

STUDENT CLIMATE SURVEY RESULTS: SUMMARY FOR 2007–2008 THROUGH 2009–2010

Schools with positive school climate are often associated with fewer behavioral problems and increases in student achievement compared to schools with poor school climate (Marshall, 2003; Mitchell, Bradshaw, & Leaf, 2010). According to Freiberg (1999), schools influence students’ commitment and attachment to school, and ultimately, influence their academic achievement via school climate. Similarly, researchers have found that students’ attachment to their school, school commitment, and school cohesion predict academic achievement (Johnson, Crosnoe, & Elder, 2001; Steward, 2008). These findings have been corroborated within the Austin Independent School District (AISD). Specifically, several student climate variables are related to student growth on the Texas Assessment of Knowledge and Skills (TAKS; e.g., student ratings of academic self-confidence) regardless of economic disadvantage (Schmitt, Cornetto, & Lamb, 2009). For these reasons, it is important to examine student climate survey results to identify areas in which the AISD student climate is strong and areas in need of improvement.

The Student Climate Survey is administered to all students in grades 3 through 11 during the spring semester. The survey was designed to measure students’ perceptions of six broad dimensions of climate: behavioral environment, teacher support, adult fairness and respect, student engagement, teacher expectations, and student academic self-confidence. This report summarizes the results of the 2009–2010 Student Climate Survey, with longitudinal data where applicable. Additionally, results are described for analyses that examined how student climate ratings were related to school performance, school economic level, and attendance rate.

WHO RESPONDED?

Three-quarters of the district’s students in grades 3 through 11 participated in the Spring 2010 survey; response rates by level for the past 3 years are provided in Table 1. Response rates to the survey were greatest at the elementary school level (87%) and least at the high school level (55%).

Table 1. Elementary school students exhibited greater participation rates than did middle and high school students in 2009–2010.

	Elementary (grades 3–6)		Middle		High (grades 9–11)	
	Number responding	Rate	Number responding	Rate	Number responding	Rate
2007–2008	16,479	85%	11,294	78%	9,627	62%
2008–2009	16,674	85%	10,661	69%	9,452	64%
2009–2010	17,425	87%	11,548	72%	8,675	55%

Note. Response rates are based on fall semester enrollment data and may not match AEIS data.

Students who responded to this survey were generally representative of the AISD student population, based on participation rates calculated by school level and ethnicity, although middle and high school students were somewhat less likely to respond than were elementary school students (Figure 1). Additionally, White and Asian American students were slightly more represented at the secondary level than were their African American and Hispanic peers (Table 2).

Figure 1. Middle and high school students had the lowest response rate in 2009–2010.

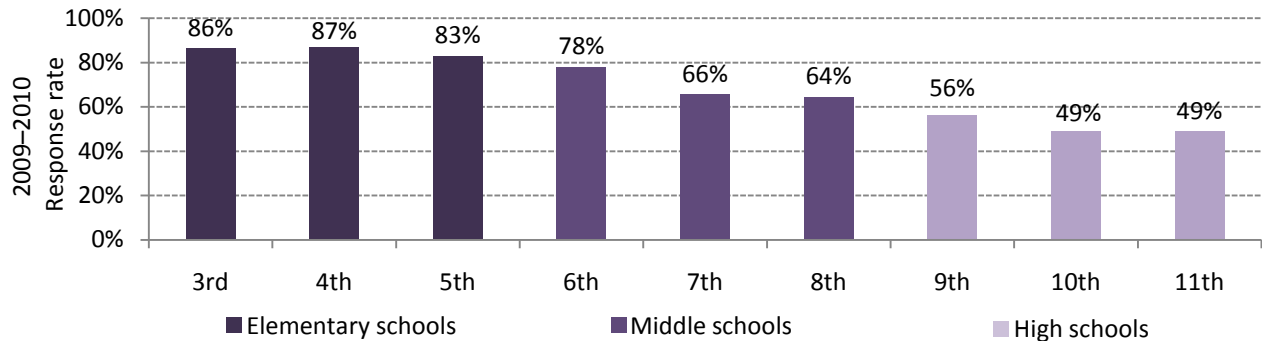


Table 2. Response rates were slightly higher for White and Asian American secondary students than for African American and Hispanic secondary students.

	Middle school response rate	High school response rate
African American	57%	42%
Asian American	91%	87%
Hispanic	64%	46%
White	67%	54%

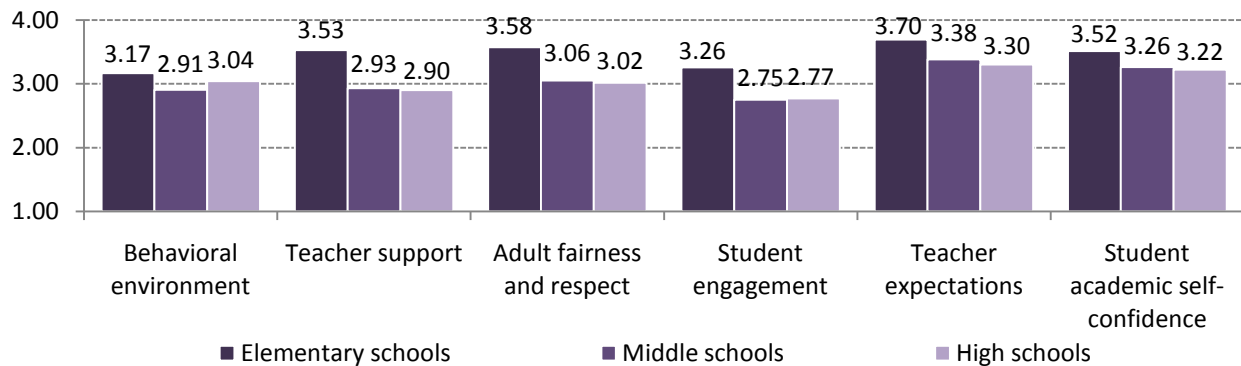
Note. Students in grades 6–11 were asked to self-report their ethnicity. Student population data were based on Fall 2009 PEIMS enrollment.

