to concentrate and learn, while between 46% and 53% of students disagreed or strongly disagreed on this item (Table 2).
- Approximately 12% of middle schools and 5% of high schools had more than 25 percent of students agree or strongly agree that classroom crowding was a problem (not shown in tables).

School Lunch Time

- A plurality of secondary students reported that lunch is served at the right time of day and that there is sufficient time to eat lunch. Between 39% and 53% agreed or strongly agreed on the two lunch time items (Table 4).
- However, significant numbers of secondary students also reported that lunch is not served at the right time of day and that they do not have enough time to eat. Approximately one-fifth of students disagreed or strongly disagreed that lunch was provided at the right time of day, and between 24% and 33% reported that they had plenty of time to eat their lunch (Table 4).
- Middle school students were more likely to report that they had enough time to eat lunch than students in high schools. Among 7th graders, 52% agreed or strongly agreed that they have enough time to eat lunch, compared to 43% of 9th graders, and 39% of 11th graders. Eleventh graders were the least likely to agree that they have adequate time to eat lunch (Table 4).

Trends in Secondary Student and Staff Reports of the Quality of School Facilities

Quality of Physical Envronment

Both student and staff perceptions of the quality of school facilities held steady since 2015/16 with one important exception. Student ratings declined in middle schools. The within-school analyses indicated that the percentage of students who agree that their school was clean and tidy declined from 51% in 2015/16 to 44% in 2019/20 (Figure 5). The Biennial CHKS data, designed to be representative of the state as a whole, indicate

³ This question was not asked of elementary students. Nor was the set of questions asking about school lunch time.



that 7th graders' perceptions of the quality of school facilities declined from 50% to 41% between 2015/17 and 2017/19 (Figure 6).

• Little change was evident that staff perceptions changed, although staff in middle schools were 3 percentage points less likely to report that the school had clean and well-maintained facilities and property in 2019/20 (Figure 7).

Relationship of Perceptions of School Physical Environment to Other School Characteristics

- Whether reported by elementary students, secondary students, or school staff school variation in perceptions of the quality of school facilities mirror the racial and socioeconomic disparities in the educational system. Lower-rated schools have greater percentages of students eligible for free/reduced-price meals, greater percentages of African American and Latinx students, and lower percentages of Asian and white students than higher-rated schools (Tables 5, 8, 12; Figures 9-11, 24-26, 37-39)
- School chronic absentee rates, expulsion rates, and suspension rates are substantially higher in schools with lower-rated physical environments than in schools with higher-rated physical environments (Table 6, 9, 13; Figures 12, 27, 28, 40, 41).
- High school graduation rates increase as student and staff perceptions of the quality of their school's physical environments increase (Tables 6, 9, 13), but dropout rates are not strongly associated with school facility ratings.
- Student and staff perceptions of the quality of their schools' physical environment are strongly and consistently related to student achievement. Both English language arts and math scores are highest in schools with higher rated physical environments and decrease in a stepwise fashion as reported school environmental quality goes down (Tables 6, 9, 13; Figures 13, 14, 29, 30, 42, 43).
- Student and staff perceptions of the quality of their schools' physical environment are also strongly related to students' physical fitness levels, as assessed by the Fitnessgram. Fitness scores are highest in schools with higher-rated physical environments and decrease as reported school environmental quality goes down (Tables 6, 9, 13; Figure 15).
- School safety, school connectedness, adult-student caring relationships, high expectations messages from staff, positive relationships with peers, and promotion of parent involvement are all related to perceptions of school environmental quality in expected ways the higher the percentage of students and staff who rate their school building and grounds positively, the higher the percentage of students and staff who report high levels on these factors (Tables 7, 10, 15, 16; Figure 16, 20, 22, 31, 33, 34, 35. 46, 47, 50, 51, 52).



• Not only are ratings of school facilities associated with student perceptions of school climate, staff in higher-rated facilites report a more positive work environment and greater collegiality among peers (Table 14; Figure 44, 45).



Student and Staff Reports of School Facilities – Tabular and Graphical Results

Table 2. CHKS questions used to assess quality of school environment (student)

Survey Item	Grade 5	Grade 7	Grade 9	Grade 11
Is your school building neat and clean?	1			
No, never	4.6%			
Yes, some of the time	21.7			
Yes, most of the time	45.1			
Yes, all of the time	28.5			
My school is usually clean and tidy				
Strongly disagree		10.1%	8.4%	11.1%
Disagree		17.6	16.6	10.1
Neither disagree nor agree		31.4	30.9	29.6
Agree		31.1	34.8	31.9
Strongly agree		9.8	9.3	8.3
The schoolyard and buildings are clean and in good condition ¹				
Strongly disagree		10.1%	9.0%	10.1%
Disagree		13.1	12.0	14.1
Neither disagree nor agree		33.7	36.5	35.5
Agree		29.6	31.6	31.0
Strongly agree		13.6	11.0	9.3
The school grounds are kept clean ¹				
Strongly disagree		12.1%	9.4%	10.1%
Disagree		14.4	12.3	13.6
Neither disagree nor agree		34.9	37.4	35.9
Agree		26.4	30.7	31.4
Strongly agree		12.2	10.2	9.0
My classroom is so crowded it is hard to concentrate and learn ¹				
Strongly disagree		19.7%	16.3%	14.9%
Disagree		31.4	32.8	33.5
Neither disagree nor agree		32.0	36.2	35.9
Agree		11.2	10.4	11.3
Strongly agree		5.8	4.3	4.4

Source: Biennial CHKS (2017-19) and local administration of the CHKS (2018-20) .

Notes: ¹ Assessed on the secondary CHKS School Climate Module only (local CHKS).



Table 3. CSSS question used to assess quality of school environment (staff)

Survey Item	Elementary	Middle	High
This school has clean and well-maintained facilities and property Strongly disagree Disagree Agree Strongly agree	4% 12 43 42	5% 13 46 35	5% 14 46 34

Source: Local administration of the CSSS (2018-20) .

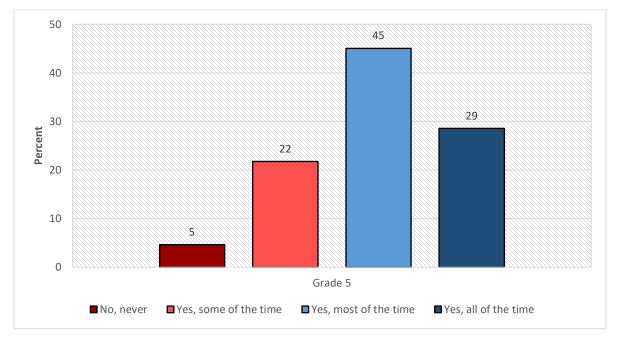
Table 4. CHKS questions used to assess meal time at school (student)

Survey Item	Grade 7	Grade 9	Grade 11
I eat my lunch at the right time of day ¹			
Strongly disagree	9.8%	9.7%	10.0%
Disagree	10.0	10.9	12.4
Neither disagree nor agree	27.6	32.7	32.9
Agree	34.1	34.6	35.0
Strongly agree	18.5	12.1	9.6
I have plenty of time ot eat my lunch ¹			
Strongly disagree	12.2%	14.5%	16.5%
Disagree	11.8	14.2	16.6
Neither disagree nor agree	24.1	28.1	28.3
Agree	32.4	31.0	29.6
Strongly agree	19.5	12.2	9.1

Source: Local administration of the CHKS (2018-20) .

Notes: ¹ Assessed on the secondary CHKS School Climate Module only (local CHKS).







Source: Local administration of elementary CHKS (2018-20).

