Social and Emotional Learning Technical Report:

An Analysis of Student Level outcomes, 2011–2012 Through 2016–2017

Department of
Research and Evaluation
AUSTIN INDEPENDENT SCHOOL DISTRICT

Executive Summary

This report analyzes student-level data as it pertains to the ongoing evaluation of the Social and Emotional Learning (SEL) Program in the Austin Independent School District (AISD). Specifically, student-level data (e.g., attendance, performance on the State of Texas Assessments for Academic Readiness [STAAR] in reading and math, ratings of school climate, reliable integrated trend scores [RITS, middle and high school students only], and teachers' ratings of students SEL-related personal development skills [elementary school students only] were analyzed from 2010–2011 through 2016–2017 to determine if these outcomes improved more for students participating in SEL for a longer period of time than for students participating in SEL for fewer years. Results showed that in some instances, students participating in SEL for fewer years experienced greater improvement in SEL outcomes, such as performance on STAAR, than did their peers participating in SEL for more years. However, students' ratings of school climate improved more for those students participating in SEL for more years than for students participating in SEL for fewer years. These results were more pronounced at the high school level than at the elementary and middle school levels.

Another set of analyses used students' ratings of climate and their SEL-related personal development skills to predict 2017 outcomes. Although the degree to which schools implement SEL with fidelity is strongly related to program outcomes (Lamb, 2016, 2017), assessing the influence of SEL implementation at the student level was not possible because implementation ratings were unavailable for all years and the implementation rubric changed over time. However, given that students' ratings of climate and SEL-related personal development skills are positively related to high levels of SEL implementation and outcomes of interest (i.e., STAAR performance and attendance; Lamb, 2017), these data were used to determine if these ratings predicted outcomes of interest in 2017. Figure 1 depicts this relationship. Additional analyses were conducted to determine if these relationships varied based on student racial group. Results showed that students' favorable ratings of school climate; specifically ratings of "My classmates show respect to each other" in 2014–2015 significantly predicted 2016–2017 STAAR reading and math performance. Additionally, students' 2014–2015 ratings of "I like to come to school" significantly predicted high attendance rates in 2016–2017. Most of these relationships were found across student racial groups (i.e., African American, Hispanic, and White).

Figure 1.
Relationships Between SEL Implementation, Students' Perceptions of Climate, SEL-Related Personal Development Skills, and Outcomes of Interest.

Note. The dashed arrow indicates a known relationship that cannot be tested at the student level. Light arrows indicate known relationships at the school level, and dark arrows indicate relationships that were tested for this report.

Table of Contents

List of Figures

List of Tables

Introduction

This report analyzes the influence of social and emotional learning (SEL) on student-level outcomes over time. Using the logic model created in 2016–2017 (Appendix A), which posits that over time, as a result of effective SEL implementation, students' perceptions of school climate, performance on the State of Texas Assessments for Academic Readiness (STAAR), attendance, and teachers' ratings of their students' SEL-related personal development skills (elementary school students only) will increase, while discipline and Reliable Integrated Trend Scores (RITS; middle and high school students only) will decrease. Prior evaluation reports published by Austin Independent School District's (AISD) Department of Research and Evaluation (DRE) examined these relationships at the school level (see Lamb 2016, 2017, for example) and have found that the degree to which SEL was implemented with fidelity was more strongly related to these long-term program effects (e.g., improved STAAR performance and improved student perceptions of school climate), than to years of participation in SEL. However, analyses have not yet examined the effects of SEL implementation and years of participation in SEL at the student level. This report examines those specific relationships (see Figure 1) as well as examining if student-level results varied based on student ethnicity.

Figure 2.
Relationships Between SEL Implementation, Students' Perceptions of Climate, SEL-Related Personal Development Skills, and Outcomes of Interest.

Note. The dashed arrow indicates a known relationship that cannot be tested at the student level. Light arrows indicate known relationships at the school level, and dark arrows indicate relationships that were tested for this report.

1

What is the history of SEL in AISD?

Beginning in 2010–2011, AISD partnered with the Collaborative for Academic, Social, and Emotional Learning (CASEL) to become a member of their Collaborating Districts Initiative (CDI). This partnership offered support and guidance as AISD began to phase SEL into schools. With the addition of generous donations from local and national leaders in SEL, AISD was able to provide SEL training and support to staff at all 130 AISD schools. In 2011–2012, schools began to join SEL in waves, based on their vertical team (i.e., a high school and the accompanying elementary and middle schools that feed into it). All 130 schools had joined by the 2015–2016 school year (Figure 2).

