Department of Research and Evaluation
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2013–2014 Social Emotional Learning (SEL) Update

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EXECUTIVE SUMMARY

In partnership with the Collaborative for Academic, Social, and Emotional Learning (CASEL), the first cohort composed of 24 Austin Independent School District (AISD) schools began implementation of the Social Emotional Learning (SEL) program in 2011–2012. Each year, additional schools joined SEL, based on their vertical team,[1] with all AISD campuses scheduled to implement SEL by the 2015–2016 school year.

This is the first in a series of reports that will analyze the effectiveness of SEL, based on program implementation year or cohort. Currently, the following vertical teams comprise the first three cohorts of SEL: Austin High School vertical team, Crockett High School vertical team, Eastside High School vertical team, McCallum High School vertical team, Travis High School vertical team, Akins High School vertical team, and part of the LBJ High School vertical team. In total, educators at 71 schools ranging from an early childhood center to high schools, have received SEL training.

Examinations of various program outcomes across SEL cohorts suggest that the longer schools have participated in SEL, the more positive the outcome. Specifically, schools that entered SEL in cohort 1 (i.e., the 2011–2012 school year) had higher ratings of integration of SEL in their campus than did schools in cohorts 2 (i.e., the 2012–2013 school year) or 3 (i.e., the 2013–2014 school year). Interestingly, overall campus implementation ratings of SEL did not vary by cohort. Campus staffs' ratings of SEL-related activities, however, were higher for cohort 1 than for cohorts 2 or 3. For example, staff in cohort 1were more likely to agree that promoting students' social and emotional learning was a central part of their school, the culture at their school supported SEL, they received coaching support to implement SEL, their principal modeled SEL behaviors, and students understood and managed their emotions. Similarly, campus staffs' ratings of achievement press, community support and engagement, and attachment to school were higher at campuses in cohort 1 than in cohort 3. Students attending schools in cohort 1 also reported less frequent bullying behaviors on their campus than did students attending schools in cohort 3. At the elementary school level, teachers' report card ratings of their students' personal development in all domains were higher in cohort 1 than in cohort 3 in kindergarten and 2nd- and 5th -grades. Importantly, at campuses participating in SEL since 2011–2012, the percentage of students meeting the state standard on the State of Texas Assessment of Academic Readiness (STAAR) reading and math increased significantly from 2011–2012 to 2013–2014. Finally, years in SEL significantly predicted program implementation and integration at the secondary level.

Results for SEL schools were favorable regardless of years in SEL. For example, students' discipline rates improved significantly over time in all cohorts. At the elementary school level, SEL integration ratings were positively related to students' performance in STAAR science; students' ratings of behavioral environment; and teachers' ratings of campus climate variables (i.e.,

[1] Vertical teams are defined as the elementary and middle schools that generally feed into a high school. In AISD, each high school has a vertical team.

achievement press, community support and engagement, and instructional practice and support). Finally, elementary schools with higher ratings of SEL integration showed greater improvement in students' and teachers' perceptions of some campus climate factors than did schools with lower ratings.

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WHAT IS SOCIAL EMOTIONAL LEARNING?

In 2011–2012, in collaboration with the Collaborative for Academic, Social, and Emotional Learning (CASEL), AISD began implementation of the Social Emotional Learning (SEL) program to help Austin Independent School District (AISD) students and staff "acquire and effectively apply the knowledge, attitudes and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (CASEL, n.d.). In 2011–2012, the first cohort of schools began implementing SEL, with all schools set to implement the program by 2015–2016 (see Appendix A for a list of vertical teams and cohorts for each school). The SEL program aims to improve students' and staff members' attitudes and beliefs about SEL competencies (i.e., self-awareness, self-management, social awareness, responsible decision making, and relationship skills); to improve the culture on campuses; to promote SEL skills; to decrease disciplinary referrals; and to improve student achievement. The logic model in Appendix B describes both the short-term and long-term goals of SEL in AISD.

WHAT ANALYSES WERE CONDUCTED FOR THIS REPORT?

Although prior analyses of the SEL program in AISD compared SEL schools with non-SEL schools, analyses in this report did not compare SEL schools with non-SEL schools for several reasons. Most importantly, the schools participating in SEL were self-selected and espoused characteristics believed to benefit the most from the SEL program (e.g., school need status, school disciplinary referral rates, school dropout rates, school climate, and school academic performance). Additionally, very few non-SEL schools remain, leaving few non-SEL comparison schools. Finally, all non-SEL schools will become SEL schools by 2015–2016, leaving a true comparison with non-SEL impractical. To more accurately evaluate the effectiveness of SEL, differences will be analyzed within SEL schools, based on SEL cohort year and using outcome data gathered from various district resources.

About this report

This report summarizes data gathered during the 2013–2014 school year with the purpose of evaluating the influence of SEL by cohort.

Data Sources Used in This Report

- Student discipline data (excluding truancy codes) for all AISD students, at the campus and student levels, from 2010–2011 through 2013–2014
- 2013–2014 Student Climate Survey for students in grades 3–11
- 2013–2014 Employee Coordinated Survey data (ECS) for a sample of SEL campus staff
- 2013–2014 Teaching, Empowering, Leading, Learning (TELL) campus working conditions data for a sample of campus staff
- 2013–2014 SEL implementation ratings for all participating SEL schools, provided by SEL coaches (see Appendix C for the rating rubric)
- 2013–2014 State of Texas Assessments of Academic Readiness (STAAR) and end of course (EOC) performance data for all students in grades 3–11
- 2013–2014 personal development report card ratings for prekindergarten through 5th grade students

DID CAMPUS LEVEL OUTCOMES VARY BASED ON SEL COHORT?

The following analyses were conducted to determine if campuses that implemented the SEL program for a longer period of time had higher implementation ratings, better staff ratings of staff climate and SEL-related items, better student ratings of student climate, improved campus discipline rates, and improved campus-wide performance on STAAR/EOC than did campuses in the program for less time.

SEL Implementation

To determine the fidelity of SEL program implementation on each campus, SEL coaches provided implementation ratings for each school. Implementation ratings were composed of 10 domains, with implementation ratings ranging from 0 (implementation level 1 not met) to level 3 (highest level of implementation). Total implementation scores were summed across domains. Actual scores ranged from 4 to 30, the maximum score possible. Analyses were conducted to determine if implementation domain ratings varied by SEL cohort. Although the ratings were low, schools that joined SEL in 2011–2012 (i.e., cohort 1) received significantly higher ratings for integrating SEL strategies or skills in instruction than did schools implementing SEL in later cohorts (Table 1).