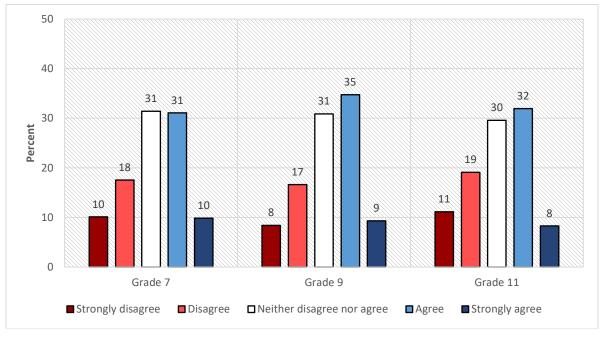
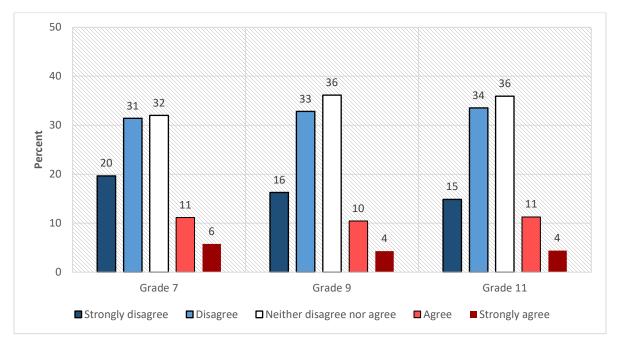


Figure 2. School usually clean and tidy (secondary student)

Source: Biennial CHKS (2017-19).





Source: Local administration of the secondary CHKS school climate module (2018-20).

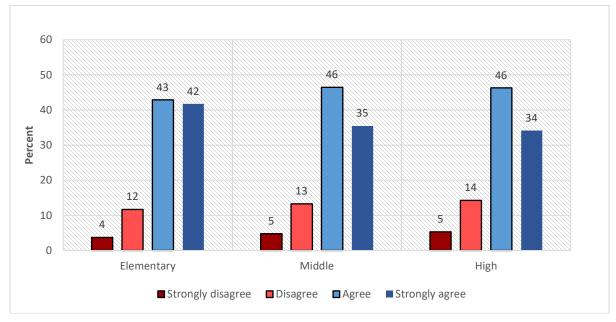


Figure 4. School has clean and well-maintained facilities and property (staff)

Source: Local administration of the CSSS (2018-20).



Trends in Perceptions of the Quality of School Facilities – Graphical Results

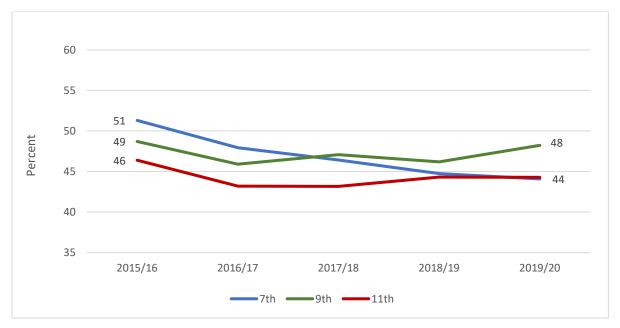


Figure 5. Within-school trends in perceptions of quality of school facilities (student)

Source: Local administration of the secondary CHKS (2015/16-2019/20). Percent of students who agree or strongly agree that their school is usually clean and tidy.



Figure 6. Statewide trends in perceptions of quality of school facilities (student)

Source: Biennial CHKS, 2015/17 and 2017/19. Percent of students who agree or strongly agree that their school is usually clean and tidy.



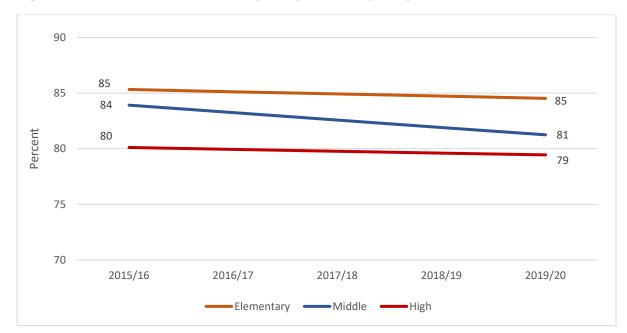


Figure 7. Within-school trends in perceptions of quality of school facilities (staff)

Source: Local administration of the secondary CSSS (2015/16-2019/20). Percent of staff who agree or strongly agree that their school has clean and well-maintained facilities and property.



How Perceptions of the School Physical Environment are Related to Other School Characteristics – Tabular and Graphical Results

Elementary Student Reports

Table 5. Demographic characteristics by quality of school physical environment(student)

	Is your school building neat and clean?				
	5 th grade (% most of the time or more)				
	< 55%	55-75%	75-88%	> 88%	
Enrollment	720	800	720	627	
Student/staff ratio	22	22	22	22	
Free/reduced-price meals (%)	72	67	55	39	
Race/ethnicity					
African American (%)	12	6	3	3	
Asian (%)	6	7	10	14	
Latinx (%)	56	60	50	36	
White (%)	15	20	30	40	

Source: Local administration of the elementar CHKS (2018/20) and demographic data from the CDE.



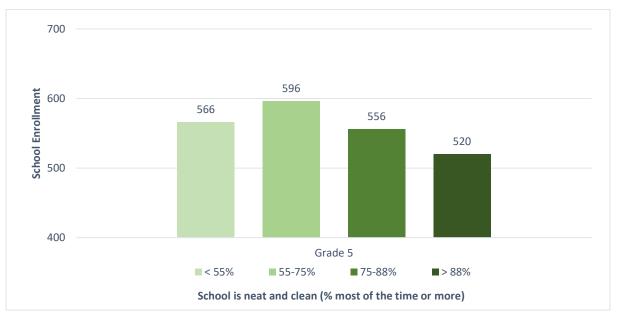


Figure 8. School enrollment by student-reported quality of school physical environment

Source: Local administration of the elementary CHKS (2018/20) and CDE enrollment data. <u>Reading the figure</u>: Schools with more students who report high levels of school environmental quality come from schools with slightly lower total enrollments. In elementary schools, average enrollment is 566 in schools in which less than 55 percent of 5th graders report that their school is neat and clean most of the time or all of the time, while average enrollment is 520 in schools in which more than 88 percent of 5th grade students report most of the time or all of the time on the item.

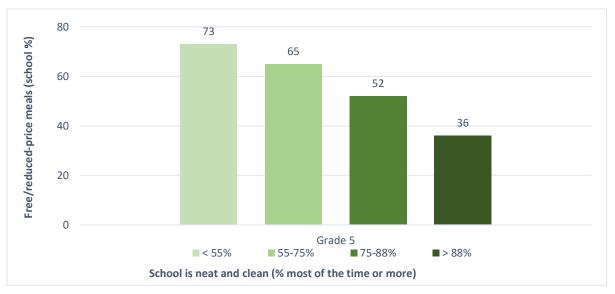


Figure 9. Poverty by student-reported quality of school physical environment

Source: Local administration of the elementary CHKS (2018/20) and CDE enrollment data. <u>Reading the figure</u>: Schools with more students who report low levels of school environmental quality serve substantially higher percentages of students in poverty. On average, 73 percent of students are eligible for free/reduced-price meals in schools where less than 55 percent of students report that their school is neat and clean most of the time or all of the time, while only 36 percent of students are eligible for free/reduced price meals in school is neat and clean most of the time or all of the time, report that their school is neat and clean most of the time or all of the time or all of the time.