Figure 2.
The Five-Year Plan to Implement SEL Into All 130 AISD Schools
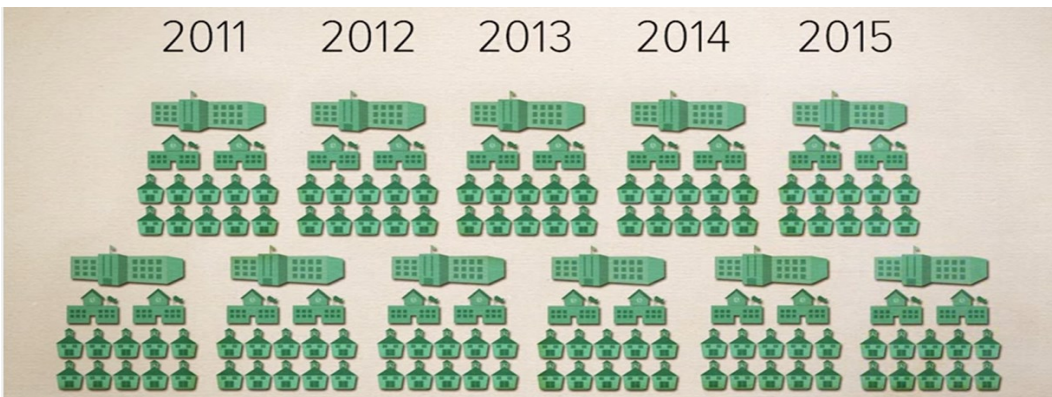
An integral component of how SEL was effectively implemented district wide was the work of the SEL specialists. Unique to AISD is the use of 12 SEL specialists, as well as one mindfulness specialist and one parent specialist, all of whom work with school staff, families, community members, and district staff to effectively implement SEL at each of the schools they serve. Specialists are assigned to specific schools, based on school level (i.e., elementary, middle, or high school), and focus their work on the following areas: explicit SEL instruction, integration in school culture and climate, integration in pedagogy, and collaborating with families and communities (Figure 3). Because the specialists' work is school-specific, SEL implementation differs from school to school. In

Figure 3.
Four Focus Areas Driving SEL's Implementation in AISD

How do you intentionally teach the knowledge and skills of SEL?

How do you intentionally create SEL opportunities for families and community members?
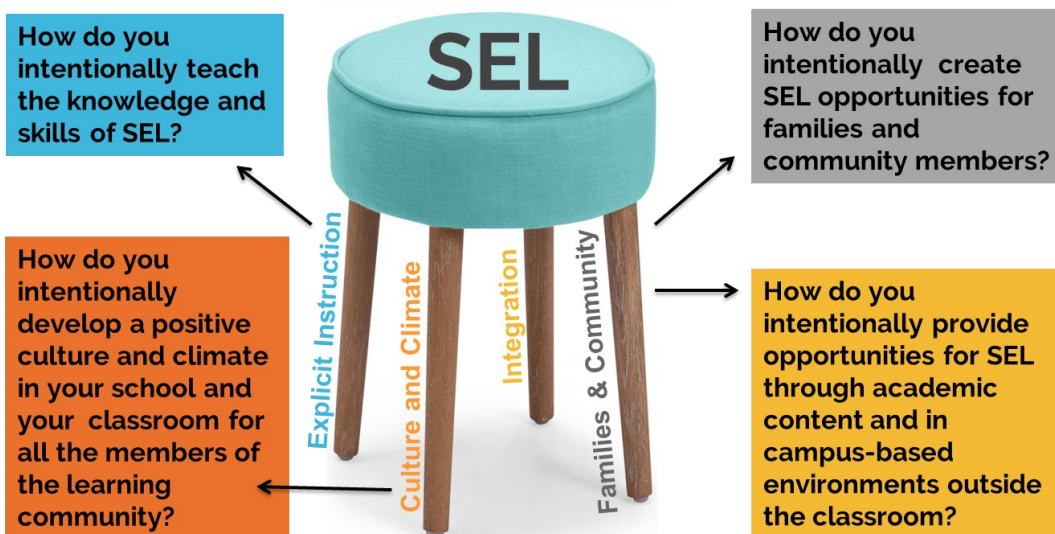
How do you intentionally develop a positive culture and climate in your school and your classroom for all the members of the learning community?

How do you intentionally provide opportunities for SEL through academic content and in campus-based environments outside the classroom?

Explicit Instruction

Culture and Climate

Integration

Families & Community

SEL

2

order to help guide the work, all specialists use the same SEL framework to teach school and district staff specific SEL skills (Figure 4). AISD's SEL framework wheel is based on the framework wheel originally developed by CASEL. AISD leaders, community members, SEL specialists, teachers, staff, students, and parents worked together to revise the framework in the 2016–2017 school year to be more inclusive and equitable, referred to as SEL 2.0. The new framework focuses on the following areas: executive functions and responsible decision-making, self-awareness and self-management, and, social awareness and relationship skills. These skills help the learner (i.e., student, teacher, parent) develop higher-level proficiencies such as academic tenacity and curiosity, self-identity and agency, and a sense of belonging and cultural consciousness. Importantly, these skills and proficiencies require a strong foundation through safe, inclusive, culturally responsive, academically engaging, and equitable learning environments. Specialists use this wheel as a tool to help teach those with whom they work how to use and model these SEL skills. The long-term goal is that effectively implementing this framework leads to positive student-level outcomes such as an increase in attendance, a decrease in disciplinary infractions, an increase in positive perceptions of school climate, and an increase in academic achievement (see the logic model presented in Appendix A). These long-term student-level outcomes were the focus of the analyses conducted for this report.