Table 1. Average Campus Ratings of Social Emotional Learning (SEL) Implementation Ratings, by Domain and Cohort

SEL implementation domain	SEL cohort		
	2011–2012 (*n* = 24)	2012–2013 (*n* = 32)	2013–2014 (*n* = 14)
1. Monthly steering committee	1.00	1.28	1.36
2. Weekly explicit SEL instruction*	2.21	1.81	2.07
3. No Place for Hate®/SEL school-wide activities*	1.88[a]	2.44[a]	2.29
4. Implementation of Peace Areas (prekindergarten–5)/ Peacemaking Process (6–12)*	1.34	1.72	1.71
5. Parent education	1.29[a]	1.66	2.07[a]
6. Monthly SEL facilitator/coach meeting	1.96	2.41	2.29
7. Once per semester principal/coach meeting	1.88	1.78	1.93
8. End-of-year reflection/planning with staff or steering committee*	1.83	2.03	2.14
9. American Institutes for Research (AIR) online student survey participation rate	2.67[a]	1.88[a]	2.00
10. Integration of SEL strategies or skills in instruction*	2.54[a,b]	1.72[a]	1.71[b]
Total implementation score*	18.63	18.72	19.57

Source. 2013–2014 SEL implementation ratings.
Note. Ratings ranged from 0 (implementation level 1 not met) to 3 (highest level of implementation) and were summed across domain to get the total implementation score. Means sharing the same superscript are significantly different from each other at $p < .05$.
* Ratings at the elementary school level were significantly higher on this domain than were ratings at the secondary levels.

Interestingly, schools in cohort 2 had higher ratings for No Place for Hate® activities than did schools in cohort 1. Additionally, schools in cohort 3 had higher ratings for parent education than did schools in cohort 1. Implementation of monthly steering committee meetings received the lowest scores regardless of cohort. Total implementation scores did not vary based on SEL cohort. It should be noted that implementation ratings were higher at the elementary school level than at the secondary levels (i.e., middle and high schools) for five domains, including the total implementation score (see Table 1). Because the proportions of elementary and secondary schools entering all SEL cohorts was similar, analyses were reported for each cohort. Results of implementation score for each school level are presented in Appendix D.

Attitudes Toward SEL

To monitor campus staff members' attitudes toward SEL campus activities, analyses were conducted to determine if ratings of SEL-related activities (gathered on the Spring 2013 ECS) varied based on SEL cohort. Because the ECS was administered to a sample of SEL campus staff, the response rate at the campus level was not adequate to conduct campus-level analyses. Instead, data were analyzed at the individual respondent level for each SEL cohort. Results indicated that staff at schools in cohort 1 typically held more favorable attitudes towards SEL-related activities than did their peers entering the program in cohort 3 (Table 2).

Table 2. Average Staff Ratings of Employee Coordinated Survey (ECS) Items, by Social Emotional Learning (SEL) Cohort

Item	SEL cohort		
	2011–2012	2012–2013	2013–2014
1. Promoting students' social and emotional learning is a central part of the mission of our school.	3.43[a] (*n* = 256)	3.36[b] (*n* = 308)	3.18[a,b] (*n* = 202)
2. The district central office provides adequate professional development and coaching support to promote social and emotional development of all students at our school.	3.09[a] (*n* = 244)	3.00 (*n* = 289)	2.86[a] (*n* = 193)
3. The district and central office provides adequate materials and curricular resources to promote social and emotional development of all students at our school.	3.14[a] (*n* = 244)	3.07 (*n* = 287)	2.98[a] (*n* = 192)
4. Teachers at my school are expected to promote the social and emotional development of all students.	3.49[a,b] (*n* = 256)	3.36[a] (*n* = 304)	3.25[b] (*n* = 199)
5. The culture at my school supports social emotional learning.	3.32[a,b] (*n* = 256)	3.16[a] (*n* = 305)	3.05[b] (*n* = 200)
6. My school has successfully integrated social and emotional learning with instruction.	3.15[a] (*n* = 245)	3.00 (*n* = 289)	2.88[a] (*n* = 194)
7. There are schoolwide strategies that reinforce students' social and emotional skills outside the classroom.	3.20[a] (*n* = 246)	3.03[a] (*n* = 292)	2.87[a] (*n* = 187)

Source. Spring Employee Coordinated Survey (ECS) 2013–2014 survey, items developed in collaboration with the American Institute for Research (AIR)

Note. Means sharing the same superscript are significantly different from each other at $p < .05$. Response options ranged from 4 (*strongly agree*) to 1 (*strongly disagree*), with favorable responses ≥ 3.0.

† Response options ranged from 4 (*5 or more times*) to 1 (*never*).

* Response options ranged from 4 (*frequently*) to 1 (*never*).

For example, staff at schools in cohort 1 were more likely than were staff in cohorts 2 or 3 to agree that promoting students' social and emotional learning was a central part of their school, the culture at their school supported SEL, they received coaching support to implement SEL, their principal modeled SEL behaviors, and their students understood and managed their emotions. Regardless of cohort, ratings for items concerning the number of times staff participated in a

Table 2. Average Staff Ratings of Employee Coordinated Survey (ECS) Items, by Social Emotional Learning (SEL) Cohort, Continued

Item	SEL cohort		
	2011–2012	2012–2013	2013–2014
8. I have received coaching support to implement the social and emotional learning approach at my school.	3.15[a] (*n* = 252)	3.06[b] (*n* = 301)	2.86[a,b] (*n* = 198)
9. My school uses data effectively in an ongoing cycle of inquiry to inform and improve social and emotional learning practice.	2.94[a] (*n* = 214)	2.82 (*n* = 343)	2.64[a] (*n* = 153)
10. I feel confident in my ability to implement the social and emotional learning program that has been adopted at my school.	3.23[a] (*n* = 248)	3.09 (*n* = 295)	3.02[a] (*n* = 188)
11. My principal models social and emotional competence in the way that she/he deals with students and faculty on an everyday basis.	3.15[a,b] (*n* = 238)	2.91[a] (*n* = 273)	2.82[b] (*n* = 179)
12. How many times in the past year have you participated in professional development in social emotional learning (e.g., Second Step training, MAPS training)?†	2.19[a] (*n* = 260)	2.11 (*n* = 311)	1.96[a] (*n* = 207)
13. How many times in the past year have you received observation and coaching in social and emotional learning?†	1.81 (*n* = 260)	1.82 (*n* = 308)	1.69 (*n* = 207)
14. Please indicate how often you teach and reinforce social and emotional skills during your lessons in academic content areas.*	3.59[a,b] (*n* = 228)	3.38[a] (*n* = 265)	3.32[b] (*n* = 179)
15. My students understand and manage their emotions.	2.89[a,b] (*n* = 210)	2.73[a] (*n* = 234)	2.74[b] (*n* = 161)
16. My students set and achieve positive goals.	2.97 (*n* = 206)	2.90 (*n* = 233)	2.87 (*n* = 187)
17. My students establish and maintain positive relationships.	3.01 (*n* = 211)	2.92 (*n* = 237)	2.96 (*n* = 158)
18. My students make responsible decisions.	2.90 (*n* = 213)	2.78 (*n* = 237)	2.77 (*n* = 158)
19. My students have benefitted from SEL.	3.15 (*n* = 190)	3.09 (*n* = 210)	3.06 (*n* = 127)

Source. Spring Employee Coordinated Survey (ECS) 2013–2014 survey, items developed in collaboration with the American Institute for Research (AIR)

Note. Means sharing the same superscript are significantly different from each other at $p < .05$. Response options ranged from 4 (*strongly agree*) to 1 (*strongly disagree*), with favorable responses ≥ 3.0.