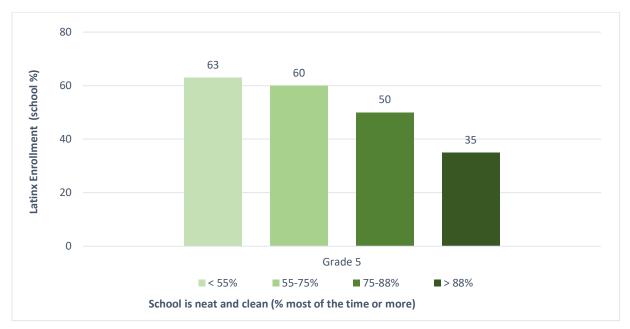
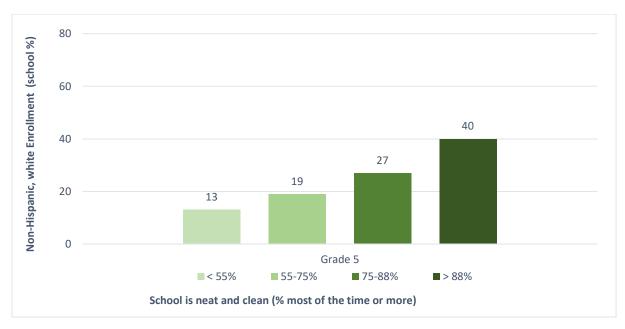


Figure 10. Latinx enrollment by student-reported quality of school physical environment

Source: Local administration of the elementary CHKS (2018/20) and CDE enrollment data.

Figure 11. Non-Hispanic, white enrollment by student-reported quality of school physical environment



Source: Local administration of the elementary CHKS (2018/20) and CDE enrollment data.

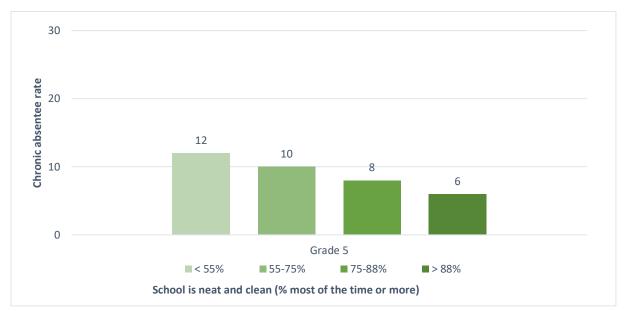


Table 6. School discipline, dropout/graduation, test scores, and fitnessgram results by quality of school physical environment (student)

	Is your school building neat and clean?							
	5 th grade (% most of the time or more)							
	< 55%	< 55% < 55% < 55% < 55%						
Chronic absentee rate	16	12	9	6				
Suspension rate (*10)	92	63	46	28				
Expulsion rate (*100)	14	11	9	5				
ELA (% met standards)	36	45	57	68				
Math (% met standards)	23	31	43	56				
Fitnessgram (% 5 or 6 HFZs)	38	46	53	57				

Source: Local administration of the elementary CHKS (2018/20) and incident/academic performance data from the CDE.





Source: Local administration of the elementary CHKS (2018/20) and CDE chronic absentee rate data.



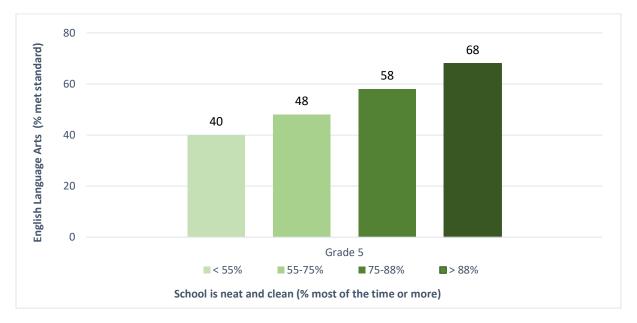
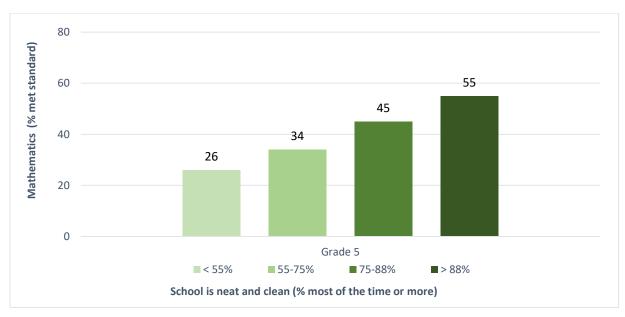


Figure 13. English Language Arts performance by student-reported quality of school physical environment

Source: Local administration of the elementary CHKS (2018/20) and CDE test score data.

Figure 14. Mathematics performance by student-reported quality of school physical environment



Source: Local administration of the elementary CHKS (2018/20) and CDE test score data.



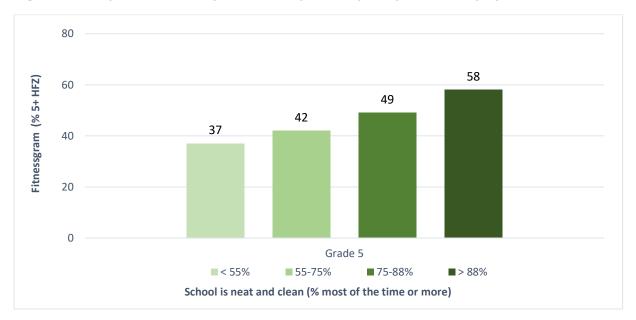


Figure 15. Physical fitness by student-reported quality of school physical environment

Source: Local administration of the elementary CHKS (2018/20) and CDE Fitnessgram data. The outcome is the percent of students who met Healthy Fitness Zone standards in five or more of the six standards assessed.

Table 7. School safety, school connectedness, school supports, parental involvement, student mental health, and peer relationship quality by quality of school physical environment (student)

	ls your s	Is your school building neat and clean?				
	5 th grade	5 th grade (% most of the time or more)				
	< 55%	< 55%	< 55%	< 55%		
Safe at school (% most+)	31	39	47	53		
Physical fight at school (% any)	38	32	27	22		
Seen weapon school (% any)	19	15	11	9		
Violence victimization (% any)	51	47	43	39		
School connected (% most+)	63	70	75	80		
Academ motivation (% most+)	82	85	88	90		
Any absenses (% any)	44	44	41	39		
Caring relationships (% most+)	64	70	75	79		
Parent involvement (% most+)	77	79	80	81		
Breakfast (% yes)	75	78	82	85		
Chronic sadness (% most+)	24	20	18	15		



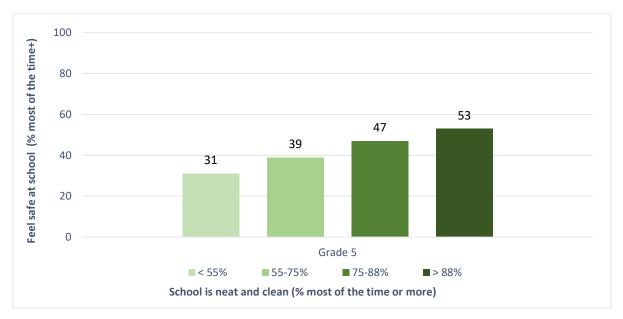
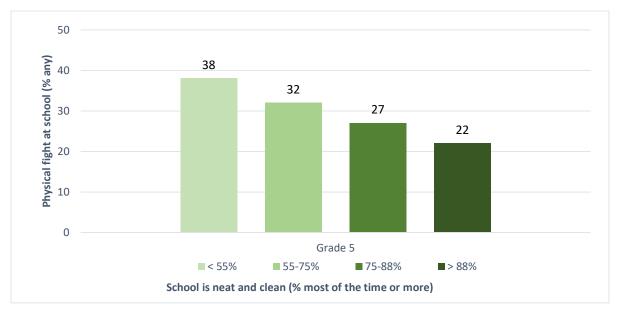


Figure 16. School safety by student-reported quality of school physical environment

Source: Local administration of the elementary CHKS (2018/20).