Figure 4.
AISD's Framework for SEL Implementation.

Did students who participated in SEL for a longer period of time experience better outcomes than did their peers who participated in SEL for fewer years?

How were data sources compiled for this analysis?

To address this question, available student-level data (i.e., attendance, STAAR, personal development skill report card ratings) from the 2010–2011 school year (which was the year prior to district SEL implementation) through the 2016–2017 school year were linked to identified student-level climate data from 2014–2015 through 2016–2017. Because of attrition and some students not having complete data for all years, the final sample of students was 85,271; however, not all of these students had data for each of the variables at each time point. Additionally, as noted on pages 2 and 3, some data sources, although available for prior years, had too few students from the 2010–2011 school year with available data. As a result, longitudinal data were included for the year with the most available data. After this final data set was created, students were flagged for the total number of years they had participated in SEL (meaning that they were at a school implementing SEL). For example, an elementary or middle school student with available data from the 2011–2012 school year who was also attending a school in the first SEL cohort, and continued to be enrolled in SEL schools through 2016–2017, was flagged as participating in SEL for 6 years. If, however, a student was attending a school that implemented SEL in 2011–2012, but only had data available for 2016–2017, he or she were flagged as participating in SEL for only 1 year. As another example, if an elementary school student had data from 2011–2012 but did not attend an SEL school until middle school in 2015–2016, he or she was flagged as having participated in SEL for 2 years. Due to the many codes resulting from this process, students were then grouped into two groups: (a) having been influenced by SEL for 1, 2, or 3 years or (b) having been influenced by SEL for 4, 5, or 6 years. Analyses were then conducted to examine the change in student outcomes over time for students in these two groups, as well as an analysis of 2016–2017 outcomes based on these two student groups. Additionally, too few students had discipline data at each time period, so discipline data were excluded from analyses in this report.

Did improvements in outcomes over time differ based on years of participation in SEL?

The percentage change in each student-level outcome (i.e., students' ratings of climate over time, attendance over time, STAAR NCE scores over time) was calculated. Differences in these changes were analyzed based on years of participation in SEL (as defined in this report). Results from these analyses found few instances in which students who had participated in SEL for more years also experienced more positive changes in outcomes of interest (i.e., attendance, school climate, STAAR NCE scores) than did their peers who had been participating in SEL for fewer years. In fact, students from schools participating in SEL for fewer years who were enrolled in elementary school in 2016–2017 experienced a statistically significantly greater improvement in 2016–2017 STAAR NCE scores in reading and math than did elementary school students participating in SEL for more years (an increase of 14% in reading and math for students participating in SEL for fewer years, and an increase of 3% in reading and 5% in math for students participating in SEL for more years in SEL). This could be due to characteristics

of schools joining SEL in later years (e.g., better baseline performance on STAAR, compared with performance in schools joining SEL in earlier years). Additionally, at the high school level, students' RITS increased significantly more, meaning there was an increase in indicators (e.g., disciplinary referrals and absenteeism), for students with more years of SEL influence (an increase of 217%) than for students with fewer years of SEL influence (an increase of 170%). This difference could be the result of RITS generally being higher in upper grades, on average, than in lower grades.

Students enrolled in middle school in 2016–2017 participating in SEL for fewer years experienced a statistically significant greater increase in their ratings of "My classmates show respect to each other" than did students participating in SEL for more years (an increase of 1% and a decrease of 3%, respectively). Conversely, students enrolled in middle school in 2016–2017 with more years of SEL participation experienced a significantly greater increase in their ratings of "Students at my school are bullied" than did students participating in SEL for fewer years (increases of 12% and 1%, respectively). This result has been found at the school level (Lamb, 2015, 2017) and is likely due to students becoming more aware of bullying after receiving SEL instruction for multiple years.

Importantly, students enrolled in high school in 2016–2017 who participated in SEL for more years experienced significantly greater improvement over time on their ratings of school climate than did their peers who participated in SEL for fewer years (Figure 5). Most notably, students' belief that their "Classmates show respect to other students who are different" increased more from 2014–2015 to 2016–2017 for students participating in SEL for more years than for students participating in SEL for fewer years. Too few matched cases were found at the elementary school level to examine student-level school climate outcomes over time.

