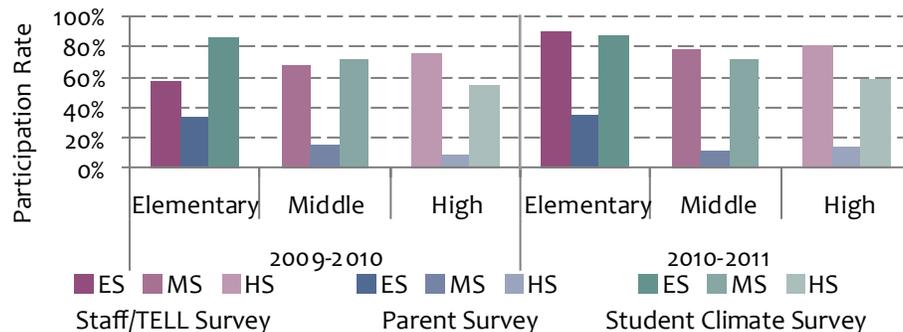


What surveys were administered in 2010–2011, and who responded to them?

In 2010–2011, 65,019 Austin Independent School District (AISD) campus stakeholders participated in three districtwide surveys: the Staff/Teaching, Empowering, Leading, and Learning Survey (TELL, winter), the Parent Survey (spring), and the Student Climate Survey (spring). Collectively, these surveys assessed four broad dimensions of school climate (campus and district reports are available on the Department of Research and Evaluation's [DRE] [website](#)).

Figure 1. Participation rates for District-wide Surveys, by Level, for 2009–2010 and 2010–2011.



Source. 2009–2010 to 2010–2011 AISD climate surveys

Participation of students, staff, and parents of AISD students was greater at the elementary level than at the secondary level in 2010–2011. Participation on the staff survey improved from 2009–2010 to 2010–2011 while other survey participation rates remained stable (see Figure 1).

The Importance of Monitoring School Climate

Previous analyses found that school climate dimensions were positively related to students' performance on the Texas Assessment of Knowledge and Skills (TAKS) (Lamb & Schmitt, 2010; Schmitt, Cornetto, & Lamb, 2009). This report seeks to examine the relationships between the four broad dimensions of school climate with (a) campus TAKS passing rates (e.g., percentage of students meeting the state standard); (b) campus-level value-added gains¹; and (c) campus net growth (e.g., percentage of students in a school who performed above predicted on TAKS minus the percentage of students who performed below predicted on TAKS). Because economic disadvantage is highly related to TAKS performance (Schmitt, et al., 2009) and other school climate factors (Gutman & Midgley, 2000), analyses also examined if these relationships varied based on school level and economic disadvantage. Results presented in the sidebars discuss the combination of student climate factors that best predict the different measures of student performance. The appendices provide more detailed results.

¹ SAS®-EVAAS® computed value-added gains for AISD schools.

High-performing, high economically disadvantaged schools differed from lower performing similarly disadvantaged schools in their ratings of school climate. Similar to previous analyses (Lamb & Schmitt, 2010), results found that students, staff, and parents of AISD students rate the following climate dimensions higher at high-performing, high economically disadvantaged schools than at lower performing, high economically disadvantaged schools (detailed information on this analysis is provided in Appendix A):

Respectful school environment

- Managing student conduct
- Respectful school community
- My child's school is a safe learning environment
- Behavioral environment

School engagement and community involvement

- Community support
- Parental assistance, communication and school involvement
- Support for parental involvement
- Student engagement
- Academic self-confidence

Expectations for student achievement

- Student achievement press
- Self-efficacy
- Information about student expectations and progress
- Teacher expectations (parent)
- Teacher expectations (student)

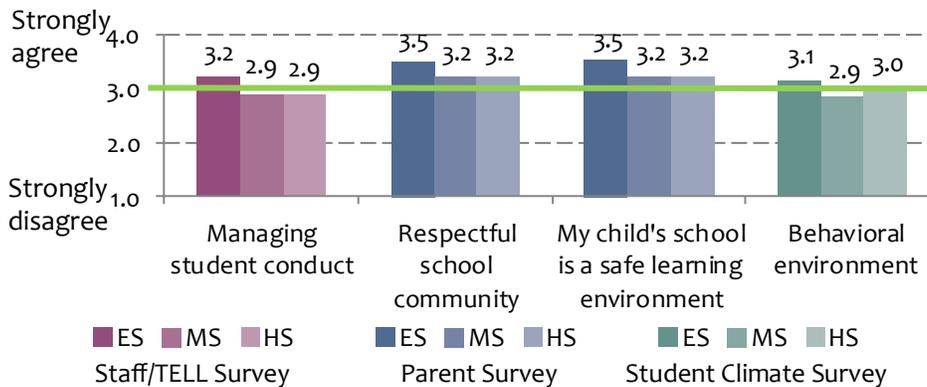
Campus support for teachers

- Facilities and resources
- Professional development opportunities
- School leadership
- Teacher leadership
- Instructional practice and support