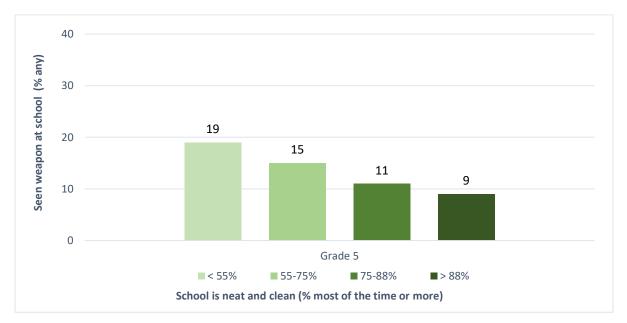
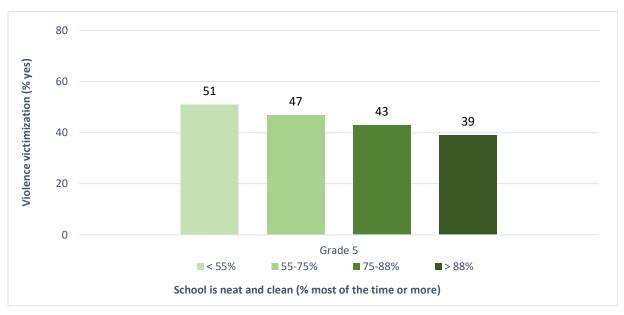


Figure 18. Weapons at school by student-reported quality of school physical environment

Source: Local administration of the elementary CHKS (2018/20)







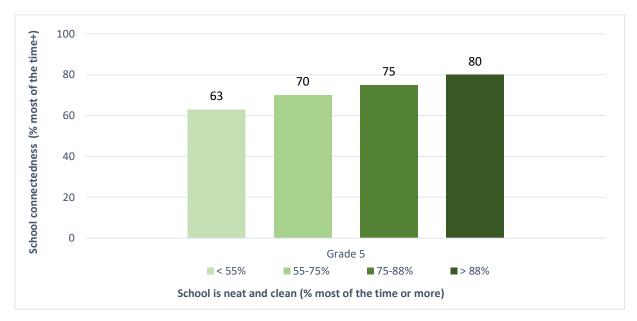
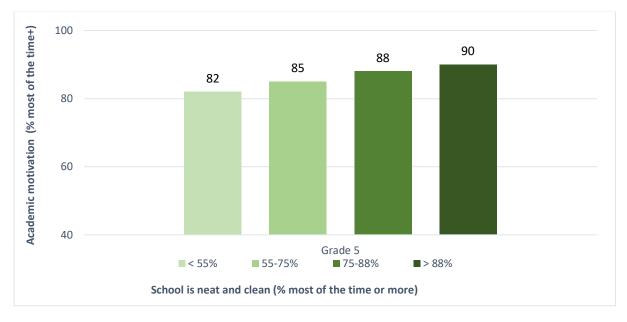


Figure 20. School connectedness by student-reported quality of school physical environment

Source: Local administration of the elementary CHKS (2018/20)







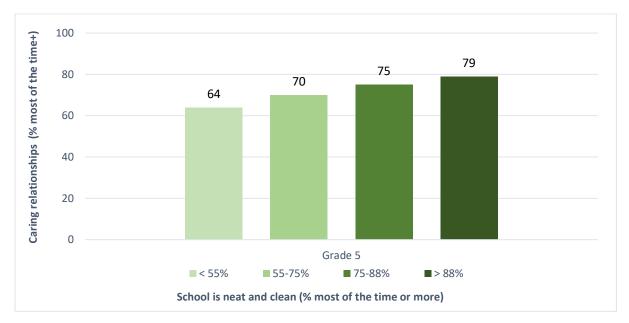


Figure 22. Caring staff-student relationships by student-reported quality of school physical environment



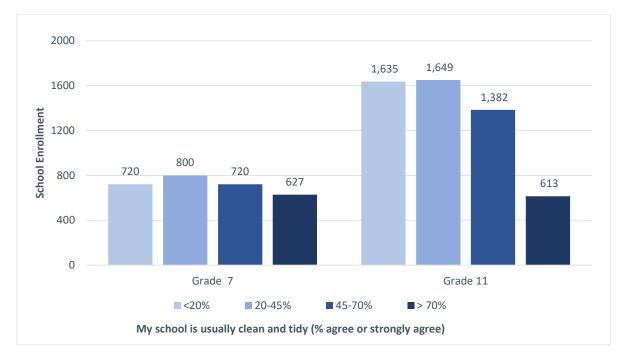
Secondary Student Reports

Table 8. Demographic characteristics by quality of school physical environment(student)

		My school is usually clean and tidy						
		7 th grade (%	agreemen	t)	:	11 th grade (9	% agreemer	nt)
	< 20%	20-45%	45-70%	> 70%	< 20%	20-45%	45-70%	> 70%
Enrollment	720	800	720	627	1635	1649	1382	613
Student/staff ratio	22	22	22	22	22	22	21	21
Free/reduced-price meals (%)	72	67	55	39	66	63	51	44
Race/ethnicity								
African American (%)	12	6	3	3	11	6	3	3
Asian (%)	6	7	10	14	7	8	9	9
Latinx (%)	56	60	50	36	58	58	49	40
White (%)	15	20	30	40	15	22	31	40

Source: Local administration of the secondary CHKS (2018/20) and demographic data from the CDE.

Figure 23. School enrollment by student-reported quality of school physical environment





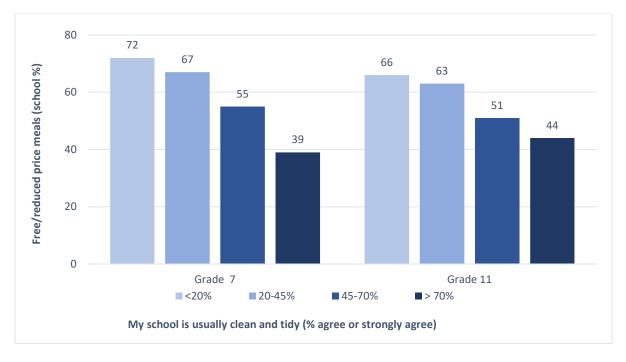
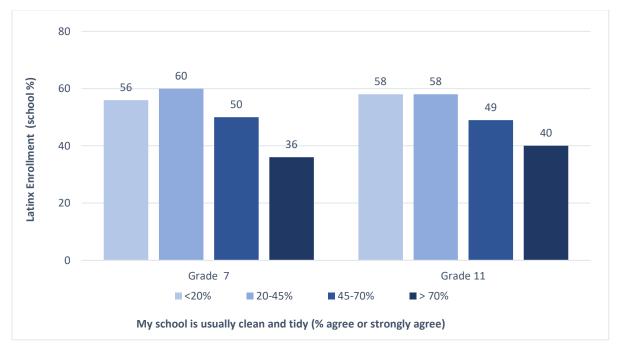


Figure 24. Poverty by student-reported quality of school physical environment

Source: Local administration of the secondary CHKS (2018/20)







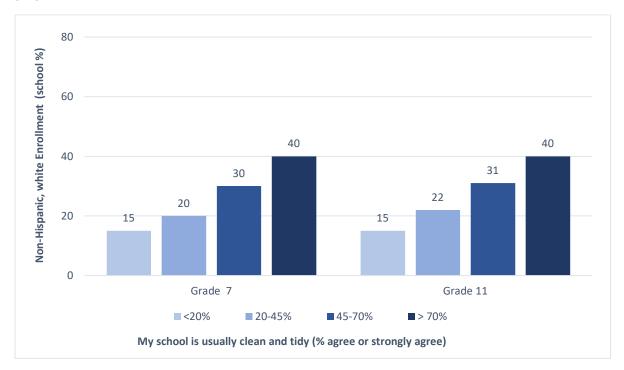


Figure 26. Non-Hispanic, white enrollment by student-reported quality of school physical environment