WHAT DID RESPONDENTS SAY ABOUT SCHOOL CLIMATE?

Across school levels, students rated three of the six climate categories favorably (adult fairness and respect, teacher expectations, and student academic self-confidence), with scores above the desired 3.0 score. Students’ ratings of teacher expectations were highest among all climate dimensions at each grade level, indicating students perceived high expectations from their teachers. The lowest rated dimension for elementary students was behavioral environment, whereas the lowest rated climate dimension for middle and high school students was student engagement. In general, ratings remained stable from 2008–2009 to 2009–2010. However, a positive trend emerged at the high school level, where ratings for some items increased meaningfully from 2007–2008 to 2009–2010.

The survey questions were grouped by topic into six school-related dimensions, or subscales (Figure 2). Results are provided by subscale for each level. Ratings from elementary students were higher, on average, than ratings from their secondary peers. Of all dimensions, ratings of behavioral environment were least discrepant among the levels, while ratings of teacher support were most discrepant between elementary and secondary students.

Figure 2. Elementary school students rated all subscales higher than did middle and high school students in 2009–2010, and ratings of middle and high school students were similar to each other.



Note. AISD students responded to each statement by indicating their level of agreement on a 4-point scale ranging from *always* to *never*, with the options of indicating “Don’t know/NA” or of skipping any item. Ratings were scored such that 4.0 was the most favorable.

HOW IMPORTANT IS SCHOOL CLIMATE?

A variety of research studies, both outside and within AISD, have suggested that positive school climate is associated with academic achievement (e.g., Freiberg, 1999; Marshall, 2003; Mitchell et al., 2010). Student climate ratings were significantly related to school performance on TAKS at every grade level in AISD, regardless of school economic status (Table 3). Behavioral environment, in particular, was a significant predictor of TAKS performance across elementary, middle, and high schools (Table 3). These results suggest that efforts to foster positive behavioral environments (e.g., the Positive Behavior Support initiative) can promote student success in all schools. Additionally, high school students’ ratings of their engagement in school and their academic self-confidence were strongly related to TAKS performance in both reading and mathematics (math).

Table 3. Regardless of economic disadvantage, students’ positive ratings of behavioral environment were strongly related to TAKS performance across grade levels and subject areas.

	Pearson’s partial correlations controlling for economic disadvantage					
	Elementary		Middle		High	
	Reading	Math	Reading	Math	Reading	Math
Behavioral environment	.34*	.25*	.27*	.40*	.39*	.22 ^a
Teacher support	.24*	--	--	.30*	.39*	--
Adult fairness and respect	.31*	--	--	.40*	.53*	.28 ^a
Student engagement	.25*	--	--	.40*	.56*	.54*
Teacher expectations	--	--	--	.42*	.36*	.22 ^a
Academic self-confidence	.22*	.20*	--	.43*	.48*	.45*
School attendance rate	--	.14*	.32*	.52*	--	.21*

Source. 2010 TAKS passing percentages and AISD Student Climate Survey, by grade level and campus
 Note. * $p < .05$; -- relationship is not statistically significant or has a correlation magnitude of less than $r = .20$; ^a Smaller sample sizes are less likely to result in statistical significance than are larger sample sizes. Although these relationships were not statistically significant, the magnitude of correlation was comparable to that found at the elementary level.

IS CLIMATE DIFFERENT AT HIGH POVERTY VS. OTHER SCHOOLS?

Some climate dimensions were rated differently by students at high-poverty schools than by students at other schools. For example, students at high-poverty schools reported feeling greater levels of support from their teachers (at the elementary level, $t(237) = 4.32, p < .01$; at the secondary level, $t(237) = 7.64, p < .01$) and were more engaged in the classroom (at the elementary level, $t(93) = 3.56, p < .01$; at the secondary level, $t(93) = 4.54, p < .01$) than were their peers at lower poverty schools.¹ According to Bowen, Richman, Brewster, and Bowen's (1998) theoretical model of academic resiliency among students attending high-poverty schools, when high levels of poverty interact with protective factors (e.g., teacher support and student engagement), students are able to overcome the negative effects of poverty (e.g., perform well on TAKS). These protective factors occur when (a) teachers at high-poverty schools work hard to engage and support their students, and (b) students compensate for the difficulties associated with economic disadvantage by creating a positive experience in their school environment (e.g., are more engaged and perform better in school). These results suggest that students at high-poverty schools in AISD exhibit the protective factors that can foster their academic success.

Indeed, TAKS performance in 2010 was better at high-poverty schools with high ratings of student engagement than at high-poverty schools with low ratings of student engagement. At the elementary level, high-poverty schools with high ratings of student engagement had an average passing rate of 87% for TAKS reading, compared with 82% for high-poverty, low-student-engagement schools (this difference approached significance, $t(86) = 1.79, p = .08$). At the secondary level, TAKS math passing rates for high-poverty schools with high ratings of student engagement averaged 83%, compared to average passing rates of 65% for high-poverty secondary schools with low ratings of student engagement (this difference was significant, $t(30) = 3.75, p < .01$). The data suggest that favorable student climate at high-poverty schools may influence students' TAKS performance. It is important to continue examining the policies and practices that can explain why these differences in student engagement exist.

Given the significant relationship between student engagement and TAKS performance, analyses were conducted to determine which, if any, student climate dimensions might predict high ratings of student engagement.² At high-poverty elementary schools, students' ratings of academic self-confidence ($B = 14.71, p < .01$) and teacher support ($B = 15.81, p < .01$), and student engagement ($B = 6.10, p < .01$) significantly predicted high ratings of student

¹ At the elementary school level, high-poverty schools are defined as those where at least 80% of students are identified as economically disadvantaged. At the secondary school level, high-poverty schools are defined as those where at least 60% of students are identified as economically disadvantaged.

² High ratings of student engagement at the elementary school level were above 3.4, and at the secondary level they were above 3.0.

engagement, whereas, teacher support ($B = 11.43, p = .03$) and teacher expectations for students ($B = 23.74, p = .02$) predicted high ratings of student engagement at low-poverty elementary schools. At the secondary level, teacher support approached significance in predicting high levels of student engagement ($B = 15.05, p = .06$) at high-poverty schools (see Appendix C). These data again corroborated Bowen and colleagues' (1998; 2004) research identifying teacher support and student engagement as protective factors to promote academic achievement at high-poverty schools.