Respectful School Environment and Campus TAKS Performance

The degree to which students, parents, and staff feel safe and supported by their school was found to be positively related to students' academic achievement (Lamb & Schmitt, 2010; Mitchell, Bradshaw, & Leaf, 2010). AISD students' performance on TAKS in 2010-2011 at the campus level (e.g., passing rates, net growth, and value-added gains) was related to respectful school environment in several ways.

Figure 2. Respondents' Ratings of Respectful School Environment Items, by Level, in 2010–2011



Source. 2010–2011 AISD climate surveys

Note. Subscale averages ≥ 3.0 are considered desirable. Analyses exclude schools of choice (e.g., Ann Richards School for Young Women Leaders, LASA, Garza, Fulmore Magnet, and Kealing Magnet schools).

For example, at high economically disadvantaged elementary schools, staff members' favorable ratings of managing student conduct were related to campus TAKS passing rates in reading and math and campus net growth in mathematics (math). Similarly, at high economically disadvantaged secondary schools, staff members' positive ratings of managing student conduct were related to campus net growth in reading and math and campus value-added gains in reading and math. Students' favorable ratings of behavioral environment also were related to campus net growth in math at high economically disadvantaged elementary schools and TAKS passing rates in reading and math at lower economically disadvantaged schools. Importantly, researchers (Hughes, Luo, Kwok & Loyd, 2008) have found that the more students feel supported and safe in their classroom (e.g., favorable ratings of behavioral environment), the more likely they are to adhere to class and school rules (e.g., favorable ratings of managing student conduct); engage in classroom activities; and see improvements in their academic performance. These findings reinforce the notion that factors related to school safety, behavior management, and student support are integral to students' academic achievement (Mitchell, et al., 2010). Work to improve climate factors (see Figure 2) should be encouraged on all campuses. Additional analyses are presented in Appendices B and C.

TAKS passing rates in reading/English Language Arts (ELA) and/or math and school climate. The following combination of factors best predicted campus TAKS passing rates.

High economically disadvantaged schools²

Elementary

- Staff reported they adequately **managed student conduct**³ (math and reading).

Secondary

- Staff reported feeling they can teach all students (e.g., **self-efficacy**, math and reading).

Less economically disadvantaged schools²

Elementary

- Staff reported feeling supported by their **campus community** (reading).
- Students reported feeling respected by their peers and safe on campus (**behavioral environment**, math and reading).

Secondary

- Staff reported they were supported by their **campus community** (math and reading).

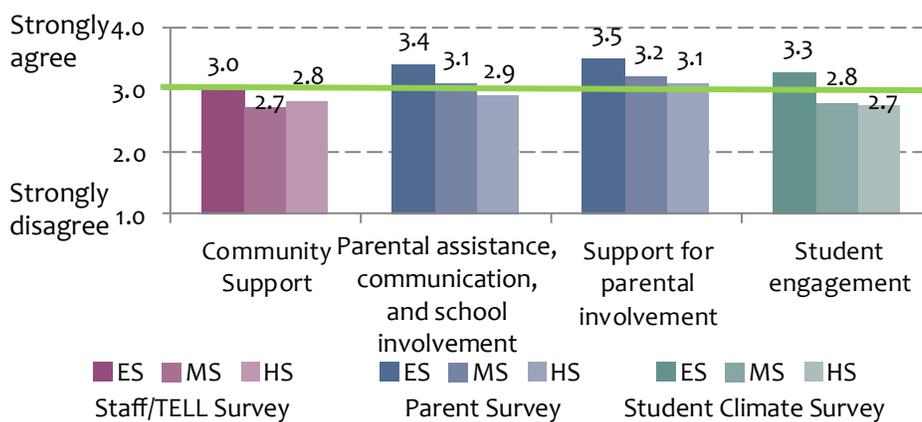
² Elementary schools with 80% of students identified as economically disadvantaged, and secondary schools with 60% of students identified as economically disadvantaged are considered high economically disadvantaged schools.