† Response options ranged from 4 (*5 or more times*) to 1 (*never*).

* Response options ranged from 4 (*frequently*) to 1 (*never*).

professional development activity in SEL or received observational coaching provided by SEL coaches were low. Despite these concerns, on average, staff from all participating cohorts agreed that their students benefitted from SEL, with average scores above 3.0. It should be noted that the significant differences reported across cohorts suggest that activities and attitudes associated with implementation of SEL were more pervasive on campuses that participated in the program for a longer time than on campuses that participated for a shorter time.

Campus Climate

One of the long-term goals of SEL is to improve the campus climate on SEL schools to promote a more supportive learning environment for both students and staff. To evaluate this goal, analyses were conducted using the AISD TELL survey, which measures various aspects of campus climate, including the degree to which campus staff believe their campus is a good place to work and learn, the degree to which campus staff press for student achievement, perceived community support and engagement, ratings of school leadership, perceptions of general climate, the degree to which staff manage student behavior, ratings of instructional practice and support, teachers' ratings of their own self-efficacy, and teachers' attachment to school. (TELL survey and campus and district reports are available online). Table 3 contains results from analyses conducted to determine if campus staff members' attitudes toward various dimensions of campus

Table 3. Average Ratings of Campus Teaching, Empowering, Leading, Learning (TELL) Items and Subscales, by Social Emotional Learning (SEL) Cohort

Item/subscale	SEL cohort		
	2011–2012 (*n* = 24)	2012–2013 (*n* = 31)	2013–2014 (*n* = 14)
Overall, my school is a good place to work and learn.	3.51	3.34	3.28
Achievement press	3.14[a]	2.99	2.94[a]
Community support and engagement	3.19[a]	3.01	2.88[a]
School leadership	3.17	3.06	3.04
General climate	3.22	3.15	3.07
Managing student conduct	3.13	3.03	3.06
Instructional practice and support	3.16	3.10	3.03
Self-efficacy	3.10[a]	3.03[a]	3.06
Attachment to school	3.24[a,b]	3.11[a]	3.06[b]

Source. 2013–2014 Teaching, Empowering, Leading, Learning (TELL) survey
Note. Means sharing the same superscript are significantly different from each other within subscale at $p < .05$. *N* counts are included in parentheses. Response options ranged from 4 (*strongly agree*) to 1 (*strongly disagree*), with favorable responses ≥ 3.0.

climate varied for each SEL cohort. Results suggest that staff at schools in cohort 1 reported greater achievement press, more support and engagement from the community, and greater overall attachment to their school than did staff at schools in cohort 3. Importantly, staff members' ratings of managing students' conduct were generally favorable at all SEL schools.

Student Climate

Improving campus climate at the student level is another goal of SEL. Specifically, SEL aims to improve students' experiences with bullying behaviors, increase students' engagement on campus and in the classroom, and improve students' perceptions of the behavioral environment in their classroom. Each spring, students complete the Student Climate Survey, which assesses five broad dimensions of student climate, including behavioral environment, adult fairness and respect, student engagement, academic self-confidence, and teacher expectations. Analyses were conducted to determine if students' ratings varied based on SEL cohort. Results suggested that students attending SEL schools in cohort 1 reported fewer incidents of bullying on their campus than did their peers attending schools in cohort 3. Campus and district reports of Student Climate Survey results are available online.

Table 4. Average Campus Ratings of Student Climate, by Social Emotional Learning (SEL) Cohort

Items/subscales	SEL cohort		
	2011–2012 (*n* = 24)	2012–2013 (*n* = 31)	2013–2014 (*n* = 15)
Students at my school are bullied (teased, taunted, threatened by other students).†	2.62[a]	2.44	2.36[a]
When bullying is reported to adults at my school they try to stop it.	3.63	3.59	3.57
Behavioral environment	3.13	3.02	2.99
Adult fairness and respect	3.47	3.45	3.45
Student engagement	3.17	3.19	3.20
Academic self-confidence	3.48	3.44	3.46
Teacher expectations	3.79	3.76	3.76

Source. 2013–2014 Student Climate Survey

† Indicates the item was reworded for the Spring 2013 survey and was reverse-scored so that higher scores are positive and in the desirable range (i.e., ≥ 3.0), suggesting a lower incidence of bullying. This elementary school version was worded slightly differently: "Students at my school are bullied (teased, taunted, messed with by other students)." Means sharing the same superscript are significantly different from each other within item at $p < .05$. Response options ranged from 4 (*a lot of the time*) to 1 (*never*), with favorable responses ≥ 3.0.

Campus Disciplinary Incidents

Another major long-term objective of SEL is to reduce the frequency of disciplinary referrals. To determine if the rate of disciplinary referrals varied by SEL cohort, campus-level discipline rates were computed by summing the number of unique incidents at each school and dividing by campus-level weighted daily attendance to yield a disciplinary incident rate for each campus for each year since 2010–2011. Next, the rate of change since the year prior to SEL implementation (i.e., the baseline year) was computed for each campus. Analyses were conducted to determine if the disciplinary rates varied by SEL cohort, and if the percentage change in disciplinary rates since campus baseline years varied by SEL cohort. Results suggested no significant differences across SEL cohort between the disciplinary rates in 2013–2014 or across the baseline years (Table 5). No significant differences were found between cohorts with respect to the percentage of change in disciplinary rates since SEL implementation. However, regardless of cohort, SEL campuses experienced statistically significant reductions in campus disciplinary rates since the year prior to SEL implementation (i.e., baseline year). Appendix E contains a detailed list of discipline data for the vertical teams and SEL cohort of each campus.