DOES CLIMATE PREDICT ATTENDANCE?

Previous AISD reports have identified school attendance rates as a strong predictor of the percentage of students meeting the state standard on TAKS at the secondary level (Schmitt, & Carney, 2008). Based on the relationships between student climate variables and student performance on TAKS outlined in the previous section of this report, analyses were conducted to determine whether school climate variables also were related to attendance rates among secondary schools. Among low-poverty schools,³ attendance rates were greater at schools with favorable ratings of academic self-confidence, adult fairness and respect, and teacher expectations than at schools with unfavorable ratings in these areas. Among high-poverty schools, however, attendance rates were not related to school climate ratings.

HOW DID STUDENTS RATE EACH SURVEY ITEM, AND HOW HAVE RATINGS CHANGED OVER TIME?

The tables that follow provide detailed item-level data for each of the six dimensions of school climate. An average of 3.0 or higher for each item and climate dimension is considered desirable, and statistically meaningful changes from year to year are denoted with up or down arrows ($\uparrow\downarrow$), or with an asterisk (*).⁴ Significant differences between school levels are presented in the text when applicable. Principals received customized reports for their campuses and are encouraged to examine the results for areas of strength and opportunities for improvement. District administrators are encouraged to work with staff and students to address areas with low ratings and to share best practices with others in areas in which they excel.

Behavioral Environment

This scale consists of 6 items that assess the degree of caring and respect students feel from each other and the extent to which students obey their school's rules. Ratings were in the desirable range above 3.0 for most items at each school level, with students indicating that they were happy with the way their classmates treated them and felt safe at their schools (individual item and climate dimension averages provided in Table 4).

³ Garza was not included in these analyses because its attendance rates were much lower than rates for schools with fewer economically disadvantaged students.

⁴ Effect sizes (Cohen's d) were calculated to measure the magnitude of the difference between two averages. Differences were flagged as meaningful where $d \geq 18$.

Table 4. In general, students rated behavioral environment favorably in 2009–2010.

Behavioral environment	Elementary			Middle			High		
	07-08	08-09	09-10	07-08	08-09	09-10	07-08	08-09	09-10
1. My classmates show respect to each other.	2.98	2.99	2.96	2.82	2.84	2.83	2.94	2.96	3.01
2. My classmates show respect to other students who are different.	3.07	3.10	3.11	2.75	2.79	2.79	2.94	2.90	2.94
3. I am happy with the way my classmates treat me.	3.18	3.17	3.13	3.18	3.19	3.16	3.34	3.31	3.30
14. Students at my school follow the school rules.	2.87	2.89	2.80	2.46	2.52	2.48	2.56	2.64	2.66
15. I feel safe at my school.	3.53	3.52	3.53	3.03	3.11	3.12	3.13	3.17	3.22
16. I feel safe on the school property.	3.52	3.49	3.50	3.05	3.09	3.13	3.12	3.15	3.20
Behavioral environment average	3.19↓	3.20	3.17	2.88	2.93	2.91	2.99	3.02	3.04

Note. Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). It is desirable to have a response of at least 3.0.

↑↓ Denotes significant changes within a given school level from the previous year. No significant changes were found within a given school level from 2007–2008 to 2009–2010.

Teacher Support

Although teacher support items were included on the Student Climate Survey in previous years, this scale is new to the 2009–2010 report. This dimension of student climate indicates the level of support and encouragement students receive from their teachers regarding their academic work. Responses were generally more favorable for elementary school students than for students of other levels, although high school students were more likely in 2009–2010 than in 2007–2008 to report that their teachers cared about how they did in school. Individual item averages are presented in Table 5.

Table 5. In 2009–2010, high school students were significantly more likely than they were in 2007–2008 to feel their teachers cared about how they were performing in school.

Teacher support	Elementary			Middle			High		
	07-08	08-09	09-10	07-08	08-09	09-10	07-08	08-09	09-10
4. Teachers at this school care about their students.	3.87	3.86	3.86	3.30	3.37	3.34	3.17	3.31	3.25
17. Teachers give rewards or praise for good behavior.	3.31	3.28	3.30	2.61	2.66	2.62	2.55	2.60	2.66
28. Teachers give rewards or praise for good work.	3.26	3.23	3.24	2.61	2.67	2.68	2.58	2.64	2.71
32. My teachers care about how I do in school.	3.83	3.83	3.82	3.22	3.28	3.32	3.06	3.10	3.21*
34. Teachers help students with personal problems.	3.45	3.43	3.45	2.69	2.76	2.80	2.65	2.67	2.76
Teacher support	3.54	3.52	3.53	2.88	2.94	2.93	2.80	2.85	2.90

Note. Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). It is desirable to have a response of at least 3.0.

* Denotes a significant change within a given school level from 2007–2008 to 2009–2010. No significant changes from the previous year were found for items or subscale averages on this dimension within a given school level.

Adult Fairness and Respect

This scale consists of eight items that ask students to assess how they feel teachers and other adults on their campus treat them in areas such as classroom grading, consequences for breaking school rules, and the extent to which teachers/adults listen to students’ ideas and opinions. Although elementary school students rated this dimension of student climate more favorably than did their middle and high school peers, high school students were significantly more likely in 2009–2010 than in 2007–2008 to feel that adults treated them fairly. Individual item and climate dimension averages are presented in Table 6.

Table 6. High school students were more likely in 2009–2010 than in 2007–2008 to report that adults on their campus treated them fairly.