³ Text colors correspond with the colors used to identify the three different climate surveys displayed in the figure bars throughout the report.

School Engagement, Community Involvement, and Campus TAKS Performance

The degree to which students, parents of AISD students, staff, and community members are engaged with their campus have been positively related to students' performance on TAKS in the past—particularly at high economically disadvantaged schools (Lamb & Schmitt, 2010). Indeed, in 2011, AISD students at high-poverty elementary schools with high ratings of student engagement had significantly higher net growth in reading/ELA than did their peers at similarly disadvantaged schools ($t(44) = 2.8, p < .05$). This relationship supports Bowen, Richman, Brewster, and Bowen's (1998) identification of student engagement as a protective factor that helps students attending high economically disadvantaged schools to attain high levels of academic achievement.

Figure 3. Respondents' Ratings of School Engagement and Community Involvement Items, by Level, in 2010–2011



Source. 2010–2011 AISD climate surveys

Regression analyses also identified other school engagement and community involvement factors as strongly related to student performance on TAKS. For example, at lower economically disadvantaged schools, community support was predictive of TAKS passing rates in reading (elementary and secondary) and math (secondary) and to net growth in math (secondary). Similarly, at lower economically disadvantaged elementary schools where parents of AISD students provided favorable ratings of parental assistance, communication, and school involvement had high campus net growth in reading. Importantly, these results provide support for the identification of parental involvement and community support as critical factors contributing to students' achievement (Fan & Chen, 2010). Some researchers (e.g., Gutman & Midgley, 2000) have found that the combination of both family- and school-related supports are more effective in promoting academic achievement at higher economically disadvantaged schools than is the influence of just one of these factors alone. Schools—particularly high economically disadvantaged schools—should continue promoting student engagement and community involvement (Figure 3) on their campus. Additional relationships between these variables and TAKS are presented in Appendices B and C.

Campus net growth in reading/ELA and/or math and school climate.

The following combination of factors positively predicted campus net growth on TAKS.

High economically disadvantaged schools

Elementary

- Staff reported they adequately **managed student conduct** (math).
- Staff report they recognized teachers as leaders on their campus (**teacher leadership**, reading).
- Students report feeling respected by their peers and safe on campus (**behavioral environment**, math) and challenged by their teachers (**teacher expectations**, reading).

Secondary

- Staff report they effectively **managed student conduct** (math and reading).
- Parents of AISD students reported receiving adequate information regarding their child's academic work (**information about student expectations and progress**, math).

Less economically disadvantaged schools

Elementary

- Staff reported a positive work environment with adequate access to training and educational materials (**facilities and resources**, math).
- Parents of AISD students reported participating in school-related activities at home and at school (**parental assistance, communication, and school involvement**, reading).

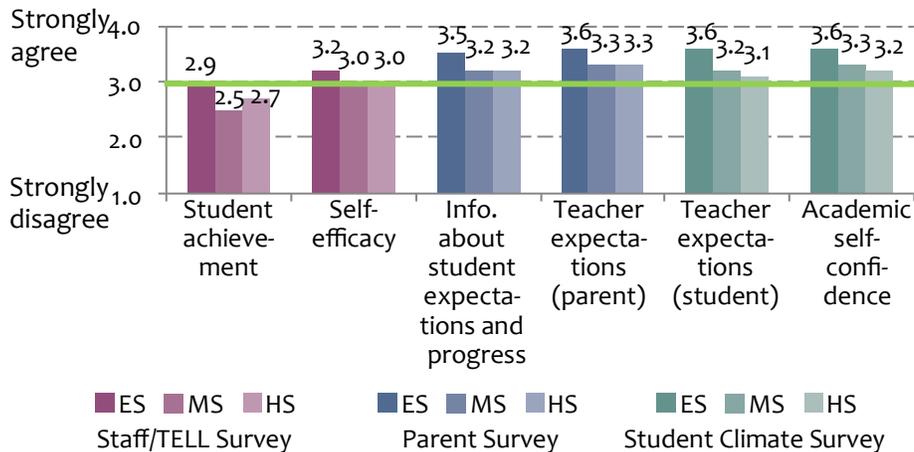
Secondary

- Staff reported feeling supported by their **campus community** (math).
- Staff reported they pushed their students to succeed (**student achievement press**, reading).