Figure 5.
Perceptions of school climate improved significantly more for high school students participating in SEL for more years than for students participating in SEL for fewer years.
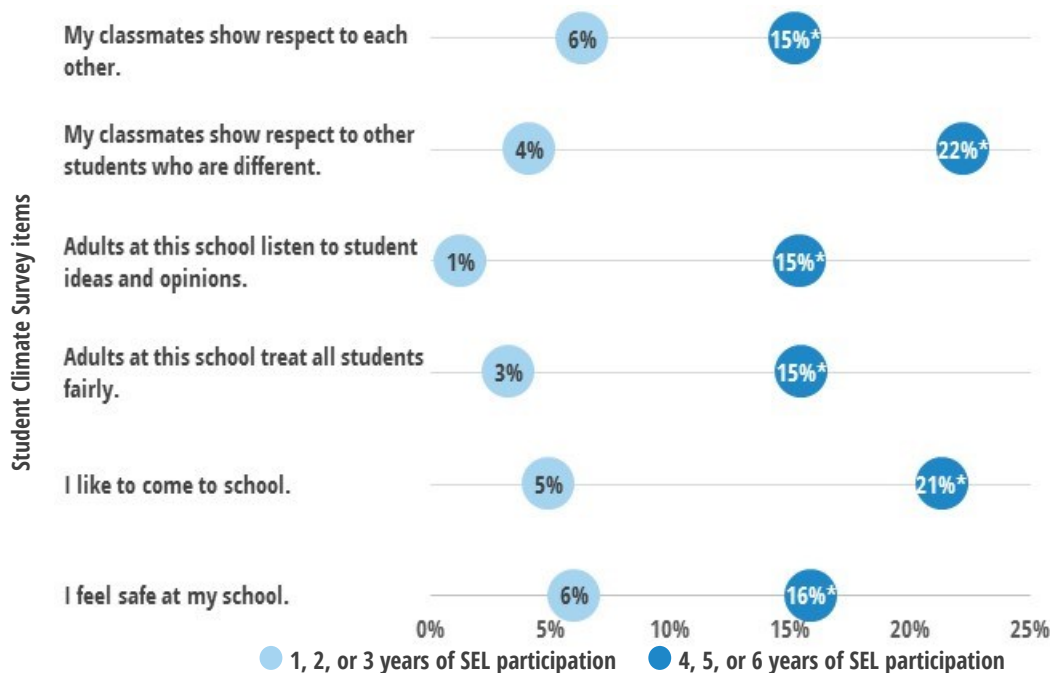
Source. 2014–2015 through 2016–2017 matched student responses to the Student Climate Survey
* Percentages are significantly different from each other within survey item where $p < .05$.

Which student-level factors predicted 2016–2017 outcomes?

As documented in several reports examining school level effects, the degree to which a school has implemented SEL with fidelity relates to strong program outcomes, even after controlling for years of participation in SEL (Lamb 2016, 2017). To conduct similar analyses at the student level was difficult due to student mobility over time (and within a single school year), lack of implementation ratings for the first few years of SEL, and a dramatic change to the implementation rubric in 2016–2017. To approximate the relationship between implementation and outcomes, students' 2014–2015 ratings of school climate, and 2013–2014 teachers' ratings of their students' SEL-related personal development skills (elementary school students only), which are both known to positively relate to high levels of SEL implementation (Lamb 2016, 2017), were used to predict 2017 outcomes, controlling for years of SEL influence. Prior to conducting regression analyses, correlations were conducted to determine which Student Climate Survey items and SEL-related personal development skill items were most related to outcomes. Items with the strongest relationships were included in regressions. Analyses were also conducted to determine if relationships varied based on student race, using separate correlations to determine which Student Climate Survey and SEL-related personal development skill items were used in the regressions.

STAAR NCE scores. Teachers' ratings of their students' SEL-related personal development skills (gathered from 2013–2014) and 2014–2015 Student Climate Survey data were used to determine which factor (if any) predicted student performance on 2016–2017 STAAR math and reading,[1] after controlling for how long a student had participated in SEL. Results showed that for students enrolled in elementary school in 2016–2017, receiving high ratings from their teachers for taking responsibility for their own actions in 2013–2014 significantly predicted their 2016–2017 STAAR math NCE scores (ß = 2.18, p < .05) and reading NCE scores (ß = 2.50, p < .01). These results remained after controlling for years of participation in SEL and 2014–2015 STAAR math and reading performance. Additionally, elementary school students believing that their classmates respected each other in 2014–2015 significantly predicted STAAR reading performance in 2016–2017, after controlling for years of SEL participation and 2014–2015 reading performance (ß = 1.46, p < .03).

Elementary and middle school students' agreement that their classmates showed respect to each other in 2014–2015 significantly predicted 2016–2017 STAAR reading.

At the middle school level, results were similar. Specifically, for students enrolled in middle school in 2016–2017, believing that their classmates showed respect to each other in 2014–2015 significantly predicted their 2016–2017 STAAR math (ß = 1.63, p = .04) and reading NCE scores (ß = 1.49, p = .03), after controlling for years of SEL participation and 2014–2015 reading and math performance. Additionally, receiving

[1] STAAR performance was assessed by computing NCEs. For more information see sidebar on pg. 3

high ratings from their teachers on their ability to take responsibility for their own actions in 2013–2014 also significantly predicted 2016–2017 math (ß = 2.87, p <.01) and reading (ß = 3.11, p <.01), after controlling for years of SEL participation and 2014–2015 reading and math NCE scores.