Table 5. Average Campus Disciplinary Rate, by Social Emotional Learning (SEL) Cohort

	SEL cohort		
	2011–2012 (*n* = 24)	2012–2013 (*n* = 32)	2013–2014 (*n* = 15)
Incidents per student by campus 2013-2014	.07	.11	.09
Baseline incidents per student by campus	.11	.23	.14
Percent change in incidents per student by campus from baseline year	-35%	-44%	-32%

Source. AISD discipline data from 2010–2011 through 2013–2014
Note. The number of incidents per campus was computed based on the number of unique incidents per campus, excluding truancy discipline offense codes and truancy disposition codes.

Personal Development Report Card Ratings

Another outcome of interest in the evaluation of SEL is students' report card ratings of personal development. Students enrolled in prekindergarten (pre-K) through 6th grade[2] receive ratings on domains considered integral to their personal development, many of which were designed specifically to assess SEL-related competencies. Analyses were conducted to determine if average campus personal development ratings varied by SEL cohort. Although no significant differences were found between SEL cohorts at the pre-K level, ratings at the kindergarten level

[2] Not enough elementary schools with a 6th grade participated in SEL; additionally students enrolled in early childhood centers also received personal development ratings, but only one early childhood center participated in SEL. Therefore, analyses in this report are limited to pre-K through 5th grade.

in cohort 1 were higher across all domains than were ratings in cohort 3 (Table 6). Similarly, results indicate that 2nd- and 5th-grade students in cohort 1 received significantly higher personal development ratings across all domains than did 2nd- and 5th-grade students in cohort 3 (Tables 5 and 6). Differences across cohort were not as great in grades 1, 3, and 4.

Table 6. Average Campus Report Card Ratings of Personal Development for Prekindergarten (pre-K) and Kindergarten Students, by Social Emotional Learning (SEL) Cohort

	Grade					
	Pre-K			Kindergarten		
SEL cohort Personal development domains	1 (*n* = 15)	2 (*n* = 21)	3 (*n* = 11)	1 (*n* = 18)	2 (*n* = 23)	3 (*n* = 11)
Adjusts to school routines	3.62	3.61	3.62	3.76[a]	3.69[b]	3.55[a,b]
Demonstrates healthy practices (*practices healthy habits*)	3.55	3.60	3.56	3.77[a]	3.66	3.54[a]
Works productively in large group	3.42	3.47	3.78	—	—	—
Works productively in small group	3.56	3.54	3.53	—	—	—
Works collaboratively and productively in large or small groups	—	—	—	3.50[a]	3.39[b]	3.22[a,b]
Works productively and independently	—	—	—	3.46[a,b]	3.31[a]	3.22[b]
Focuses on (*and completes*) assigned tasks	3.41	3.49	3.38	3.48[a]	3.34	3.22[a]
Responds to questions appropriately	3.48	3.49	3.43	—	—	—
Exhibits appropriate fine motor skills	3.57	3.56	3.53	3.61[a]	3.53[b]	3.38[a,b]
Participates actively in unstructured (*structured*) physical activity	3.69	3.74	3.72	3.80[a]	3.79[b]	3.56[a,b]
Manages emotions constructively	3.45	3.52	3.44	3.63[a]	3.53[b]	3.39[a,b]
Respects self and others	3.45	3.56	3.46	3.64[a]	3.54	3.42[a]
Aware of consequences for behavior	—	—	—	3.69[a]	3.65[b]	3.44[a,b]
Takes responsibility for own actions	3.43	3.51	3.42	3.62[a]	3.54	3.40[a]
Interacts cooperatively with peers	3.49	3.55	3.46	3.61[a]	3.51	3.39[a]
Interacts cooperatively with adults	3.57	3.61	3.59	3.74[a]	3.69[b]	3.54[a,b]
Solves problems appropriately	3.30	3.41	3.29	—	—	—
Follows directions	—	—	—	3.50[a]	3.36	3.26[a]

Source. 2013–2014 personal development report card ratings for pre-K and kindergarten
Note. Ratings ranged from 4 (*consistently*) to 1 (*rarely*), with favorable ratings ≥ 3.0. Means sharing the same superscript are significantly different within grade and domain at $p < .05$. SEL cohorts correspond with the following school years: 1 = 2011–2012, 2 = 2012–2013, and 3 = 2013–2014.
Language in parentheses was used to rate kindergarten students only.
— Domain was not included for this grade

Table 7. Average Campus Report Card Ratings of Personal Development for Grades 1 Through 3, by Social Emotional Learning (SEL) Cohort

Personal development domains	SEL cohort	Grade 1 (*n* = 18)			Grade 2 (*n* =23)			Grade 3 (*n* = 11)		
		1	2	3	1	2	3	1	2	3
Follows directions in all areas of school		3.37	3.37	3.29	3.46[a]	3.36	3.30[a]	3.49	3.47	3.44
Is responsible for schoolwork		3.52	3.42	3.41	3.58[a]	3.45	3.37[a]	3.55	3.56	3.49
Is responsible for completing and returning homework		3.60[a]	3.43	3.33[a]	3.60[a,b]	3.39[a]	3.36[b]	3.52	3.46	3.48
Demonstrates ability to set and achieve goals		3.51	3.41	3.82	3.59[a]	3.45	3.32[a]	3.57	3.52	3.52
Takes responsibility for own actions		3.57	3.48	3.44	3.63[a]	3.48	3.40[a]	3.62	3.54	3.51
Respects self and others		3.60	3.54	3.49	3.64[a]	3.51	3.48[a]	3.69	3.56	3.55
Manages emotions constructively		3.58	3.55	3.52	3.68[a]	3.52	3.48[a]	3.65	3.58	3.56
Interacts cooperatively with adults		3.71	3.64	3.62	3.78[a,b]	3.67[a]	3.61[b]	3.78	3.69	3.64
Interacts cooperatively with peers		3.60	3.54	3.48	3.66[a]	3.55	3.45[a]	3.66	3.57	3.52
Participates in structured physical activity		3.81	3.79	3.69	3.89[a]	3.81	3.70[a]	3.88	3.79	3.77
Makes effective decisions		3.38	3.32	3.28	3.44[a]	3.35	3.26[a]	3.48	3.41	3.41

Source. 2013–2014 personal development report card ratings for grades 1 through 3
Note. Ratings ranged from 4 (*consistently*) to 1 (*rarely*), with favorable ratings ≥ 3.0. Means sharing the same superscript are significantly different within grade and domain at $p < .05$. SEL cohorts correspond with the following school years: 1 = 2011–2012, 2 = 2012–2013, and 3 = 2013–2014.