Adult fairness and respect	Elementary			Middle			High		
	07-08	08-09	09-10	07-08	08-09	09-10	07-08	08-09	09-10
5. Adults at this school listen to student ideas and opinions.	3.49	3.50	3.50	2.91	3.00	2.99	2.86	2.92	2.99
6. Adults at this school treat all students fairly.	3.59	3.58	3.58	2.97	3.05	3.04	2.83	2.92	2.99*
7. The staff in the front office show respect to students.	3.81	3.81	3.82	3.40	3.46	3.47	3.22	3.23	3.34
10. The school rules are fair.	3.53	3.55	3.51	2.67	2.81	2.75	2.75	2.81	2.88
11. The consequences for breaking school rules are the same for everyone.	3.45	3.43	3.47	3.04	3.13	3.13	2.90	2.98	3.07
12. My teachers always make sure the students follow the rules.	3.81	3.82	3.83	3.32	3.34	3.32	3.09	3.11	3.16
36. My teachers are fair to everyone.	3.63	3.59	3.57	2.88	2.99	3.00	2.82	2.89	3.01
37. All my teachers use the same rules.	n/a	3.32	3.31	n/a	2.86	2.87	n/a	2.73	2.81
Adult fairness and respect average	n/a	3.58	3.58	n/a	3.08	3.06	n/a	2.96	3.02

Note. Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). It is desirable to have a response of at least 3.0.

* Denotes a significant change within a given school level from 2007–2008 to 2009–2010. No significant changes from the previous year were found for items or subscale averages on this dimension within a given school level.

Student Engagement

This dimension of student climate consists of six items designed to measure the extent to which students enjoy school and believe their school work is relevant and engaging. Elementary school students reported greater levels of student engagement than did middle or high school students; however, item averages did not change meaningfully at any level in 2009–2010, compared with averages for previous years. Individual item and climate dimension averages are provided in Table 7.

Table 7. Elementary school students rated student engagement higher than did middle and high school students.⁵

Student engagement	Elementary			Middle			High		
	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010
9. I like to come to school.	n/a	n/a	3.21	n/a	n/a	2.81	n/a	n/a	2.85
21. I enjoy doing my schoolwork.	3.14	3.11	3.10	2.48	2.50	2.51	2.48	2.50	2.54
30. My homework helps me learn things I need to know.	3.52	3.49	3.48	2.97	2.99	2.99	2.89	2.94	2.97
33. My schoolwork makes me think about things in new ways.	3.29	3.26	3.27	2.81	2.82	2.84	2.76	2.78	2.82
35. I have fun learning in my classes.	3.33	3.32	3.31	2.67	2.72	2.73	2.70	2.75	2.79
38. My teachers connect what I am doing to my life outside the classroom.	n/a	3.29	3.27	n/a	2.67	2.70	n/a	2.65	2.72
Student engagement average	n/a	n/a	3.26	n/a	n/a	2.75	n/a	n/a	2.77

Note. Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). It is desirable to have a response of at least 3.0. With the addition of item 9 in 2009–2010, climate dimension comparisons across years were no longer possible. No significant changes from the previous year were found for items or subscale averages within a given school level, nor were any meaningful changes since 2007–2008 found.

Teacher Expectations

This scale was new to the 2009–2010 survey, although some of the items were included on the Student Climate Survey in previous years to measure students’ perceptions of their teachers’ expectations. These items were combined with two new items. Elementary school students reported more favorable responses to these items than did middle and high school students, though students across all levels reported that their teachers had high expectations of them. The individual item and climate dimension averages are provided in Table 8.

⁵ These differences were significant at $p < .01$.

Table 8. Elementary school students’ ratings of teacher expectations were higher than those of middle and high school students⁶.

Teacher expectations	Elementary			Middle			High		
	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010
13. My teachers believe I can learn.	n/a	n/a	3.71	n/a	n/a	3.56	n/a	n/a	3.48
18. My teachers expect me to do my best work.	3.93	3.92	3.92	3.63	3.64	3.60	3.48	3.45	3.48
19. My teachers challenge me to do better.	3.63	3.60	3.60	3.30	3.29	3.30	3.19	3.18	3.21
24. My teachers believe I can do well in school.	n/a	n/a	3.69	n/a	n/a	3.50	n/a	n/a	3.41
27. My teachers show me how to know if my work is good.	3.60	3.61	3.59	3.02	3.09	3.10	2.91	2.98	3.05
Teacher expectations average	n/a	n/a	3.70	n/a	n/a	3.38	n/a	n/a	3.30

Note. Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). It is desirable to have a response of at least 3.0. With the addition of items 13 and 24 in 2009–2010, subscale comparisons across years were no longer possible. No significant changes from the previous year were found for items or subscale averages within a given school level, nor were any meaningful changes since 2007–2008 found.

Academic Self-Confidence

This dimension of student climate is composed of seven items that assess students’ motivation, self-efficacy, and acquisition of self-evaluation skills. Although subscale scores did not improve meaningfully from 2008–2009 to 2009–2010, high school students were more likely to report feeling prepared for TAKS and knowing how they were doing in school in 2009–2010 than in 2007–2008. Individual item and subscale averages are presented in Table 9.

⁶ These differences were significant at $p < .01$.

Table 9. High school students were more likely report knowing how they were doing in school, and feeling prepared for TAKS in 2009–2010 than in 2007–2008.

Academic self-confidence	Elementary			Middle			High		
	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010
20. I can do even the hardest schoolwork if I try.	3.54	3.52	3.51	3.24	3.23	3.23	3.23	3.20	3.23
22. I feel/felt well prepared for TAKS.	3.56	3.57	3.54	3.22	3.25	3.29	3.00	3.10	3.18*
23. I try hard to do my best work.	3.76	3.76	3.75	3.41	3.40	3.41	3.24	3.23	3.26
26. I feel successful in my schoolwork.	3.48	3.47	3.44	3.15	3.17	3.17	3.03	3.05	3.10
29. I can reach the goals I set for myself	3.53	3.53	3.52	3.28	3.31	3.28	3.25	3.24	3.28
31. I know how I am doing in school.	3.45	3.45	3.39	3.22	3.28	3.32	3.18	3.24	3.38*↑
Academic self-confidence average	3.58	3.54	3.51	3.27	3.26	3.26	3.18	3.17	3.22

Note. Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). It is desirable to have a response of at least 3.0.

↑↓ Denotes significant changes within a given school level from the previous year.