Due to the fact that students typically take EOC exams only once per subject area, similar analyses were not conducted at the high school level.

> **For African American and Hispanic elementary school students, 2013–2014 ratings from their teachers of their ability to take responsibility for their own actions significantly predicted their 2016–2017 STAAR math performance.**

Predicting 2016–2017 STAAR performance, by student race. A similar set of analyses was conducted separately, based on students' racial group. It should also be noted that some student groups had few cases with longitudinal data; therefore, results are exploratory in nature and used p values of .10 and lower as an indicator of statistical significance (Table 1).

Math. At the elementary school level, results were similar to those presented for the full sample (Table 1). That is, for African American and Hispanic students receiving high 2013–2014 ratings from their teachers of their ability to take responsibility for their own actions significantly predicted their 2016–2017 STAAR math NCE scores (African American: ß = 8.40, p = .03; Hispanic: ß = 2.72, p = .02), after controlling for years of participation in SEL and 2014–2015 math NCE scores. White students believing that their classmates showed respect to each other significantly predicted their STAAR math performance, after controlling for years of participation in SEL and 2014–2015 math performance (ß = 2.2, p < .01; Table 1).

Table 1.

For White and Hispanic students, receiving high ratings from their teachers regarding their ability to take responsibility for their own actions significantly predicted 2016–2017 reading performance.

	Race/Ethnicity	My classmates show respect to each other (2014–2015 Student Climate Survey)		Takes responsibility for own actions (2013–2014 teacher report card ratings of students personal development skills)		Years of SEL participation	
		Math	**Reading**	**Math**	**Reading**	**Math**	**Reading**
Elementary	**African American** (*n* = 37)	†	†	✓	†	†	—
	Hispanic (*n* = 303)	†	✓	✓	✓	—	†
	White (*n* = 414)	✓	✓	†	✓	—	†
Middle	**African American** (*n* = 21)						
	Hispanic (*n* = 286)	†	†	✓	✓	†	†
	White (*n* = 325)	†	†	†	✓	†	†

Source. 2014–2015 through 2016–2017 matched student responses to the Student Climate Survey; 2013–2014 through 2016–2017 teacher ratings of students' personal development skills, and 2014–2015 through 2016–2017 student performance on STAAR converted to NCE scores.
Note. Student groups with fewer than 30 students were excluded from analyses.
✓indicates a positive significant relationship predicting STAAR performance, p < .10; — indicates a significant negative relationship predicting STAAR performance, p <.01; † indicates a non-significant relationship predicting STAAR performance; blank cells indicate too few cases for analyses.

At the middle school level, for Hispanic students receiving high 2013–2014 ratings from their teachers of their ability to take responsibility for their own actions significantly predicted their 2016–2017 math, after controlling for years of participation in SEL and 2014–2015 math (ß = 2.93, p = .02). There were too few middle school African American students with longitudinal data to include in the analysis (Table 1).

Reading. For Hispanic and White elementary school students, believing that their classmates showed respect to each other in 2014–2015 predicted their 2016–2017 reading NCE scores, after controlling for years of SEL participation and 2014–2015 reading performance (Hispanic: ß = 2.17, p = .04; White: ß = 1.74, p = .09). Additionally, for Hispanic and White elementary school students, receiving high 2013–2014 ratings from their teachers for their ability to take responsibility for their own actions significantly predicted their 2016–2017 reading performance, after controlling for years of SEL participation and 2014–2015 reading performance (Hispanic: ß = 3.45, p < .01; White: (ß = 2.39, p = .06).

At the middle school level, for Hispanic and White students, receiving high 2013–2014 ratings of their ability to take responsibility for their own actions predicted their 2016–2017 reading performance, after controlling of years for SEL participation and 2014–2015 reading (Hispanic: ß = 1.86, p < .09; White: ß = 4.31, p < .01; Table 1). No significant relationships were found between student climate and math or reading NCE scores across all racial groups.

Attendance. Students' 2014–2015 ratings of school climate and teachers' 2013–2014 ratings of their students SEL-related personal development skills (elementary school students only) were used to predict students' 2016–2017 attendance, controlling for years of SEL participation and 2010–2011 attendance. For students enrolled in elementary school in 2016–2017, the only factor that predicted attendance was years of SEL participation, which negatively predicted students' attendance in 2016–2017 (ß = -1.53, p < .01). This relationship could be influenced by the fact that attendance rates generally decline in the upper grade levels. For middle school students, stating that they liked to come to school in 2014–2015 (ß = .46, p = .01) and being rated by their teachers as taking responsibility for their own actions in 2013–2014 (ß = .79, p < .01) predicted attendance in 2016–2017, after controlling for years of SEL participation and 2010–2011 attendance. Although the relationship was negative, years of SEL participation was the only factor that predicted high school students' 2016–2017 attendance (ß = -1.09, p < .01). This relationship was also negative, which is likely related to the decline in attendance rates in high school.