Table 8. Average Campus Report Card Ratings of Personal Development for Grades 4 Through 5, by Social Emotional Learning (SEL) Cohort

	Grade					
	4			5		
SEL cohort / Personal development domains	1 (*n* = 15)	2 (*n* = 21)	3 (*n* = 11)	1 (*n* = 18)	2 (*n* = 23)	3 (*n* = 11)
Follows directions in all areas of school	3.56	3.42	3.52	3.60[a]	3.53[b]	3.34[a,b]
Is responsible for schoolwork	3.62	3.49	3.51	3.66[a]	3.62[b]	3.42[a,b]
Is responsible for completing and returning homework	3.58	3.44	3.43	3.61	3.54	3.41
Demonstrates ability to set and achieve goals	3.64	3.53	3.47	3.66[a]	3.58	3.44[a]
Takes responsibility for own actions	3.69[a]	3.52[a]	3.58	3.70[a]	3.58	3.42[a]
Respects self and others	3.69	3.55	3.61	3.74[a]	3.58	3.45[a]
Manages emotions constructively	3.72	3.58	3.61	3.77[a,b]	3.61[a]	3.46[b]
Interacts cooperatively with adults	3.79[a]	3.65[a]	3.69	3.78[a]	3.71[b]	3.57[a,b]
Interacts cooperatively with peers	3.71	3.57	3.60	3.74[a]	3.62	3.46[a]
Participates in structured physical activity	3.89[a]	3.82	3.75[a]	3.91[a]	3.85[b]	3.70[a,b]
Makes effective decisions	3.50	3.37	3.46	3.59[a]	3.47	3.29[a]

Source. 2013–2014 personal development report card ratings for grades 4 through 5
Note. Ratings ranged from 4 (*consistently*) to 1 (*rarely*), with favorable ratings ≥ 3.0. Means sharing the same superscript are significantly different within grade and domain at $p < .05$. SEL cohorts correspond with the following school years: 1 = 2011–2012, 2 = 2012–2013, and 3 = 2013–2014.

Student Achievement

The final long-term goal evaluated in this report concerns students' academic achievement in SEL schools. Analyses were conducted to determine if students' achievement (based on students' performance on STAAR for reading, math, and science, and EOC exams for English I, English II, Algebra I, and Biology I) varied based on SEL cohort. The percentage of students meeting the state standard in each subject area was computed at the campus level and aggregated for SEL cohorts. Due to the small number of campuses with EOC data (Table 9), statistical tests were only conducted using STAAR data. Results suggest the percentage of students meeting the state standards in reading and math was higher among schools in cohort 1 than in schools in cohort 3 (Table 7). Additionally, the percentage of students meeting the state standard in science was higher among schools in cohort 1 than in schools in cohort 2.

Finally, analyses were conducted to determine if longevity in the program influenced students' performance on STAAR. Results from these analyses found that for campuses participating in SEL since cohort 1, the percentage of students meeting the state standard on STAAR reading and math increased significantly from 2011–2012 to 2103–2014 (reading: t [21] = 4.82, $p < .01$; math: t [21] = 2.13, $p < .05$). However, because the schools in each cohort differed on a variety of factors related to student achievement, further analyses examining the interrelationships among multiple factors were conducted.

Table 9. Campus Level Percentage of Students Meeting State Standard, by Subject and SEL Cohort in 2013–2014

Percentage of students meeting the state standard in 2013–2014		SEL cohort		
		2011–2012	2012–2013	2013–2014
Statistical analysis conducted	STAAR - Math	82%[a] (n = 22)	76% (n = 28)	71%[a] (n = 12)
	STAAR - Reading	85%[a] (n = 22)	77% (n = 28)	74%[a] (n = 12)
	STAAR - Science	82%[a] (n = 22)	72%[a] (n = 28)	71% (n =12)
Descriptive analyses only	EOC - English I	73% (n = 2)	62% (n = 3)	38% (n = 3)
	EOC - English II	73% (n = 2)	59% (n = 3)	42% (n = 3)
	EOC - Algebra I	93% (n = 6)	90% (n = 8)	63% (n = 4)
	EOC - Biology I	93% (n = 2)	86% (n = 3)	59% (n = 3)

Source. 2013–2014 State of Texas Assessment of Academic Readiness (STAAR) and end of course (EOC) data
Note. Percentages sharing the same superscript are significantly different from each other within subject at $p < .05$.

WHAT WERE THE RELATIONSHIPS AMONG SEL OUTCOME VARIABLES?

To examine relationships among the various outcome measures of interest, correlations were conducted between all measures of interest (i.e., campus-level SEL implementation, campus-level SEL integration, campus-level climate data, campus-level discipline data, and campus-level STAAR data). Analyses did not include ECS data because not enough responses were available to be representative at the campus level. Personal development ratings were only included at the elementary school level and for those domains that were consistent across grade (i.e., takes responsibility for own actions, respects self and others, manages emotions constructively, interacts cooperatively with adults, and interacts cooperatively with peers). Analyses did include campus percentage of students with economic disadvantage and SEL cohort. Due to the known differences in climate and discipline data according to school level (i.e., elementary, middle, and high), correlations were conducted separately for elementary and secondary schools.[3] A significant relationship was found between SEL cohort and campus percentage of economic disadvantage at both the elementary and secondary levels, suggesting that campuses in later cohorts tended to have a higher percentage of economically disadvantaged students than did campuses joining SEL in cohort 1. Given that economic disadvantage is known to be related to many of the outcome measures of interest (Lamb, 2013), particularly student achievement data, partial correlations were conducted in subsequent analyses to control for the influence of economic disadvantage on these relationships (please contact the author for further details about zero order correlations).

Partial correlations were stronger at the elementary school level than at the secondary school level (Tables 8 and 9). At the elementary school level, several significant relationships were found between students' performance on STAAR and many of the measures of student and staff climate. Of particular interest, students' ratings of behavioral environment (the degree to which students felt respected by each other, felt safe at school, obeyed the rules, and remained on task in the classroom) were positively related to the percentage of students meeting the state standard in STAAR math, reading, and science. Similarly, campus staff members' ratings of managing students' conduct (the degree to which campus staff members believed that students followed school rules, that teaching and non-teaching staff consistently enforced the school rules, that administrators supported teachers' efforts to maintain discipline in the classroom, and that their school was considered safe) were related positively to elementary school students' performance on STAAR.

Results from the partial correlations found that higher ratings of SEL integration (one domain measured on the implementation rubric) were positively related to the percentage of elementary students passing STAAR science. SEL integration scores were also positively related to students' ratings of behavioral environment. Also of note, staff ratings of managing student conduct was negatively related to the percentage of change in elementary campus disciplinary rates,

[3] Middle and high schools were combined in these analyses due to the small number of middle and high schools in the sample.