* Denotes a significant change within a given school level from 2007–2008 to 2009–2010.

Additional Climate Items

Students were asked if they had an adult on campus with whom they could talk if they had a problem, and if they felt their teachers enjoyed teaching (Table 10). Across grade levels, students responded favorably to these two items.

Table 10. Across levels, students believed their teachers liked to teach, and reported having at least one adult to whom they would go if they had a problem.

Item	Elementary			Middle			High		
	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010
8. There is at least one adult at my school who I would go to if I have a problem.	3.60	3.52	3.54	3.26	3.15	3.16	3.24	3.11	3.13
25. My teachers like to teach.	3.79	3.77	3.78	3.19	3.24	3.29	3.09	3.13	3.25*

Note. Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). It is desirable to have a response of at least 3.0. No significant changes were found from the previous year within a given school level.

* Denotes a significant change within a given school level from 2007–2008 to 2009–2010.

Additionally, secondary students enrolled in grades 6 through 11 were asked if they planned to go to college (Table 11). Consistent with 2008–2009 data, roughly 70% of secondary students planned to attend college after graduating from high school.

Table 11. In 2009–2010, 70% of secondary students planned to attend college, while most others were unsure.

I will go to college after high school.	Middle			High		
	2007-2008	2008-2009	2009-2010	2007-2008	2008-2009	2009-2010
% Yes	n/a	71%	73%	n/a	73%	75%
% No	n/a	4%	3%	n/a	5%	4%
% Maybe	n/a	25%	23%	n/a	22%	21%

APPENDICES

Appendix A. Schools with a high percentage of students with high economic disadvantage were likely to have lower Texas Assessment of Knowledge and Skills (TAKS) performance and somewhat lower ratings of behavioral environment, than were schools with fewer disadvantaged students.

	Pearson <i>r</i> correlation with economic disadvantage		
	Elementary	Middle	High
Math TAKS	-.54*	-.80*	-.71*
Reading TAKS	-.59*	-.81*	-.79*
Behavioral environment	-.48*	-.43*	-.22 ^a
Teacher support	.24*	.25 ^a	.25 ^a
Adult fairness and respect	--	--	--
Student engagement	.41*	.27*	.47*
Teacher expectations	.21*	--	--
Academic self-confidence	--	-.27*	--
Attendance	-.46*	-.67*	-.51*

Source. 2010 TAKS passing percentages, by grade level, for each campus; AISD Student Climate Survey, by grade level, for each campus.

Note. * $p < .05$; -- relationship is not statistically significant or has a correlation magnitude of less than $r = .20$; ^a Smaller sample sizes are less likely to result in statistical significance than are larger sample sizes. Although these relationships were not statistically significant, the magnitude of correlation was comparable to that found at the elementary level.

Appendix B. Schools with high ratings of student climate had higher Texas Assessment of Knowledge and Skills (TAKS) passing percentages in reading and math than did schools in with low levels of student climate.

	Elementary				Secondary			
	Math		Reading		Math		Reading	
	High Climate	Low Climate	High Climate	Low Climate	High Climate	Low Climate	High Climate	Low Climate
High economic disadvantage								
Behavioral environment	85%*	80%	86%*	82%	77%*	69%	86%*	73%
Teacher support	82%	83%	86%*	81%	72%	66%	78%	78%
Adult fairness and respect	83%	82%	87%*	80%	74%*	64%	78%	78%
Student engagement	83%	84%	87%*	82%	83%*	64%	81%	77%
Teacher expectations	83%	83%	86%*	81%	75%*	63%	79%	77%
Academic self-confidence	85%	81%	87%*	81%	97%*	63%	97%*	77%
Lower economic disadvantage								
Behavioral environment	94%*	82%	96%*	87%	91%*	81%*	96%*	88%*
Teacher support	91%	91%	94%	93%	86%	88%	93%	93%
Adult fairness and respect	93%	89%	95%	91%	87%	87%	95%	94%
Student engagement	89%	93%	93%	95%	77%	87%	97%	93%
Teacher expectations	96%*	89%	97%*	93%	87%	88%	95%	94%
Academic self-confidence	97%*	86%	97%*	90%	83%	86%	95%	93%

Source. 2010 TAKS passing percentages, by grade level, for each campus; AISD Student Climate Survey, by grade level, for each campus.

* The percentages of TAKS passing rates were significantly different within school level, subject area, student climate dimension, and level of economic disadvantage at $p < .05$.

Appendix C. Teacher support predicted high levels of student engagement across all elementary schools, and at high-poverty secondary schools.

	Elementary		Secondary	
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>
High economic disadvantage				
Teacher support	15.81*	4.13	15.05 ^a	8.14
Adult fairness and respect	1.68	4.56	6.35	8.53
Teacher expectations	-4.26	5.40	-5.29	8.73
Academic self-confidence	14.71*	4.33	11.49	11.05
Behavioral environment	6.10*	2.68	2.60	4.30
Lower economic disadvantage				
Teacher support	11.43*	5.12	--	--
Adult fairness and respect	8.04	5.99	--	--
Teacher expectations	23.74*	10.53	--	--
Academic self-confidence	-10.02	10.14	--	--
Behavioral environment	-1.68	3.87		

Source. 2010 Texas Assessment of Knowledge and Skills (TAKS) passing percentages, by grade level for each campus; AISD Student Climate Survey.

* The contribution of this factor to predictions of student engagement was statistically significant at $p < .05$.

^a Smaller sample sizes are less likely to result in statistical significance than are large sample sizes.

Although these relationships were not statistically significant, the magnitude of correlation was comparable to that found at the elementary level. Analyses were not conducted for lower economically disadvantaged secondary schools due to the low number of cases.