Predicting 2016–2017 attendance, by student race. A similar set of analyses was conducted separately based on students' racial group. As was the case when predicting STAAR performance based on student race, some student groups had few cases with longitudinal data; therefore, results are exploratory in nature and used p values of .10 or less to indicate statistical significance (Table 2). For Hispanic elementary school students, 2014–2015 ratings of "My

> **For Hispanic middle school students, stating that they liked to come to school in 2014–2015 significantly predicted 2016–2017 attendance.**

classmates show respect to each other" negatively predicted their 2016–2017 attendance (ß = -.93, p = .03), as did years of participation in SEL (ß = -1.15, p = .09). There were no significant predictors of attendance for White elementary school students, and too few cases to examine in African American students' data (Table 2).

For Hispanic students enrolled in middle school in 2016–2017, stating that they liked to come to school in 2014–2015 positively predicted their 2016–2017 attendance (ß = .93, p < .01). For White middle school students, being rated as taking responsibility for their own actions in 2013–2014 (ß = .68, p = .07) and believing that their classmates showed respect to each other in 2014–2015 (ß = .58, p = .06) positively predicted their 2016–2017 attendance, after controlling for years of SEL participation and 2010–2011 attendance (Table 2).

Finally, for White students enrolled in high school in 2016–2017, stating that they liked to come to school in 2014–2015 positively predicted their 2016–2017 attendance (ß = .39, p < .01), after controlling for years of SEL participation and 2010–2011 attendance (Table 2).

Table 2.
For Hispanic middle school students and White high school students, reporting that they liked to come to school in 2014–2015 predicted high attendance rates in 2016–2017.

	Race/Ethnicity	I like to come to school (2014–2015 Student Climate Survey)	My classmates show respect to each other (2014–2015 Student Climate Survey)	Takes responsibility for own actions (2013–2014 teacher report card ratings of students personal development skills)	Years of SEL participation
Elementary	African American (*n* = 21)				
	Hispanic (*n* = 192)	†	—	†	—
	White (*n* = 51)	†	†	†	†
Middle	African American (*n* = 21)				
	Hispanic (*n* = 276)	✓	†	†	†
	White (*n* = 305)	†	✓	✓	†
High	African American (*n* = 83)	†	†	†	†
	Hispanic (*n* = 921)	†	†	†	—
	White (*n* = 422)	✓	†	†	†

Source. 2014–2015 through 2016–2017 matched student responses to the Student Climate Survey; 2013–2014 through 2016–2017 teacher ratings of students' personal development skills, and 2010–2011 through 2016–2017 AISD attendance data.
Note. Student groups with fewer than 30 students were excluded from analyses.
✓indicates a positive significant relationship predicting attendance, p < .10; — indicates a significant negative relationship predicting attendance, p <.01; † indicates a non-significant relationship predicting attendance; blank cells indicate too few cases for analyses. There are fewer elementary school students in this sample because fewer elementary students enrolled in 2016–2017 were enrolled in AISD in 2010–2011.

Students' SEL-related personal development skills. Elementary school students' SEL-related personal development skill ratings have been shown to positively relate to SEL implementation (Lamb, 2017; see Figure 1). To determine what factors might influence these ratings, analyses were conducted to determine if students' ratings of student climate in 2014–2015 predicted how their teachers rated them across an average of five SEL-related personal development skills (i.e., takes responsibility for own actions, respects self and others, manages emotions constructively, interacts cooperatively with peers, and interacts cooperatively with adults). Given the fact that SEL specialists work to improve the culture and climate of a school, it is likely that students' SEL personal development skills are related to their overall perceptions of climate. Results showed that after controlling for average 2013–2014 SEL-related personal development skill ratings and years of SEL participation, believing that adults at their school listened to students' ideas and opinions predicted students' average 2016–2017 personal development skill ratings ($ß = .04$, $p = .04$). These results suggest a relationship between how students feel they are being treated by adults, and in turn,

> **For African American and White elementary school students, believing that adults at their school listened to students' ideas and opinions in 2014–2015 significantly predicted 2016–2017 SEL-related personal development skill ratings.**

adults' perceptions of their students' SEL skills. These relationships speak to the importance of fostering adults' SEL skills and building relationships, major goals of SEL 2.0.

Predicting 2016–2017 SEL-related personal development skills ratings, by student race.
Parallel analyses were conducted based on student race. Similar results were documented for African American students and White students enrolled in elementary school in 2016–2017. That is, after controlling for years of SEL participation and 2013–2014 average SEL-related personal development skill ratings, for African American and White students, believing that adults at their school listened to student ideas and opinions in 2014–2015 significantly predicted average personal development skill ratings in 2016–2017 (White: $ß = .04$, $p = .04$; African American: $ß = .27$, $p = .06$; Table 3). Because some student groups had few students with longitudinal data, analyses were exploratory and used p values of .10 to determine statistical significance.