Table 10. Partial Correlations Among Campus Factors at Social Emotional Learning (SEL) Elementary Schools, Controlling for Campus-Level Economic Disadvantage

		SEL implementation	SEL integration†	% change in rate of incidents per student since baseline year	% met math standard	% met reading standard	% met science standard	Years in SEL††
SEL data	SEL implementation	—	.56*	.16	-.17	-.06	.19	-.35*
	SEL integration	.56**	—	.13	.00	.14	.42**	.08
	Years in SEL	-.35*	.08	.02	.18	.12	.18	—
Student Climate Survey	Behavioral environment	.30*	.41**	-.13	.39**	.42**	.47**	.19
	Adult fairness and respect	.15	.13	-.23	.19	.19	.26	-.05
	Student engagement	.16	-.00	-.03	-.07	-.26	.01	.08
	Academic self-confidence	.21	.17	.03	-.09	-.19	.09	-.09
	Teacher expectations	.34*	.22	-.08	.27	.36**	.42**	.10
Teacher TELL survey	Overall, my school is a good place to work and learn.	.20	.24	-.24	.46**	.48**	.55**	.18
	Achievement press	.23	.33*	-.32*	.56**	.66**	.56**	.14
	Community support and engagement	.22	.32*	-.25	.50*	.60*	.47**	.17
	School leadership	.18	.13	-.27	.40**	.37**	.48**	.20
	General climate	.12	.12	-.28*	.50**	.51**	.47**	.19
	Managing student conduct	.13	.26	-.44**	.59**	.57**	.60**	.16
	Instructional practice and support	.18	.28*	-.19	.51**	.59**	.52**	.18

Source. 2013–2014 SEL implementation rubric, Student Climate and Teaching, Empowering, Leading, Learning (TELL) surveys, discipline and State of Texas Assessment of Academic Readiness (STAAR) data

Note. Correlations between 0 and .19 are weak; between .20 and .40 are weak-to-moderate; between .40 and .60 are moderate-to-strong; between .60 and 1.0 are strong-to-very strong ($n = 52$).

* Indicates a significant relationship $p < .05$

** $p < .01$

† SEL integration domain from the SEL rubric

†† Years in SEL were coded such that 3 = 2011–2012, 2 = 2012–2013, and 1 = 2013–2014

Table 10. Partial Correlations Among Campus Factors at Social Emotional Learning (SEL) Elementary Schools, Controlling for Campus-Level Economic Disadvantage, Continued

		SEL implementation	SEL integration†	% change in rate of incidents per student since baseline year	% met math standard	% met reading standard	% met science standard	Years in SEL††
TELL, cont.	Self-efficacy	-.03	.12	-.13	.43**	.52**	.36**	.29*
	Attachment to school	.16	.26	-.30*	.44**	.46**	.50*	.25
Personal Development	Takes responsibility for own actions	-.02	.22	-.11	.40**	.27	.19	.22
	Respects self and others	-.05	.22	-.08	.35*	.26	.17	.24
	Manages emotions constructively	-.01	.22	-.06	.38**	.26	.18	.21
	Interacts cooperatively with adults	-.01	.24	-.14	.50**	.43**	.27	.28*
	Interacts cooperatively with peers	-.13	.15	-.08	.44**	.33*	.19	.29*

Source. 2013–2014 SEL implementation rubric, Student Climate and Teaching, Empowering, Leading, Learning (TELL) surveys, discipline and State of Texas Assessment of Academic Readiness (STAAR) data
Note. Correlations between 0 and .19 are weak; between .20 and .40 are weak-to-moderate; between .40 and .60 are moderate-to-strong; between .60 and 1.0 are strong-to-very strong ($n = 52$).
* Indicates a significant relationship $p < .05$
** $p < .01$
† SEL integration domain from the SEL rubric
†† Years in SEL were coded such that 3 = 2011–2012, 2 = 2012–2013, and 1 = 2013–2014

meaning that the more positively campus staff members rated managing student conduct, the greater the decrease in the percentage of change in disciplinary rates on campus. At the elementary level, schools with more years in SEL had significantly lower overall SEL implementation scores than did schools with fewer years in SEL, although years in SEL was unrelated to the SEL integration domain of the implementation rubric. Conversely, at the secondary level, years in SEL was positively related to both SEL implementation and SEL integration.

At the elementary school level, personal development report card ratings (i.e., takes responsibility for own actions, respects self and others, manages emotions constructively, interacts cooperatively with adults, and interacts cooperatively with peers) were positively related to the percentage of students meeting the state standard in STAAR math. Additionally, ratings of

Table 11. Partial Correlations Among Campus Factors at Social Emotional Learning (SEL) Secondary Schools, Controlling for Campus-Level Economic Disadvantage

		Total SEL implementation	SEL integration†	% change in rate of incidents per student since baseline year	Years in SEL††
SEL data	SEL implementation	—	.88**	.21	.64**
	SEL integration	.88**	—	.16	.72**
	Years in SEL	.64**	.72**	.22	—
Student Climate Survey	Behavioral environment	.07	.22	.23	.05
	Adult fairness and respect	.16	.08	-.27	.09
	Student engagement	.01	.01	-.12	.08
	Academic self-confidence	.28	.20	-.23	.12
	Teacher expectations	.23	.15	-.46	.08
Teacher TELL survey	Overall, my school is a good place to work and learn.	.02	.05	-.14	-.08
	Achievement press	.03	.07	-.28	-.18
	Community support and engagement	.25	.19	-.17	.11
	School leadership	.14	.14	-.11	-.01
	General climate	.16	.16	-.10	.05
	Managing student conduct	.04	.01	-.19	-.40
	Instructional practice and support	.15	.12	-.08	.08
	Self-efficacy	-.18	-.13	-.15	-.30
	Attachment to school	.03	.00	.12	-.05

Source. 2013–2014 SEL implementation rubric, Student Climate and Teaching, Empowering, Leading, Learning (TELL) surveys, and discipline data

Note. Correlations between 0 and .19 are weak; between .20 and .40 are weak-to-moderate; between .40 and .60 are moderate-to-strong; between .60 and 1.0 are strong-to-very strong (n = 17).

* Indicates a significant relationship $p < .05$

** $p < .01$

† SEL integration domain from the SEL rubric

†† Years in SEL were coded such that 3 = 2011–2012, 2 = 2012–2013, and 1 = 2013–2014

students' ability to interact cooperatively with peers/adults were positively related to the percentage of students meeting the state standard in STAAR reading and to years in SEL. Personal development ratings were not related to SEL implementation or integration scores.

It should be noted that although few correlations were statistically significant at the secondary level (which was likely due to the small number of SEL campuses at the secondary level), some correlations emerged as moderate to strong. For example, students' ratings of teacher expectations were negatively related to the percentage of change in disciplinary rates,

suggesting that the more students felt challenged by their teachers in their schoolwork, the less likely they were to receive a disciplinary referral. Similarly, the more positively campus staff members rated managing student conduct, the greater the decrease in the percentage of change in disciplinary rates on secondary campuses. This same result was found, and was statistically significant, at the elementary school level.