Appendix C. Elementary Student Climate Dimension Scores, by Campus

School	Behavioral Environment	Teacher Support	Adult Fairness and Respect	Student Engagement	Teacher Expectations	Academic Self-Confidence	# Surveys	% of Students Represented
ALL Elementary	↑ 3.17	↑ 3.53	↑ 3.58	↑ 3.26	↑ 3.70	↑ 3.51	17,425	87%
Allan	↗ 2.86	↑ 3.46	↑ 3.53	↑ 3.09	↑ 3.55	↑ 3.31	91	53%
Allison	↑ 3.18	↑ 3.69	↑ 3.71	↑ 3.48	↑ 3.80	↑ 3.62	199	89%
Andrews	↑ 3.35	↑ 3.76	↑ 3.76	↑ 3.61	↑ 3.90	↑ 3.53	22	11%
Baranoff	↑ 3.29	↑ 3.54	↑ 3.62	↑ 3.16	↑ 3.67	↑ 3.53	409	96%
Barrington	↑ 3.26	↑ 3.58	↑ 3.58	↑ 3.48	↑ 3.69	↑ 3.57	278	82%
Barton Hills	↑ 3.40	↑ 3.47	↑ 3.66	↑ 3.17	↑ 3.74	↑ 3.60	187	94%
Becker	↑ 3.06	↑ 3.44	↑ 3.55	↑ 3.29	↑ 3.57	↑ 3.34	54	84%
Blackshear	↑ 3.07	↑ 3.46	↑ 3.51	↑ 3.23	↑ 3.71	↑ 3.50	96	104%
Blanton	↑ 3.09	↑ 3.55	↑ 3.58	↑ 3.29	↑ 3.76	↑ 3.57	185	86%
Blazier	↑ 3.15	↑ 3.55	↑ 3.66	↑ 3.34	↑ 3.68	↑ 3.55	255	88%
Boone	↑ 3.18	↑ 3.45	↑ 3.58	↑ 3.15	↑ 3.66	↑ 3.49	227	98%
Brentwood	↑ 3.26	↑ 3.46	↑ 3.59	↑ 3.27	↑ 3.74	↑ 3.56	157	79%
Brooke	↑ 3.01	↑ 3.51	↑ 3.58	↑ 3.17	↑ 3.62	↑ 3.41	115	69%
Brown	↑ 3.20	↑ 3.76	↑ 3.72	↑ 3.52	↑ 3.88	↑ 3.59	185	95%
Bryker Woods	↑ 3.47	↑ 3.54	↑ 3.48	↑ 3.29	↑ 3.67	↑ 3.56	206	96%
Campbell	↗ 2.87	↑ 3.49	↑ 3.45	↑ 3.16	↑ 3.67	↑ 3.43	127	75%
Casey	↗ 2.97	↑ 3.36	↑ 3.39	↑ 3.02	↑ 3.52	↑ 3.40	293	93%
Casis	↑ 3.34	↑ 3.47	↑ 3.56	↑ 3.10	↑ 3.74	↑ 3.58	339	93%
Clayton	↑ 3.28	↑ 3.49	↑ 3.59	↑ 3.14	↑ 3.68	↑ 3.57	341	74%
Cook	↑ 3.22	↑ 3.63	↑ 3.69	↑ 3.50	↑ 3.79	↑ 3.54	315	81%
Cowan	↑ 3.20	↑ 3.32	↑ 3.49	↑ 3.05	↑ 3.63	↑ 3.50	309	93%
Cunningham	↑ 3.07	↑ 3.41	↑ 3.48	↑ 3.02	↑ 3.61	↑ 3.40	217	90%
Davis	↑ 3.14	↑ 3.40	↑ 3.47	↑ 3.03	↑ 3.56	↑ 3.46	285	93%
Dawson	↑ 3.26	↑ 3.65	↑ 3.68	↑ 3.37	↑ 3.77	↑ 3.55	120	85%
Doss	↑ 3.25	↑ 3.42	↑ 3.49	↑ 3.09	↑ 3.65	↑ 3.52	312	90%
Galindo	↑ 3.20	↑ 3.59	↑ 3.66	↑ 3.34	↑ 3.75	↑ 3.45	275	87%
Govalle	↑ 3.01	↑ 3.51	↑ 3.57	↑ 3.25	↑ 3.71	↑ 3.45	141	96%
Graham	↑ 3.22	↑ 3.57	↑ 3.61	↑ 3.43	↑ 3.73	↑ 3.65	223	92%
Gullett	↑ 3.20	↑ 3.29	↑ 3.41	↗ 2.91	↑ 3.52	↑ 3.44	208	89%
Harris	↑ 3.19	↑ 3.66	↑ 3.71	↑ 3.45	↑ 3.74	↑ 3.59	218	83%
Hart	↑ 3.17	↑ 3.50	↑ 3.56	↑ 3.34	↑ 3.70	↑ 3.45	241	78%
Highland Park	↑ 3.35	↑ 3.44	↑ 3.55	↑ 3.07	↑ 3.57	↑ 3.51	276	98%
Hill	↑ 3.28	↑ 3.36	↑ 3.58	↑ 3.11	↑ 3.64	↑ 3.55	310	95%
Houston	↑ 3.29	↑ 3.65	↑ 3.70	↑ 3.55	↑ 3.80	↑ 3.58	200	50%
Jordan	↗ 2.87	↑ 3.53	↑ 3.51	↑ 3.33	↑ 3.72	↑ 3.50	262	84%
Joslin	↑ 3.18	↑ 3.56	↑ 3.58	↑ 3.43	↑ 3.72	↑ 3.52	113	127%
Kiker	↑ 3.44	↑ 3.60	↑ 3.63	↑ 3.19	↑ 3.76	↑ 3.56	238	66%
Kocurek	↑ 3.06	↑ 3.49	↑ 3.46	↑ 3.14	↑ 3.60	↑ 3.47	262	86%

Note. Arrows represent the desirability of the mean score: ↑ = 3.0 or greater, ↗ = 2.75–3.0, ↘ = 2.5–2.75, ↓ = less than 2.5.