Table 3.
For African American and White elementary school students, reporting that adults listened to students' ideas and opinions in 2014–2015 predicted high SEL-related personal development skill report card ratings 2016–2017.

	Race/Ethnicity	Adults at this school listen to student ideas and opinions (2014–2015 Student Climate Survey)	Years of SEL participation
Elementary	African American (*n* = 36)	✓	†
	Hispanic (*n* = 339)	†	†
	White (*n* = 480)	✓	✓

Source. 2014–2015 through 2016–2017 matched student responses to the Student Climate Survey and 2013–2014 through 2016–2017 teacher ratings of students' personal development skills.
Note. ✓ indicates a positive significant relationship predicting SEL-related personal development skills, $p < .10$; — indicates a significant negative relationship predicting SEL-related personal development skills, $p < .01$; † indicates a non-significant relationship predicting SEL-related personal development skills; blank cells indicate too few cases for analyses

Conclusion

Using student-level longitudinal data, this report examined the influence of SEL on student-level outcomes over time to determine if students who had participated in SEL for a longer period of time experienced more positive changes in their STAAR performance, attendance, ratings of school climate, and teachers' ratings of students' SEL-related personal development skills (elementary school students only) than did students who had participated in SEL for fewer years. Results showed that elementary school students who were less influenced by SEL experienced greater growth over time on STAAR than did students who were more influenced by SEL. However, high school students who had participated in SEL for more years experienced greater growth in their positive perceptions of school climate than did their peers who participated in SEL for fewer years.

Recent research in AISD found that school climate is one of the more prominent outcomes related to strong SEL implementation and is a major focus of the work of the SEL specialists (Lamb, 2017). Given this strong relationship, students' 2014–2015 ratings of school climate and teachers' ratings of their students' SEL-related personal development skills, which are also known to positively relate to high levels of SEL implementation, were used to predict 2017 student outcomes (Lamb, 2017). Results from these analyses showed that elementary and middle school students' favorable ratings of school climate, specifically ratings of "My classmates show respect to each other" in 2014–2015, significantly predicted 2016–2017 STAAR reading and math performance. Additionally, middle school students' ratings of "I like to come to school" significantly predicted high attendance rates in 2016–2017. Finally, believing that adults at their school listened to students' ideas and opinions predicted students' average 2016–2017 personal development skill ratings. These results speak to the importance of relationship building between students and teachers, a major component of SEL 2.0.

Although exploratory, most of these results were also found across student racial groups (i.e., African American, Hispanic, and White). For example, for Hispanic elementary school students, believing their classmates respected each other significantly predicted high math NCE scores in 2016–2017. Additionally, for African American and Hispanic elementary school students, receiving high 2013–2014 ratings from their teachers of their ability to take responsibility for their own actions significantly predicted their 2016–2017 STAAR math performance. Finally, for Hispanic middle school students and White high school students, stating that they liked to come to school in 2014–2015 predicted high student attendance rates in 2016–2017.

Taken together, these results corroborate those found at the campus level, highlighting the importance of improving students' perceptions of school climate to address long-term outcomes such as academic achievement and attendance. Additionally, these results reinforce SEL specialists' work with school leaders to improve school climate. Importantly, school leaders can use results presented in this report to seek ways to specifically improve how students feel about their school, their feelings of being respected, and feelings about coming to school. Doing so will build a strong foundation not only for improving students' experiences in school, but also for lifelong outcomes.