Expectations for Student Achievement and Campus TAKS Performance

Teachers' beliefs about their students' learning (Figure 4) are another dimension related to student achievement (Rosenthal & Jacobson, 1968; Rubie-Davies, 2006). Currently, researchers have begun analyzing the cumulative influence of students', teachers', and parents' expectations on students' achievement (Rubie-Davies, Peterson, Irving, Widdowson, & Dixon, 2010).

Figure 4. Ratings of Expectations for Student Achievement Items, by Level, in 2010–2011



Source. 2010–2011 AISD climate surveys

Examinations of AISD data suggest that parents of AISD students report they received adequate information about their child's expectations and progress in school predicted campus net growth in math at high economically disadvantaged secondary schools. Favorable teacher ratings of self-efficacy (e.g., the belief that they can teach any student) were related to higher TAKS passing rates in reading and math at high economically disadvantaged secondary schools, whereas student achievement press (e.g., teachers and parents of AISD students believe students can achieve academically and promote high academic standards) was related to net growth in reading at lower economically disadvantaged secondary schools. At high economically disadvantaged elementary schools, students' favorable ratings of teacher expectations (e.g., felt challenged by their teachers) were related to greater campus net growth in reading. For high economically disadvantaged secondary schools, these results support Rubie-Davies and colleagues' (2010) assertion that parents' and teachers' expectations for student achievement may work together to influence students' academic performance. Additional relationships between these variables and TAKS scores are documented in Appendices B and C.

Campus value-added growth in reading/ELA and/or math and school climate. The following combination of factors positively predicted campus TAKS value-added growth.

High economically disadvantaged schools

Elementary

- None of the student climate variables significantly predicted value-added gains for either subject.

Secondary

- Staff reported they adequately **managed student conduct** (math and reading).

Less economically disadvantaged schools

Elementary

- None of the student climate variables significantly predicted value-added gains for either subject.

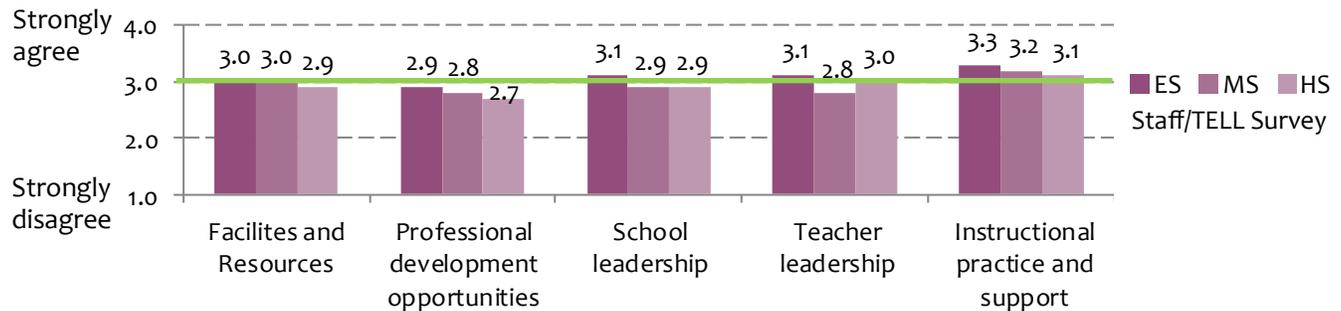
Secondary

- None of the student climate variables significantly predicted value-added gains for either subject.

Campus Support for Teachers and Campus TAKS Performance

Teachers who experienced strong campus support reported positive relationships with campus colleagues, students, and administrators and who enjoyed working at their school, had high levels of morale and trusted their campus colleagues (Hoy, Smith, & Sweetland, 2002; see Figure 5). Importantly, factors related to campus support for teachers have been known to influence students' achievement in AISD (Lamb & Schmitt, 2010).

Figure 5. Ratings of Campus Support for Teachers Items, by Level, in 2010–2011



Source. 2010–2011 AISD Staff/TELL survey

In 2010–2011, campus staff members' favorable ratings of teacher leadership (e.g., the degree to which teachers are recognized as educational leaders on their campus, are recognized as effective leaders, help make educational decisions) were related to campus net growth in reading at high economically disadvantaged elementary schools. At lower economically disadvantaged elementary schools, campus staff members' favorable ratings of facilities and resources (e.g., teachers have sufficient access to instructional materials, training, support, etc.) were related to net growth in math. These results support researchers' findings that teacher support is a critical factor influencing school climate, and by extension, students' achievement (Hoy et al., 2002).