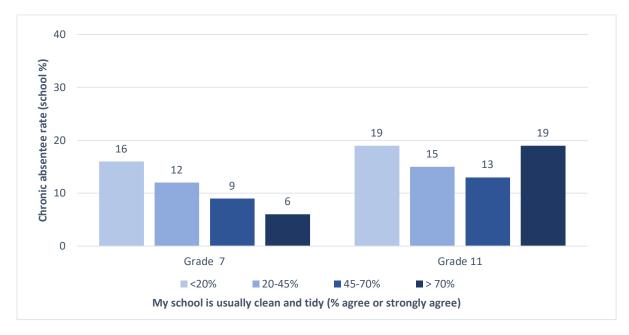
Source: Local administration of the secondary CHKS (2018/20)

Table 9. School discipline, dropout/graduation, test scores, and fitnessgram results by quality of school physical environment (student)

	My school is usually clean and tidy							
	7 th grade (% agreement)				11 th grade (% agreement)			
	< 20%	20-45%	45-70%	> 70%	< 20%	20-45%	45-70%	> 70%
Chronic absentee rate	16	12	9	6	19	15	13	19
Suspension rate (*10)	92	63	46	28	63	53	43	18
Expulsion rate (*100)	14	11	9	5	22	17	15	6
Graduation rate	—	_	—	—	89	91	93	90
UC-Eligible graduation rate	—	—	—	—	40	42	50	49
Dropout rate (*10)	—	—	—	—	6	6	5	8
ELA (% met standards)	36	45	57	68	51	55	63	66
Math (% met standards)	23	31	43	56	24	28	37	40
Fitnessgram (% 5 or 6 HFZs)	38	46	53	57	46	53	56	45

Source: Local administration of the secondary CHKS (2018/20) and incident/academic performance data from the CDE.

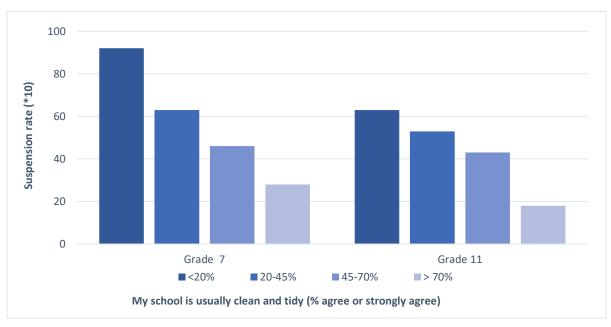






Source: Local administration of the secondary CHKS (2018/20)







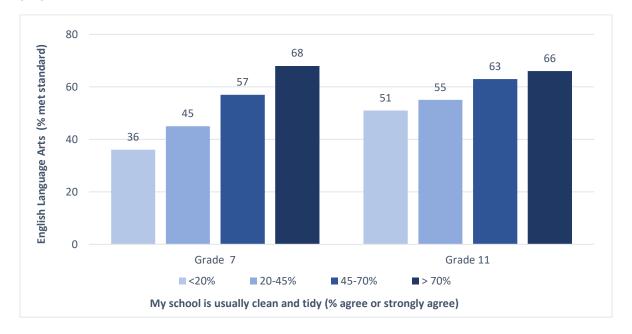
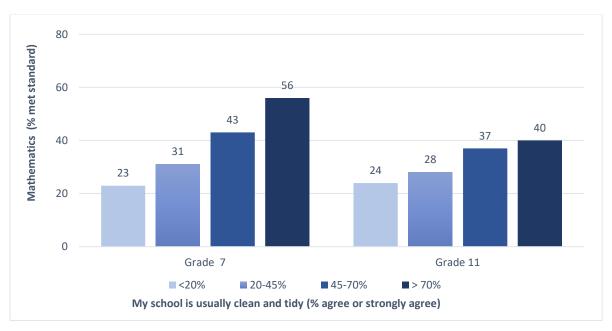


Figure 29. English Language Arts performance by student-reported quality of school physical environment

Source: Local administration of the secondary CHKS (2018/20)

Figure 30. Mathematics performance by student-reported quality of school physical environment



Source: Local administration of the secondary CHKS (2018/20)



			My sc	hool is usu	ally clean a	nd tidy		
		7 th grade (%	agreemen	t)	1	L1 th grade (%	% agreemer	nt)
	< 20%	20-45%	45-70%	> 70%	< 20%	20-45%	45-70%	> 70%
Safe at school (% agree)	46	56	68	77	42	52	63	75
Physical fight at school (% any)	22	19	16	13	10	8	7	6
Seen weapon at school (%)	18	15	13	9	14	10	9	7
Violence victimization (% yes)	35	34	30	25	14	13	11	8
Afraid of being beat up (% yes)	24	23	20	16	12	10	8	6
School connected (% agree)	49	57	66	73	44	51	58	66
Any truancy (% yes)	24	22	21	20	35	33	29	29
Any absenses (% yes)	54	51	48	44	61	59	57	53
Academ motivation (% agree)	69	72	76	79	66	68	69	71
Caring relationships (% agree)	55	60	65	71	56	60	64	72
High expectations (% agree)	69	73	77	82	65	68	72	78
Learning engage (% agree)	21	28	36	49	21	25	33	53
Support for learning (% agree)	51	59	66	76	45	49	55	71
SEL supports (% agree)	41	50	58	69	32	36	43	58
Harsh discipline (% agree)	42	42	38	35	32	31	33	26
Parent involve prom (% agree)	48	56	64	70	34	41	48	61
Peer relationships (% agree)	32	40	48	59	30	37	44	61

Table 10. School safety; school connectedness; school, parental, and peer supports; and disciplinary environment by quality of school physical environment (student)

Source: Local administration of the secondary CHKS (2018/20).



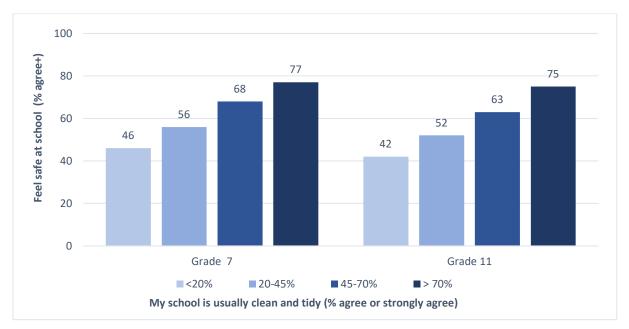
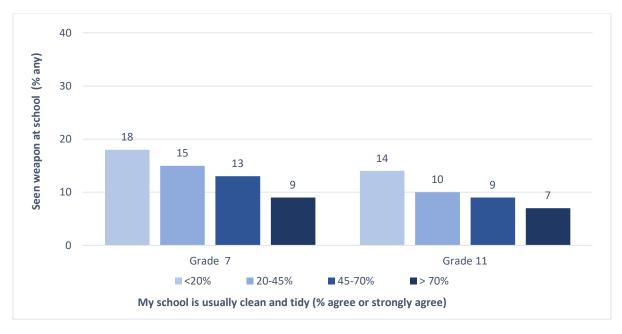


Figure 31. School safety by student-reported quality of school physical environment

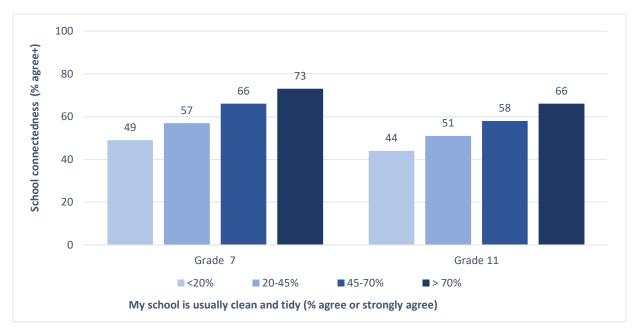
Source: Local administration of the secondary CHKS (2018/20

Figure 32. Weapons at school by student-reported quality of school physical environment