Appendix C, Continued. Elementary Student Climate Dimension Scores, by Campus

School	Behavioral Environment	Teacher Support	Adult Fairness and Respect	Student Engagement	Teacher Expectations	Academic Self-Confidence	# Surveys	% of Students Represented
ALL Elementary	↑ 3.17	↑ 3.53	↑ 3.58	↑ 3.26	↑ 3.70	↑ 3.51	17,425	87%
Langford	↗ 2.91	↑ 3.47	↑ 3.49	↑ 3.20	↑ 3.70	↑ 3.44	286	88%
Lee	↑ 3.40	↑ 3.50	↑ 3.62	↑ 3.04	↑ 3.63	↑ 3.51	220	89%
Linder	↑ 3.24	↑ 3.64	↑ 3.65	↑ 3.43	↑ 3.78	↑ 3.53	270	89%
Maplewood	↑ 3.13	↑ 3.52	↑ 3.55	↑ 3.24	↑ 3.71	↑ 3.47	163	84%
Mathews	↑ 3.22	↑ 3.41	↑ 3.50	↑ 3.11	↑ 3.63	↑ 3.45	179	95%
McBee	↑ 3.10	↑ 3.55	↑ 3.57	↑ 3.41	↑ 3.74	↑ 3.55	306	87%
Menchaca	↑ 3.11	↑ 3.42	↑ 3.51	↑ 3.13	↑ 3.61	↑ 3.48	274	93%
Metz	↑ 3.16	↑ 3.56	↑ 3.62	↑ 3.34	↑ 3.68	↑ 3.51	171	80%
Mills	↑ 3.28	↑ 3.56	↑ 3.58	↑ 3.18	↑ 3.70	↑ 3.53	470	95%
Norman	↗ 2.86	↑ 3.47	↑ 3.44	↑ 3.06	↑ 3.60	↑ 3.37	141	103%
Oak Hill	↑ 3.30	↑ 3.49	↑ 3.60	↑ 3.16	↑ 3.67	↑ 3.50	372	94%
Oak Springs	↑ 3.13	↑ 3.61	↑ 3.75	↑ 3.47	↑ 3.78	↑ 3.63	93	83%
Odom	↑ 3.14	↑ 3.59	↑ 3.58	↑ 3.23	↑ 3.72	↑ 3.43	282	99%
Ortega	↑ 3.15	↑ 3.65	↑ 3.63	↑ 3.35	↑ 3.78	↑ 3.52	98	94%
Overton	↑ 3.05	↑ 3.61	↑ 3.60	↑ 3.34	↑ 3.75	↑ 3.66	263	95%
Palm	↗ 2.88	↑ 3.57	↑ 3.60	↑ 3.35	↑ 3.75	↑ 3.59	221	74%
Patton	↑ 3.33	↑ 3.57	↑ 3.68	↑ 3.26	↑ 3.78	↑ 3.59	280	85%
Pease	↑ 3.27	↑ 3.66	↑ 3.67	↑ 3.33	↑ 3.75	↑ 3.61	183	124%
Pecan Springs	↑ 3.03	↑ 3.69	↑ 3.61	↑ 3.51	↑ 3.83	↑ 3.65	112	60%
Perez	↑ 3.16	↑ 3.60	↑ 3.62	↑ 3.32	↑ 3.73	↑ 3.47	316	78%
Pickle	↑ 3.33	↑ 3.64	↑ 3.68	↑ 3.60	↑ 3.84	↑ 3.66	252	92%
Pillow	↑ 3.14	↑ 3.50	↑ 3.56	↑ 3.23	↑ 3.68	↑ 3.45	210	83%
Pleasant Hill	↑ 3.11	↑ 3.66	↑ 3.59	↑ 3.40	↑ 3.74	↑ 3.53	220	89%
Reilly	↑ 3.10	↑ 3.61	↑ 3.60	↑ 3.26	↑ 3.70	↑ 3.45	106	95%
Ridgetop	↑ 3.24	↑ 3.59	↑ 3.75	↑ 3.37	↑ 3.72	↑ 3.50	67	92%
Rodriguez	↗ 2.99	↑ 3.48	↑ 3.51	↑ 3.29	↑ 3.73	↑ 3.49	345	91%
Sanchez	↑ 3.05	↑ 3.44	↑ 3.46	↑ 3.21	↑ 3.65	↑ 3.43	216	89%
Sims	↑ 3.20	↑ 3.64	↑ 3.63	↑ 3.39	↑ 3.75	↑ 3.59	117	84%
St. Elmo	↑ 3.17	↑ 3.51	↑ 3.58	↑ 3.36	↑ 3.75	↑ 3.56	128	92%
Summit	↑ 3.26	↑ 3.50	↑ 3.56	↑ 3.25	↑ 3.65	↑ 3.52	250	81%
Sunset Valley	↑ 3.24	↑ 3.50	↑ 3.54	↑ 3.29	↑ 3.66	↑ 3.48	170	99%
Travis Heights	↑ 3.08	↑ 3.53	↑ 3.58	↑ 3.09	↑ 3.62	↑ 3.48	153	75%
Walnut Creek	↑ 3.08	↑ 3.53	↑ 3.51	↑ 3.32	↑ 3.71	↑ 3.49	330	86%
Widen	↗ 2.99	↑ 3.55	↑ 3.57	↑ 3.25	↑ 3.68	↑ 3.43	256	77%
Williams	↑ 3.06	↑ 3.45	↑ 3.50	↑ 3.16	↑ 3.66	↑ 3.40	271	90%
Winn	↗ 2.81	↑ 3.44	↑ 3.47	↑ 3.32	↑ 3.71	↑ 3.57	151	81%
Wooldridge	↑ 3.22	↑ 3.69	↑ 3.64	↑ 3.54	↑ 3.79	↑ 3.59	387	92%
Wooten	↑ 3.21	↑ 3.61	↑ 3.60	↑ 3.43	↑ 3.75	↑ 3.52	210	83%
Zavala	↗ 2.97	↑ 3.48	↑ 3.53	↑ 3.17	↑ 3.62	↑ 3.37	123	72%
Zilker	↑ 3.35	↑ 3.56	↑ 3.57	↑ 3.17	↑ 3.69	↑ 3.53	167	81%

Note. Arrows represent the desirability of the mean score: ↑ = 3.0 or greater, ↗ = 2.75–3.0, ↘ = 2.5–2.75, ↓ = less than 2.5.