Conclusion

Examinations of these broad dimensions of school climate with campus TAKS performance supported the growing body of research identifying positive school climate as a factor that often combats the potentially negative effects that high levels of poverty can have on student achievement (Gutman & Midgley, 2000; Hughes, et al., 2008; Rubie-Davies et al., 2010). School communities—particularly at high economically disadvantaged schools—should continue to foster a positive school climate on their campus so that students and staff feel safe, students follow the rules of conduct, staff feel supported in their teaching, and parents and community members feel connected to the school; doing so will help to improve the school environment and students' achievement. This report documents the different relationships that campus TAKS performance has with student climate. For example, few relationships were found between student climate variables and value-added gains; when they were found, they were at high economically disadvantaged secondary schools. Understanding the differences between various academic outcomes and school climate may help administrators identify which dimensions of school climate to target most aggressively in order to improve school climate, and by extension, student achievement.

References

- Bowen, G. L., Richman, J. M., Brewster, A., & Bowen, N. (1998). Sense of school coherence, perceptions of danger at school, and teacher support among youth at risk of school failure. *Child and Adolescent Social Work Journal*, 15, 273–286.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13 (1), 1–22.
- Gutman, L. M., & Midgley, C. (2000). The role of protective factors in supporting the academic achievement of poor African American students during the middle school transition. *Journal of Youth and Adolescence*, 29 (2), 223-248.
- Hoy, W. K., Smith, P. A., & Sweetland, S. R. (2002). The development of the organizational climate index for high schools: Its measure and relationship to faculty trust. *The High School Journal*, 86, 38–49.
- Hughes, J. N., Luo, W., Kwok, O., & Loyd, L. K. (2008). Teacher-student support, effortful engagement, and achievement: A 3-year longitudinal study. *Journal of Educational Psychology*, 100(1), 1–14.
- Lamb, L., & Schmitt, L. (2010). *2009–2010 school climate update* (DPE Publication No. 10.11RB). Austin, TX: Austin Independent School District.
- Mitchell, M. M., Bradshaw, C. P., & Leaf, P. J. (2010). Student and teacher perceptions of school climate: A multilevel exploration of patterns of discrepancy. *Journal of School Health*, 80, 271-279.
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development*. New York, NY: Holt Rinehart & Winston.
- Rubie-Davies, C. M. (2006). Teacher expectations and student self-perceptions: Exploring relationships. *Psychology in the Schools*, 43(5), 537–552.
- Rubie-Davies, C. M., Peterson, E., Irving, E., Widdowson, D., & Dixon, R. (2010). Expectations of achievement: Student, teacher and parent perceptions. *Research in Education*, 83, 36–53.
- Schmitt, L., Cornetto, K., & Lamb, L. (2009). *Austin ISD 2008–2009 board level reports* (DPE Publication No. 08.86, 08.87, 08.88). Austin, TX: Austin Independent School District.

Appendix A. Methodology Used to determine High-Performing, High Economically Disadvantaged Schools.

The following describes the analyses used to determine whether high-performing, high economically disadvantaged schools differed from lower performing similarly disadvantaged schools in their ratings of school climate. High economically disadvantaged schools received a score of 2 for having TAKS passing rates of 90% or higher, a score of 1 for having TAKS passing rates between 80% and 90%, and a score of 0 for having TAKS passing rates less than 80%. These scores were summed across reading and math so that schools' scores ranged from 0 (both reading and math passing rates less than 80%) to 4 (both reading and math passing rates greater than 90%). The characteristics described on page 1 of the report reflect significant differences between schools with scores of 0 and schools with scores of 4.

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Appendix B. Correlations between climate variables, campus TAKS performance and Economic Disadvantage