Source: Local administration of the secondary CHKS (2018/20

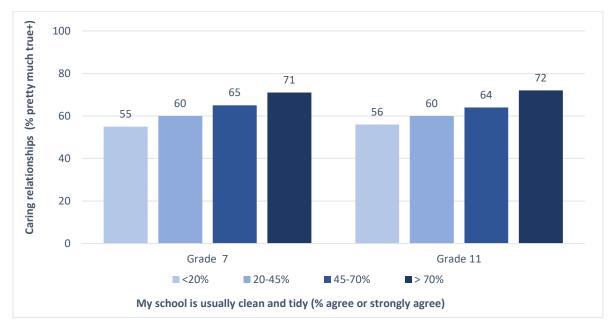






Source: Local administration of the secondary CHKS (2018/20





Source: Local administration of the secondary CHKS (2018/20



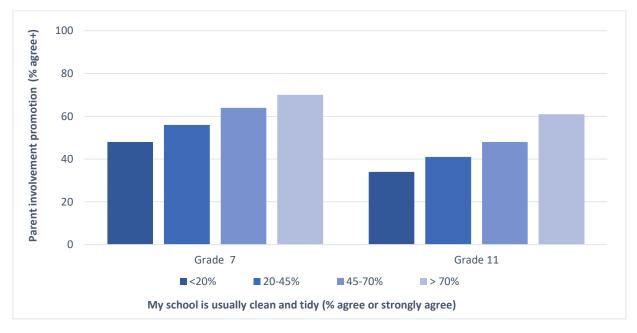


Figure 35. School promotion of parental involvement by student-reported quality of school physical environment

Source: Local administration of the secondary CHKS (2018/20

Table 11. Student mental health and breakfast consumption by quality of schoolphysical environment (student)

		My school is usually clean and tidy										
		7th grade (% agreement)11th grade (% agreement)										
	< 20%	20-45%	45-70%	> 70%	< 20%	20-45%	45-70%	> 70%				
Breakfast (% yes)	61	64	69	73	54	58	59	58				
Chronic sadness (% yes)	33	32	29	25	40	38	38	41				
Suicide ideation (% yes)	17	16	15	13	18	16	17	19				

Source: Local administration of the secondary CHKS (2018/20).

Staff Reports

Table 12. Demographic characteristics by quality of school physical environment (staff)

		This school has clean and well-maintained facilities and property											
	Elementary (% agreement)					Middle (% agreement)				High (% agreement)			
	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%	
Enrollment	562	581	590	536	792	848	866	777	1601	1751	1575	1031	
Student/staff ratio	21	22	22	22	22	23	23	24	22	22	22	21	
Free/reduced-price meals (%)	71	64	58	47	62	62	56	49	58	57	51	43	
Race/ethnicity													
African American (%)	6	5	4	3	6	4	4	3	7	5	3	3	
Asian (%)	8	7	8	11	5	7	7	10	8	5	8	13	
Latinx (%)	62	56	55	44	58	57	53	48	56	55	49	41	
White (%)	16	22	25	33	23	24	28	32	19	28	32	34	

Source: Local administration of the CSSS (2018/20) and demographic data from the CDE.



Figure 36. School enrollment by staff-reported quality of school physical environment

Source: Local administration of the CSSS (2018/20)

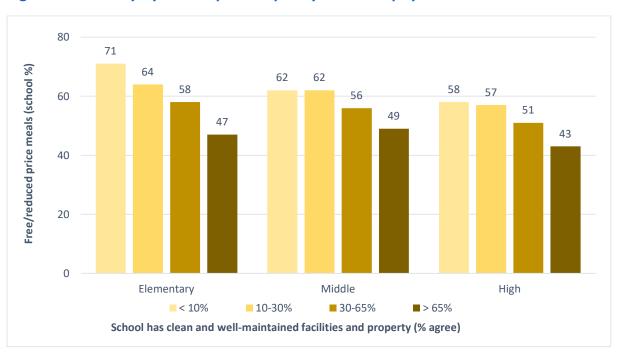


Figure 37. Poverty by staff-reported quality of school physical environment

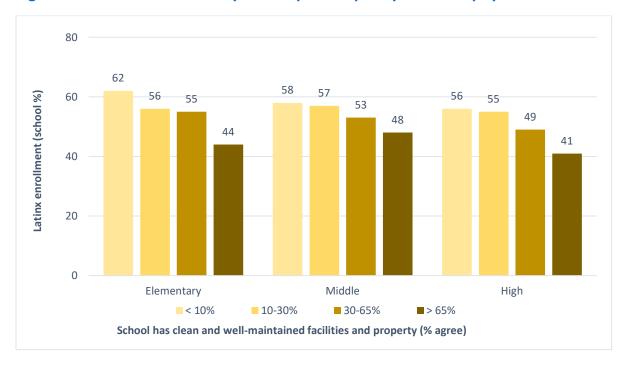
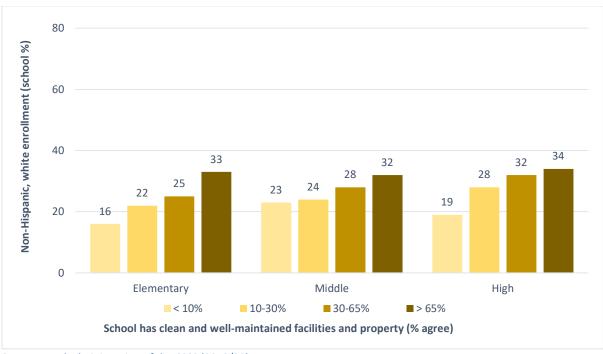


Figure 38. Latinx enrollment by staff-reported quality of school physical environment

Figure 39. Non-Hispanic, white enrollment by staff-reported quality of school physical environment



Source: Local administration of the CSSS (2018/20)

Source: Local administration of the CSSS (2018/20)

Table 13. School discipline, dropout/graduation, test scores, and fitnessgram results by quality of school physical environment (staff)

				This scho	ol has clear	n and well-n	naintained	facilities ar	nd property			
	Elementary (% agreement)					Middle (%	agreement		High (% agreement)			
	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%
Chronic absentee rate	14	11	9	7	13	11	9	8	15	14	13	15
Suspension rate (*10)	27	22	16	11	97	85	62	56	61	56	40	32
Expulsion rate (*100)	1	2	1	1	15	16	12	16	17	23	16	21
Graduation rate	_	_	_	_	-	_	_	_	91	91	94	92
UC-Eligible graduation rate	_	_	_	_	-	_	_	_	42	41	48	49
Dropout rate (*10)	_	_	_	_	-	_	_	_	4	5	4	6
ELA (% met standards)	40	46	54	62	41	47	53	60	55	57	64	68
Math (% met standards)	26	33	40	49	28	35	40	46	27	30	38	40
Fitnessgram (% 5 or 6 HFZs)	38	40	46	52	46	51	53	56	52	54	57	55

Source: Local administration of the CSSS (2018/20) and incident/academic performance data from the CDE.