WHAT FACTORS RELATED TO BETTER IMPLEMENTATION OF SEL?

To ensure that all students are equally likely to experience benefits from the program, analyses were conducted to determine whether schools with higher implementation ratings in 2014 experienced greater gains[4] in outcome measures (i.e., student climate, staff climate, student achievement, and discipline) over time. Analyses also examined whether years in SEL were related to gains. Correlations were conducted separately based on school level (i.e., elementary and secondary) and controlling for campus percentage of economic disadvantage.

At the elementary school level, schools with higher ratings of SEL integration and implementation in 2014 experienced significantly greater improvement in behavioral environment than did schools with lower ratings of SEL integration and implementation (Table 12). Schools that had participated in SEL for a longer period of time experienced significantly greater improvement in teachers' ratings of achievement press since the year prior to SEL implementation than did those with fewer years in SEL. Although not statistically significant, weak-to-moderate positive relationships were found between SEL integration and implementation ratings and improvements in students' ratings of adult fairness and respect and teacher expectations, and teachers' ratings of managing student conduct (implementation ratings only). These results suggest that schools with higher SEL implementation and integration ratings experienced somewhat greater improvement in students' ratings of adult fairness and respect and teacher expectations than did schools with lower SEL implementation and integration ratings. Although previous results (Table 10) found that at the elementary school level SEL integration in 2013–2014 was positively related to the percentage of students passing the 2014 STAAR science, unexpectedly, elementary schools with lower ratings of SEL implementation experienced significantly greater improvements over time in STAAR reading than did schools with higher ratings of SEL implementation. A similar weak-to-moderate inverse relationship was found between SEL integration and STAAR math improvement. An exploration of this finding revealed that although not significant for all subjects, there was a tendency for elementary schools in cohort 1 to have higher baseline passing rates in reading, math, and science than did schools in subsequent cohorts; thus, schools in SEL longer actually had less room to improve than did those joining in subsequent cohorts (Appendix F).

[4] Change scores for Student Climate and TELL subscales were computed by subtracting available data from each campus' baseline year (i.e., the year prior to SEL implementation) from its 2014 data. Because STAAR data were first available in 2011–2012, change scores were computed beginning in 2011–2012.

Table 12. Partial Correlations Among Change in Campus Factors Since Social Emotional Learning (SEL) Implementation at SEL Elementary Schools, Controlling for Campus-Level Economic Disadvantage

Change scores		Years in SEL††	SEL integration†	SEL implementation
Student Climate Survey	Behavioral environment	-.23	.43**	.37**
	Adult fairness and respect	-.26	.28	.25
	Student engagement	.05	.18	.10
	Academic self-confidence	-.15	.01	.23
	Teacher expectations	.04	.24	.25
Teacher TELL survey	Achievement press	.31*	.18	.01
	Community support and engagement	.21	.01	-.07
	Instructional practice and support	-.38	-.07	.23
	General climate	-.03	.01	.14
	School leadership	-.01	-.09	-.05
	Managing student conduct	-.16	.13	.26
	Overall, my campus is a good place to work and learn	-.21	-.04	.19
STAAR	STAAR - Reading	.24	-.22	-.31*
	STAAR - Math	.18	-.28	-.16
	STAAR - Science	.12	.18	.14

Source. 2013–2014 SEL implementation rubric, 2010–2011 through 2013–2014 Student Climate and Teaching, Empowering, Leading, Learning (TELL) surveys, and 2011–2012 through 2013–2014 State of Texas Assessment of Academic Readiness (STAAR) data for factors and years where longitudinal data were available.
Note. Correlations between 0 and .19 are weak; between .20 and .40 are weak-to-moderate; between .40 and .60 are moderate-to-strong; between .60 and 1.0 are strong-to-very strong (n = 50).
* Indicates a significant relationship $p < .05$
** $p < .01$
† SEL integration domain from the SEL rubric
†† Years in SEL were coded such that 3 = 2011–2012, 2 = 2012–2013, and 1 = 2013–2014

At the secondary level, although not statistically significant due to the small number of schools with longitudinal data, a few moderate-to-strong relationships emerged. Specifically, schools with higher ratings of SEL integration showed greater improvement in students' ratings of teacher expectations since the year prior to SEL implementation than did schools with lower ratings of SEL integration (Table 13). Additionally, schools that had participated in SEL for a longer period of time showed greater improvement in students' ratings of teacher expectations and adult fairness and respect, and teachers' ratings of achievement press than did schools that participated in SEL for a shorter period of time. Several weak-to-moderate relationships also emerged from these analyses. Schools with higher ratings of SEL integration and implementation experienced greater improvements in teachers' ratings of multiple campus factors than did schools with lower ratings of SEL integration. Interestingly, schools with higher ratings of SEL

Table 13. Partial Correlations Among Change in Campus Factors Since Social Emotional Learning (SEL) Implementation at SEL Secondary Schools, Controlling for Campus-Level Economic Disadvantage

	Change scores	Years in SEL††	SEL integration†	SEL implementation
Student Climate survey	Behavioral environment	.04	.15	-.05
	Adult fairness and respect	.41	.23	.04
	Student engagement	.37	.14	.02
	Academic self-confidence	.03	.07	-.13
	Teacher expectations	.52	.45	.26
Teacher TELL survey	Achievement press	.46	.38	.37
	Community support and engagement	.15	.12	.22
	Instructional practice and support	-.37	-.26	-.07
	General climate	.13	.23	.27
	School leadership	.22	.19	.26
	Managing student conduct	-.18	-.04	.13
	Overall, my campus is a good place to work and learn	-.02	-.02	.07

Source. 2013–2014 SEL implementation rubric, 2010–2011 through 2013–2014 Student Climate and Teaching, Empowering, Leading, Learning (TELL) Surveys.
Note. Correlations between 0 and .19 are weak; between .20 and .40 are weak-to-moderate; between .40 and .60 are moderate-to-strong; between .60 and 1.0 are strong-to-very strong (n = 16).
* Indicates a significant relationship $p < .05$
** $p < .01$
† SEL integration is a domain from the SEL implementation rubric
†† Years in SEL were coded such that 3 = 2011–2012, 2 = 2012–2013, and 1 = 2013–2014

integration and more years in SEL experienced greater declines in instructional practice and support the year prior to SEL implementation than did schools with lower ratings of SEL integration and fewer years in SEL.