Appendix A – SEL Logic Model

Strategic priorities	Inputs	Short-term outputs (3 years)	Long-term outcomes (4+ years)
1) Strengthen AISD's culture by embracing the principles of Social and Emotional Learning district-wide (from the board room to the classroom and into the community).	**Explicit SEL instruction** • Invest two SEL facilitators for each school and provide a monetary stipend to each SEL facilitator. • SEL specialists move work to support a campus-based leadership approach rather than a one-on-one individual teacher approach • Direct support and training of school staff in School Connect and Second Step (now available online)	**Explicit SEL instruction** • Improved program fidelity on SEL implementation (*Explicit SEL instruction* and *Coordination of SEL climate and pedagogy*) • 100% of ES and MS will engage in direct SEL instruction via Second Step • 100% of high schools will regularly provide opportunities for students to apply and use SEL language and skills in the classroom (PBL, service learning)	**Explicit SEL instruction** • Improved program fidelity across all strands of the SEL implementation rubric • Students and staff are included in developing and disseminating SEL instruction • AISD students demonstrate growth in AISD's targeted SEL skill areas (SCS; personal development skill report card ratings)
2) Develop the social and emotional knowledge and competencies of all district staff to create the environments that optimize teaching and learning.	**Model SEL schools** • Design and implement a rigorous application process that requires schools to use data to identify growth goals to deepen SEL practices and report on progress • Identify SEL seed schools piloting the revised model school application	**Model SEL schools** • Support up to 30% of schools/level to become a Model SEL school • Increase equitable representation of AISD among model schools • Use data to identify best SEL practices from Seed schools • Improved program fidelity on SEL implementation rubric (*Empowering campus leadership* and *coordination with climate and pedagogy*)	**Model SEL schools** • Improved ratings on school climate on SCS and TELL in SEL Seed Campuses • Improved staff satisfaction (TELL) and retention in SEL Seed Campuses • Improved student outcomes in SEL Seed Schools (academic performance, attendance, disciplinary referrals) • Seed schools share best practices (and data sources) with other AISD schools
3) Leverage the implementation of Social and Emotional Learning to advance AISD's commitment to cultural proficiency, inclusiveness, and equity.	**Integration of SEL, MTSS and Student Health** • Establish joint professional learning opportunities (TBRI, restorative practice, mindfulness) • Implement shared framework (Bruce Perry's Neurosequential Model for Education, NME) • Establish regular communication between departments on how best to support high priority schools • Establish regular use of eCST to house student/staff support data	**Integration of SEL, MTSS and Student Health** • Improved staff ratings of climate (TELL) • Improved teacher retention • Improved coordination of school-level plans and interventions (ECS) • Increased proficiency among teachers in trauma-informed practices (ECS) • Increased capacity to provide ongoing supports to students, staff, and families • Increased staff satisfaction with integrated support provided by SEL, MTSS, and Student Health (ECS)	**Integration of SEL, MTSS and Student Health** • Improved school culture/climate district-wide • Improved integrated systems to monitor health for all students (e.g., mental health, physical health, and SE health) • Improved student outcomes district-wide: (academic performance, attendance, disciplinary referrals)
4) Develop an innovative, integrated system of social, emotional, and mental health support for students that includes and extends beyond SEL	**SEL 2.0** • Share signature practices with administrators and school staff • Regular and ongoing presentation of SEL 2.0 priorities • Update website and materials to reflect SEL 2.0 • Align SEL implementation rubric, SEL activity log, and evaluation plan to reflect SEL 2.0	**SEL 2.0** • Improved program fidelity on SEL implementation rubric • Establish best practices of SEL specialists and facilitators using the implementation rubric and activity log	**SEL 2.0** • Improved program fidelity on SEL implementation rubric district-wide • Schools will meet campus SEL goals established on SEL implementation rubric • Improved staff ratings of SEL skills district-wide
5) Contribute to the national evidence base for Social and Emotional Learning, and continue to advance AISD's reputation as a national leader of this work.	**Prekindergarten (PreK)–2nd grade suspension ban** • Pilot and train all PreK–2 teachers and counselors in alternate methods to address discipline (i.e., TBRI, restorative practices, mindfulness) • Create TBRI coordinator • Create a tiered system of support for highest risk students **SEL professional pathway for teachers (PPfT)** • Develop in-depth training for 150 teachers per 2-year cohort for an SEL micro-credential (and stipend)	**(PreK)–2nd grade suspension ban** • Create RITS for PreK-2 students • Improve student ratings of student engagement (SCS) • Improved student personal development skill report card ratings • Improved staff retention in PreK-2 campuses • Increased use of alternative methods to address discipline (ECS; TELL) **SEL PPfT micro-credential** • Improved program fidelity on SEL implementation rubric • Improved staff perceptions of SEL skills and school climate (TELL) • Improved teacher retention • Increase in school staff offering SEL trainings	**Integration of SEL, MTSS and Student Health** **SEL PPfT micro-credential** • Improved program fidelity on SEL implementation rubric district-wide • Improved PPfT ratings district-wide • Improved staff perceptions of SEL skills and school climate (TELL) district-wide • Improved teacher retention district-wide

Vision: All students belong to a welcoming and affirming learning environment that cultivates academic, social, and emotional learning and enables them to internalize the competencies and dispositions to thrive in life.

Rationale: Because academic learning is inextricably linked to social and emotional learning, students are more likely to realize their full academic potential in teaching and learning environments that are physically and emotionally safe, and that foster a sense of belonging, agency, curiosity, and academic tenacity.

References

Lamb, L. M. (2015). *Social and emotional learning in the Austin Independent School District: Key outcomes over time.* (DRE publication No. 14.66 RB). Austin, TX: Austin Independent School District.

Lamb, L. M . (2016). *Social and emotional learning: The effects of program implementation and longevity, 2011–2012 through 2015–2016.* (DRE publication No. 15.73). Austin, TX: Austin Independent School District.

Lamb, L. M . (2017). *Social and emotional learning: The effects of program implementation and longevity, 2011–2012 through 2016–2017.* (DRE publication No. 16.55). Austin, TX: Austin Independent School District.

Funding