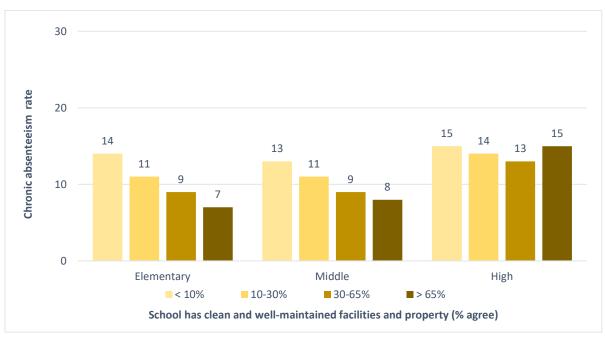
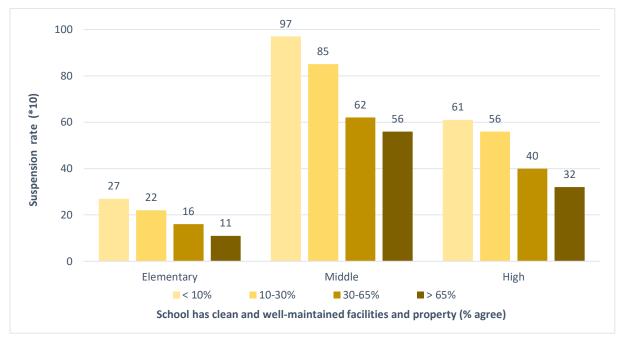
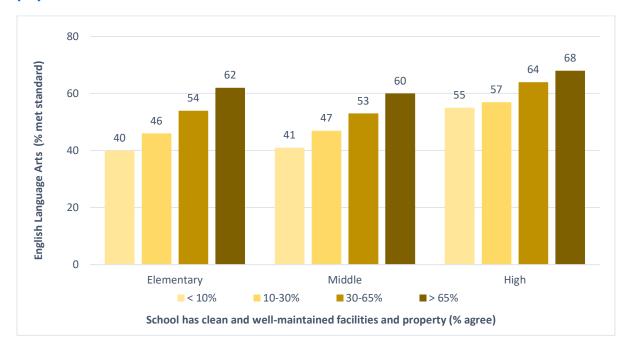


Figure 40. Chronic absentee rate by staff-reported quality of school physical environment

Figure 41. Student suspensions by staff-reported quality of school physical environment



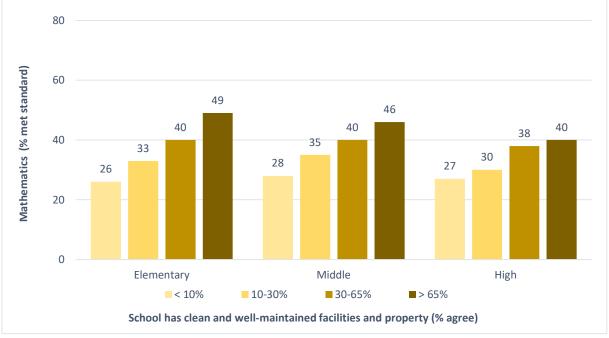
Source: Local administration of the CSSS (2018/20)





Source: Local administration of the CSSSS (2018/20)

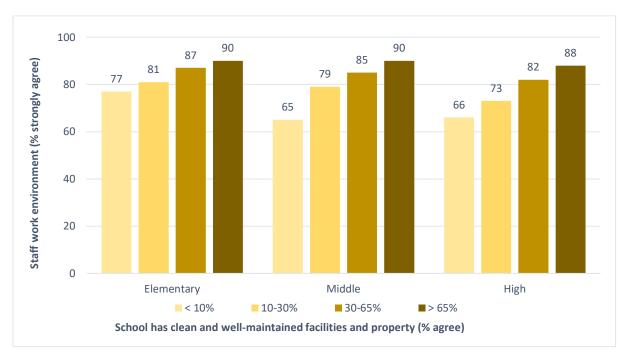






		This school has clean and well-maintained facilities and property											
	E	lementary (% agreeme	nt)		Middle (%	agreement		High (% agreement)				
	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%	
Staff work envir (% str agree)	77	81	87	90	65	79	85	90	66	73	82	88	
Staff collegiality (% str agree)	79	80	87	90	66	78	83	88	65	71	80	87	
Caring relations (% str agree)	83	84	89	90	75	82	87	90	73	77	83	89	
Parent inclusive (% str agree)	40	48	59	68	33	46	54	65	34	38	51	63	
Student ready (% str agree)	56	62	74	79	39	55	64	74	39	47	60	70	
Student SEL sup (% str agree)	75	75	83	87	67	74	78	83	62	65	73	81	
Disciplinary harsh (% agree)	73	70	76	79	65	67	69	69	61	60	64	72	
Sub use/m hlth prob (% mod+)	67	57	55	44	78	74	71	60	76	77	75	69	
St antisoc beh prob (% mod+)	47	39	36	29	62	61	55	48	60	55	56	59	
Disorder prob (% moderate+)	52	38	33	26	69	63	54	39	73	71	64	62	

Table 14. Staff reported outcomes by quality of school physical environment (staff)





Source: Local administration of the CSSS (2018/20)

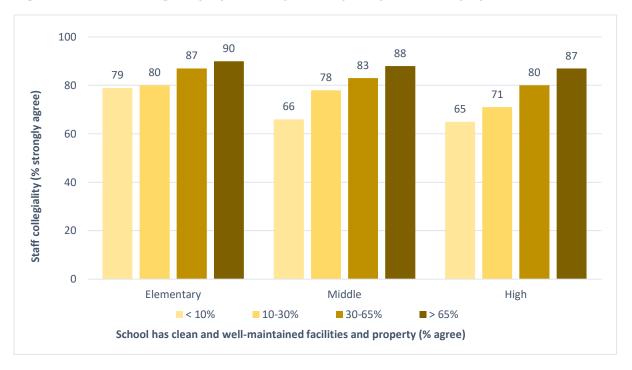


Figure 45. Staff-collegiality by staff-reported quality of school physical environment

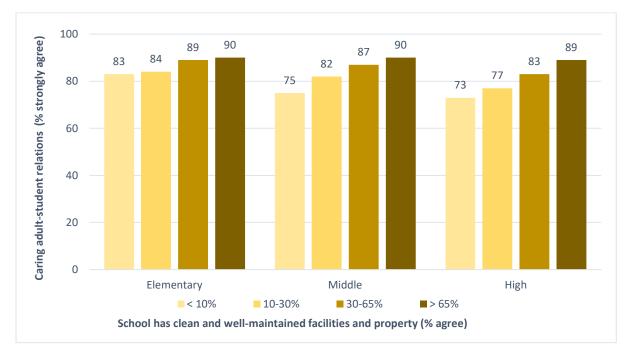
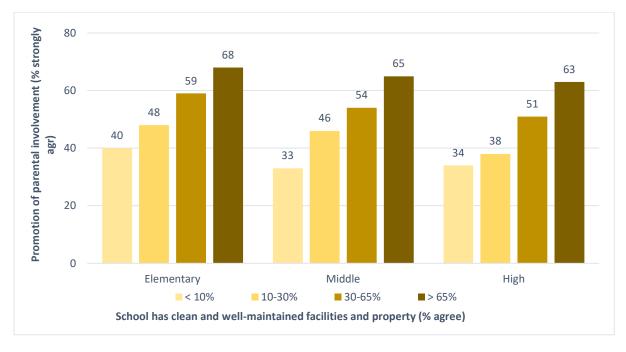


Figure 46. Staff-reported caring adult-student relationships by staff-reported quality of school physical environment





Source: Local administration of the CSSS (2018/20)

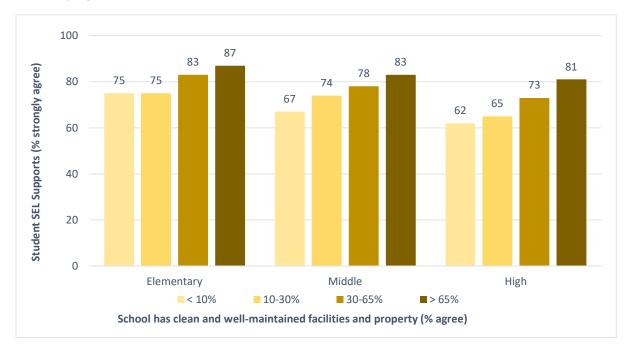


Figure 48. Student social emotional learning supports by staff-reported quality of school physical environment

Figure 49. School disorder problems by staff-reported quality of school physical environment



Source: Local administration of the CSSS (2018/20)

Table 15. Student-reported school safety, connectedenss, supports, sadness, and breakfast consumption by quality of school physical environment (staff)

				This scho	ol has cleai	n and well-n	naintained	facilities an	d property				
	Elementary (% most of the time +)					Middle (% agreement)				High (% agreement)			
	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%	
Safe at school ¹	36	40	43	47	52	58	64	69	49	52	61	68	
Physical fight at school (% any)	35	32	29	27	19	17	16	14	9	8	7	7	
Seen weapons school (% any)	15	14	13	11	15	14	13	11	13	10	9	7	
Violence victimization ¹	51	46	45	43	34	32	31	28	14	13	11	9	
School connectedness ¹	67	70	73	75	54	59	63	67	49	51	57	61	
Any absenses (% yes)	46	44	43	41	53	52	50	48	61	59	58	53	
Academic motivation ¹	82	85	87	88	71	73	74	77	67	68	69	70	
Caring relationships ¹	69	71	73	75	57	60	63	65	58	60	64	67	
Parent involvement ¹	78	79	79	80	51	57	60	64	36	40	47	54	
Sadness ¹	22	19	19	17	32	30	29	27	39	39	38	40	
Breakfast (% yes)	75	78	80	83	65	67	67	70	56	57	59	60	

Source: Local administration of the CSSS and CHKS (2018/20).