Climate Dimension		Elementary									Secondary								
		ED < 80% (n = 33)						ED > 80% (n = 46)			ED < 60% (n = 11)					ED > 60% (n = 20)			
		Math			Reading			Math		Reading	Math			Reading		Math		Reading	
		%Met	EVAAS	Net	%Met	EVAAS	Net	%Met	EVAAS	Net	%Met	EVAAS	Net	%Met	EVAAS	Net	%Met	EVAAS	Net
Respectful school environment	Managing student conduct	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Respectful school community	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	My child's school is a safe learning environment	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Behavioral environment	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
School engagement and community involvement	Community support	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Parental assistance, communication, and school involvement	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Support for parental involvement						+	+		+									
	Student engagement	-							+				-	-	-		-		
Expectations for student achievement	Student achievement press	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Self-efficacy																		
	Information about student expectations and progress						+	+		+			-	-					
	Teacher expectations (parent)				+	+	+	+		+			-	-					
	Teacher expectations (student)								+		+			-					
Campus support for teachers	Facilities and resources	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Professional development			+				+		+								+	
	School leadership							+		+							+	+	
	Teacher leadership				+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Other climate indicators	General climate	+	+	+				+		+	+				-		-	+	
	District vision							+		+							-	+	
	Academic planning information									+									
	Adult fairness and respect	-		+	+					+				-		+	-	+	

Note. The + symbol indicates that the correlation is significant and positive, while the - symbol indicates that the correlation is significant and negative. Correlations at the elementary level are considered significant at $p < .05$, and due to the smaller number of campuses at the secondary level, correlations are considered significant at $p < .10$.

Appendix C. Correlations between climate variables, campus TAKS performance and Economic Disadvantage

Climate Dimension	Elementary									Secondary														
	ED < 80% (n = 33)						ED > 80% (n = 46)						ED < 60% (n = 11)						ED > 60% (n = 20)					
	Math			Reading			Math			Reading			Math			Reading			Math			Reading		
	% Met	EVAAS	Net	% Met	EVAAS	Net	% Met	EVAAS	Net	% Met	EVAAS	Net	% Met	EVAAS	Net	% Met	EVAAS	Net	% Met	EVAAS	Net			
AISD Staff Climate (TELL) Survey	Student Achievement Press	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
	Facilities and Resources	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
	General Climate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
	Managing Student Conduct	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
	Professional Development			+			+			+			+			+			+			+		
	School Leadership						+			+			+			+			+			+		
	Teacher Leadership			+			+			+			+			+			+			+		
	Community Support	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Instructional Practice & Support	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Self-Efficacy																							
	District Vision						+			+			+			+			+			+		
	Parent Survey	Respectful School Community	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Information about Student Expectations & Progress							+		+			+			-		-							
Academic Planning Information												+												
Support for Parental Involvement							+		+			+												
Teacher Expectations				+			+		+			+			-		-							
Parental Assistance, Communication & School Involvement		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
Parental Assistance, Communication & School Involvement (SUM)		+		+		+	+		+		+		+		+		+		+		+			
My child's school is a safe learning environment	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
Student Climate Survey	Behavioral Environment	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
	Adult Fairness and Respect		-	+		+		+		+		+		+		+		+		-	+			
	Student Engagement		-																					
	Academic Self-Confidence			+		+		+		+		+		+		+		+		-	+			
	Teacher Expectations																							

Note. The + symbol indicates that the correlation is significant and positive, while the - symbol indicates that the correlation is significant and negative. Correlations at the elementary level are considered significant at $p < .05$, and due to the smaller number of campuses at the secondary level, correlations are considered significant at $p < .10$.

Appendix D. Results from Multiple Regression Analyses Predicting Campus TAKS Performance

Climate Dimension		Elementary									Secondary								
		ED < 80% (n = 33)						ED > 80% (n = 46)			ED < 60% (n = 11)			ED > 60% (n = 20)					
		Math			Reading			Math	Reading		Math	Reading		Math	Reading				
		%Met	EVAAS	Net	%Met	EVAAS	Net	%Met	EVAAS	Net	%Met	EVAAS	Net	%Met	EVAAS	Net			
Respectful school environment	Managing student conduct						✓		✓						✓	✓			
	Respectful school community								✓										
	My child's school is a safe learning environment																		
	Behavioral environment	✓			✓				✓						✓				
School engagement and community involvement	Community support				✓							✓	✓	✓					
	Parental assistance, communication, and school involvement																		
	Support for parental involvement																		
	Student engagement																		
Expectations for student achievement	Student achievement press												✓						
	Self-efficacy													✓					
	Information about student expectations and progress														✓				
	Teacher expectations (parent)														✓				
Campus support for teachers	Facilities and resources			✓			✓												
	Professional development																		
	School leadership																		
	Teacher leadership														✓				
Other climate indicators	General climate																		
	District vision																		
	Academic planning information																		
	Adult fairness and respect																		

Note. The ✓ symbol indicates that the student climate variable positively predicted TAKS performance in that particular subject area and school level.