Appendix D. Middle School Student Climate Dimension Scores, by Campus

School	Behavioral Environment	Teacher Support	Adult Fairness and Respect	Student Engagement	Teacher Expectations	Academic Self-Confidence	# Surveys	% of Students Represented
ALL Middle	↗ 2.91	↗ 2.93	↑ 3.06	↗ 2.75	↑ 3.38	↑ 3.26	11,548	72%
Ann Richards	↑ 3.35	↑ 3.30	↑ 3.44	↑ 3.17	↑ 3.72	↑ 3.55	406	93%
Bailey	↗ 2.90	↗ 2.85	↗ 2.95	↘ 2.61	↑ 3.35	↑ 3.29	745	78%
Bedichek	↗ 2.83	↗ 2.92	↗ 2.94	↘ 2.70	↑ 3.35	↑ 3.20	890	87%
Burnet	↗ 2.76	↗ 2.90	↗ 2.91	↗ 2.76	↑ 3.29	↑ 3.17	695	72%
Covington	↘ 2.70	↘ 2.60	↗ 2.83	↘ 2.51	↑ 3.21	↑ 3.10	709	75%
Dobie	↗ 2.80	↗ 2.97	↑ 3.03	↘ 2.71	↑ 3.36	↑ 3.18	197	597%
Fulmore	↗ 2.93	↗ 2.98	↑ 3.08	↗ 2.83	↑ 3.41	↑ 3.28	796	79%
Garcia	↗ 2.78	↑ 3.10	↑ 3.08	↗ 2.87	↑ 3.39	↑ 3.28	237	34%
Gozycki	↑ 3.15	↑ 3.03	↑ 3.15	↗ 2.77	↑ 3.46	↑ 3.39	665	80%
Kealing	↗ 2.92	↗ 2.91	↑ 3.11	↗ 2.77	↑ 3.43	↑ 3.36	816	66%
Lamar	↘ 2.67	↘ 2.69	↗ 2.83	↘ 2.56	↑ 3.17	↑ 3.06	528	80%
Martin	↗ 2.94	↑ 3.16	↑ 3.21	↗ 2.92	↑ 3.54	↑ 3.27	312	46%
Mendez	↗ 2.93	↑ 3.04	↑ 3.16	↗ 2.85	↑ 3.40	↑ 3.19	678	78%
Murchison	↑ 3.02	↗ 2.87	↑ 3.08	↘ 2.68	↑ 3.42	↑ 3.35	955	77%
O. Henry	↗ 2.87	↗ 2.82	↑ 3.03	↘ 2.61	↑ 3.29	↑ 3.25	391	39%
Paredes	↗ 2.91	↗ 2.93	↑ 3.14	↗ 2.80	↑ 3.39	↑ 3.28	727	82%
Pearce	↗ 2.78	↑ 3.08	↑ 3.02	↗ 2.93	↑ 3.40	↑ 3.28	282	62%
Small	↑ 3.06	↑ 3.01	↑ 3.16	↗ 2.78	↑ 3.42	↑ 3.30	725	76%
Webb	↗ 2.85	↑ 3.12	↑ 3.13	↗ 2.82	↑ 3.49	↑ 3.21	290	51%

Note. Arrows represent the desirability of the mean score: ↑ = 3.0 or greater, ↗ = 2.75–3.0, ↘ = 2.5–2.75, ↓ = less than 2.5.

Appendix E. High School Student Climate Survey Dimension Scores, by Campus

School	Behavioral Environment	Teacher Support	Adult Fairness and Respect	Student Engagement	Teacher Expectations	Academic Self-Confidence	# Surveys	% of Students Represented
ALL High	↑ 3.04	↗ 2.90	↑ 3.02	↗ 2.77	↑ 3.30	↑ 3.22	8,675	55%
Akins	↗ 2.93	↗ 2.82	↗ 2.94	↘ 2.74	↑ 3.20	↑ 3.16	397	19%
Anderson	↗ 2.97	↘ 2.73	↗ 2.88	↘ 2.64	↑ 3.14	↑ 3.13	1168	77%
Austin	↑ 3.05	↗ 2.97	↑ 3.00	↗ 2.79	↑ 3.26	↑ 3.21	962	51%
Bowie	↑ 3.15	↗ 2.87	↑ 3.02	↘ 2.62	↑ 3.38	↑ 3.29	1289	59%
Crockett	↑ 3.08	↗ 2.93	↗ 2.96	↗ 2.81	↑ 3.32	↑ 3.22	679	51%
Eastside - Global	↗ 2.89	↗ 2.95	↗ 2.94	↗ 2.84	↑ 3.24	↑ 3.08	110	54%
Eastside - Green	↗ 3.00	↗ 2.94	↑ 3.05	↗ 2.85	↑ 3.32	↑ 3.14	183	54%
Garza	↑ 3.65	↑ 3.61	↑ 3.66	↑ 3.28	↑ 3.73	↑ 3.57	96	102%
International	↗ 2.93	↑ 3.37	↑ 3.27	↑ 3.24	↑ 3.55	↑ 3.31	173	73%
Lanier	↑ 3.03	↑ 3.05	↑ 3.08	↗ 2.95	↑ 3.34	↑ 3.24	587	49%
LASA	↑ 3.11	↘ 2.70	↑ 3.07	↘ 2.66	↑ 3.29	↑ 3.26	511	73%
LBJ	↗ 2.89	↗ 2.93	↑ 3.03	↗ 2.87	↑ 3.32	↑ 3.23	256	32%
McCallum	↗ 2.98	↗ 2.79	↗ 2.91	↘ 2.68	↑ 3.19	↑ 3.15	612	45%
Reagan	↗ 2.95	↗ 2.97	↑ 3.08	↗ 2.89	↑ 3.31	↑ 3.24	311	45%
Travis	↑ 3.09	↑ 3.00	↑ 3.18	↗ 2.91	↑ 3.47	↑ 3.31	723	71%

Note. Arrows represent the desirability of the mean score: ↑ = 3.0 or greater, ↗ = 2.75–3.0, ↘ = 2.5–2.75, ↓ = less than 2.5.

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Publication Number 09.52a

December 2010