Notes : ¹ Elementary measures have a diferent metric than middle/secondary school measures and should not be compared

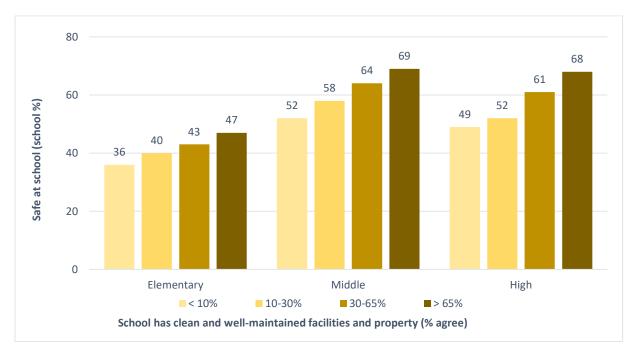
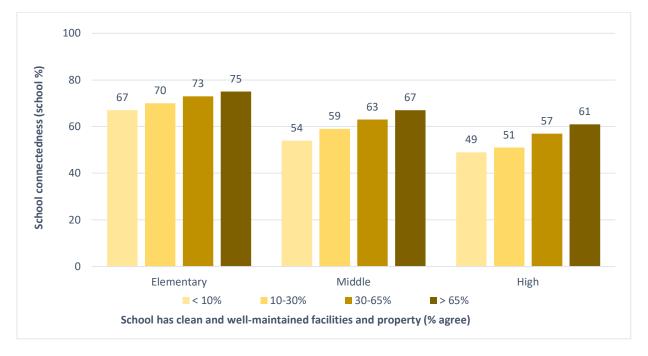


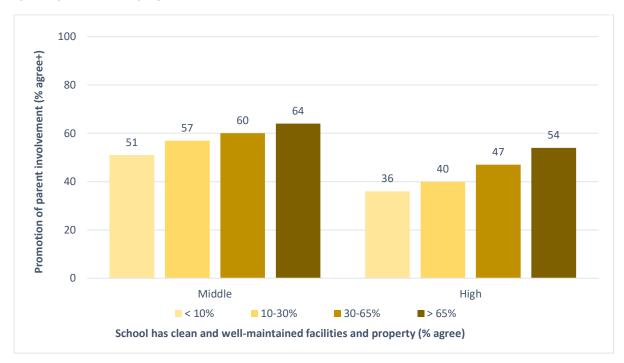
Figure 50. Student school safety by staff-reported quality of school physical environment

Source: Local administration of the CSSS and elementary/secondary CHKS (2018/20)





Source: Local administration of the CSSS and elementary/secondary CHKS (2018/20)

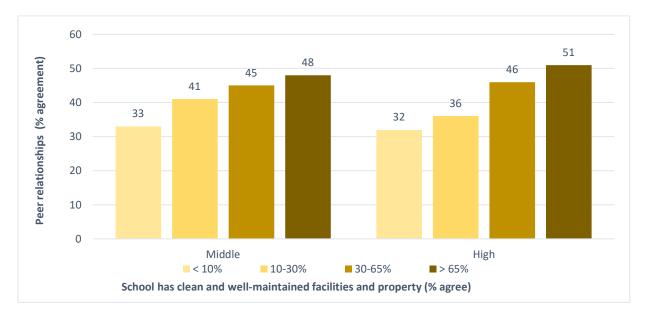




Source: Local administration of the CSSS and elementary/secondary CHKS (2018/20)

Table 16. Supports by quality of school physical environment (staff)

	This school has clean and well-maintained facilities and property									
		Middle (%	agreement)	High (% agreement)					
	< 10%	10-30%	30-65%	> 65%	< 10%	10-30%	30-65%	> 65%		
High expectations (% agree)	70	73	76	77	66	68	71	75		
Suicide ideation (% yes)	16	15	14	13	16	17	16	19		
Peer relationships (% agree)	33	41	45	48	32	36	46	51		
Any truancy (% yes)	22	21	21	20	33	33	29	27		
Afraid of being beat up (% yes)	25	23	21	19	10	10	8	7		
Learning engage (% agree)	21	29	32	36	21	25	35	43		
Support for learning (% agree)	53	62	64	65	45	48	57	62		
Harsh discipline (% agree)	42	41	40	37	31	32	32	34		
SEL supports (% agree)	45	54	56	58	33	37	45	50		





Source: Local administration of the CSSS and elementary/secondary CHKS (2018/20)

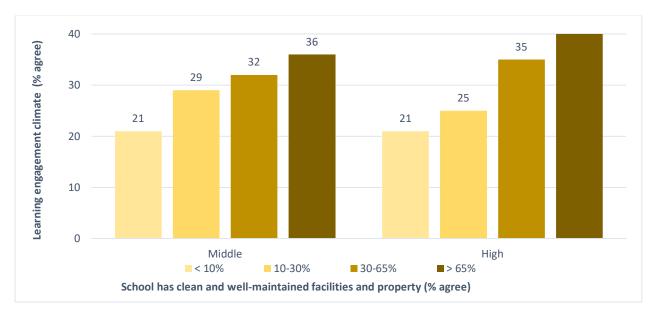


Figure 54. Learning engagement climate by staff-reported quality of school physical environment

Source: Local administration of the CSSS and elementary/secondary CHKS (2018/20)

References

- Austin, G., Hanson, T., Zhang, G., & Zheng, C. (2020). School climate and student engagement and well-being in California, 2017/19. Results of the Seventeenth Biennial State California Healthy Kids Survey, Grades 7, 9, and 11. WestEd. Retrieved from <u>data.calschls.org/resources/Biennial State 1719.pdf</u>
- Berliner, D. (2009). *Poverty and potential: Out-of-school factors and school success*. Boulder and Tempe: Educational Public Interest Center and Education Policy Research Unit. Retrieved from nepc.colorado.edu/publication/poverty-and-potential
- Evans, G. W. (2006). Child development and the physical environment. *Annual Review of Psychology*, *57*, 423–51.
- Hanson, T., & Austin, G. (2018). CHKS School Facilities Results: How are students' reports of the quality of the school physical environment, school crowding, and school lunch time related to other characteristics of schools? San Francisco: WestEd. Retrieved from calschls.org/docs/facilities 2018-1.pdf
- Jennings, K. (2010, June). *Keynote address*. Thirteenth annual meeting of the National Coordinating Committee on School Health and Safety, Washington, DC.
- O'Malley, M. D., Renshaw, T. R., Ritchey, K. M., & Furlong, M. J. (2011). Gauging the system: Trends in school climate measurement and intervention. In S. Jimerson, M. Mayer, A. Nickerson, & M. Furlong (Eds.), *Handbook of school violence and school safety: From research to practice* (2nd ed.). New York: Routledge.
- Plank, S. B., Bradshaw, C. P., & Young, H. (2009). An application of "broken-windows" and related theories to the study of disorder, fear, and collective efficacy in schools. *American Journal of Education*, 115(2), 227–47. <u>http://eric.ed.gov/?id=EJ826474</u>