In general, SEL integration ratings positively related to changes in students' and staff members' ratings of school climate; therefore, a series of regression analyses was conducted to determine which factors best predicted change in school climate. Separate models were analyzed, based on school level and school climate factors considered most related to SEL (i.e., students' ratings of behavioral environment, adult fairness and respect, and teacher expectations; and teachers' ratings of instructional practice and support, school leadership, and managing student conduct; Table 14). Because the SEL integration component of the implementation rubric was more strongly related than total SEL implementation scores to most outcomes of interest, integration ratings were included in the models to predict change in school climate.

Indeed, students' and teachers' baseline ratings of the six school climate factors served as strong significant predictors of change in climate ratings. In all cases, these relationships were negative,

Table 14. Regression Results Predicting Change in Campus School Climate Ratings Based on Baseline Campus School Climate Data with Social Emotional Learning (SEL) Integration Ratings

	Elementary		Secondary	
Change in school climate factor predicted in the model	Baseline school climate ratings	SEL integration	Baseline school climate ratings	SEL integration
	β	β	β	β
Behavioral environment	-.32**	.09**	-.55*	.03
Adult fairness and respect	-.89**	.01	-.65**	.02
Teacher expectations	-1.00**	.01*	-.61**	.03
Instructional practice and support	-.54**	.04	-.78**	.00
School leadership	-.66**	.02	-.60**	.04
Managing student conduct	-.47**	.06†	-.60**	.01

Source. 2013–2014 SEL implementation and integration ratings, 2010–2011 through 2013–2014 Student Climate Survey and Teaching, Empowering, Leading, Learning (TELL) Survey data
* $p < .05$
** $p < .01$
† $p < .10$
β Designates the parameter estimate for each variable included in the model

meaning that lower baseline ratings of school climate predicted greater change in school climate over time. Results from the regression analyses corroborated the results from the partial correlations, suggesting that schools with lower ratings of school climate in the year prior to SEL implementation demonstrated the most positive changes in school climate. Importantly, SEL integration ratings positively predicted change in students' ratings of behavioral environment and teacher expectations and positively predicted change in staffs' ratings of managing student conduct at the elementary level. That is, elementary schools with higher ratings of SEL integration in 2014 were more likely to demonstrate greater improvement over time in students' ratings of behavioral environment and teacher expectations and in teachers' ratings of the school's methods for managing student conduct than were schools with lower ratings of SEL integration. Thus, positive change in students' and teachers' perceptions of school climate happened significantly more when elementary campus SEL integration was high than when it was low.

CONCLUSION

Collectively, results described throughout this report were positive and suggested that for the most part, the longer SEL had been implemented on a campus, the more positive the outcomes. Students' performance on STAAR math and reading improved significantly over time at schools in cohort 1. Additionally, ratings of the degree to which their campus had integrated SEL skills in all classes on campus (measured using the SEL tri-level implementation rubric) were higher among schools entering SEL in cohort 1 than in schools in later cohorts. Interestingly, SEL overall implementation ratings did not vary based on cohort.

Examinations of attitudinal measures associated with SEL also suggested that positive outcomes were more prominent at campuses in cohort 1 than at campuses in cohorts 2 or 3. For example, staff ratings of SEL-related activities and perceptions of campus climate were generally more favorable at campuses in cohort 1 than in campuses in cohort 3, and students reported less frequent bullying at their campus in cohort 1 than in cohort 3. At the elementary school level, teachers' ratings of their students' personal development were higher in cohort 1 in kindergarten, 2nd grade, and 5th grade than were ratings in these same grades in later cohorts.

Although results appeared more favorable for schools entering cohort 1, positive results were found regardless of SEL implementation year. For example, SEL integration ratings were positively related to students' performance in 2013–2014 STAAR science, students' ratings of behavioral environment, and teachers' ratings of campus climate variables (i.e., achievement press, community support and engagement, and instructional practice and support) at the elementary school level. Although elementary schools with lower ratings of SEL implementation experienced greater improvements in STAAR reading and math over time than did schools with higher ratings of SEL implementation, a deeper examination of this relationship revealed that while not significant in all subject areas, elementary schools tended to have a higher percentage of students passing STAAR in 2011–2012 than did schools in later cohorts. Because schools joining SEL in cohort 1started out with higher STAAR passing rates, schools joining SEL in later cohorts had more room to improve over time than did schools joining SEL in cohort 1. Also of note, discipline rates decreased significantly over time across all SEL cohorts. These findings corroborate those documented in a meta-analysis of SEL intervention programs which found that not only did students who participated in SEL programs experience gains in SEL related skills and behaviors (e.g., fewer discipline problems, greater pro-social behaviors), but also they experienced improved academic performance (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Schools with lower ratings of school climate in the year prior to SEL implementation exhibited greater growth in school climate ratings over time than did schools with lower ratings of school

climate. Additionally, schools with higher SEL integration ratings reported greater improvements in students' ratings of behavioral environment and teacher expectations and teachers' ratings of achievement press since the year prior to SEL implementation than did schools with lower ratings of SEL integration. Importantly, these relationships imply that schools with low ratings of school climate prior to SEL implementation can make significant gains in their students' and teachers' attitudes toward school climate with a strong integration of SEL. These results are also important for program staff because, unlike many of the findings indicating that length in the program relates to positive results, these findings suggest that positive results can be found for schools regardless of length in the program. Additionally, these findings provide schools with some suggestions for ways to improve their campuses experiences with SEL.

Taken together, these results suggest positive outcomes associated with SEL implementation, offering further support to researchers' claims that students benefit from SEL programs (Durlak et al., 2011; Greenberg et al., 2003; Osher et al., 2012). Indeed, the longer a campus had participated in SEL, the more positively campus staff seemed to not only perceive campus climate but also rate SEL-related activities, the more favorably teachers rated students' personal development, the less frequently students reported bullying, the less frequently students received a disciplinary referral, and the more favorably students performed on STAAR reading and math. However, given that it takes time for campuses to experience these positive outcomes, campuses might be able to accomplish these outcomes in other ways. For example, campuses can ensure that SEL integration is evident in 90% of classrooms (the highest level of integration rating on the implementation rubric) as a means of improving fidelity of SEL implementation. Additionally, campuses with lower ratings of school climate might work on improving students' perceptions of behavioral environment and teachers' expectations as a means of improving SEL implementation and integration.

Although this report analyzed several critical questions integral to the SEL program, several questions remain. For example, is the implementation rubric a reliable measure of SEL program fidelity? How do SEL coaches perceive fidelity of SEL program implementation? Is SEL influencing student level outcomes? To address these questions, future reports will identify which implementation ratings were most strongly related to program outcomes, explore SEL coaches' perceptions of the program and of findings presented in this report, and will present a deeper analysis of SEL outcomes at the student level.

APPENDIX

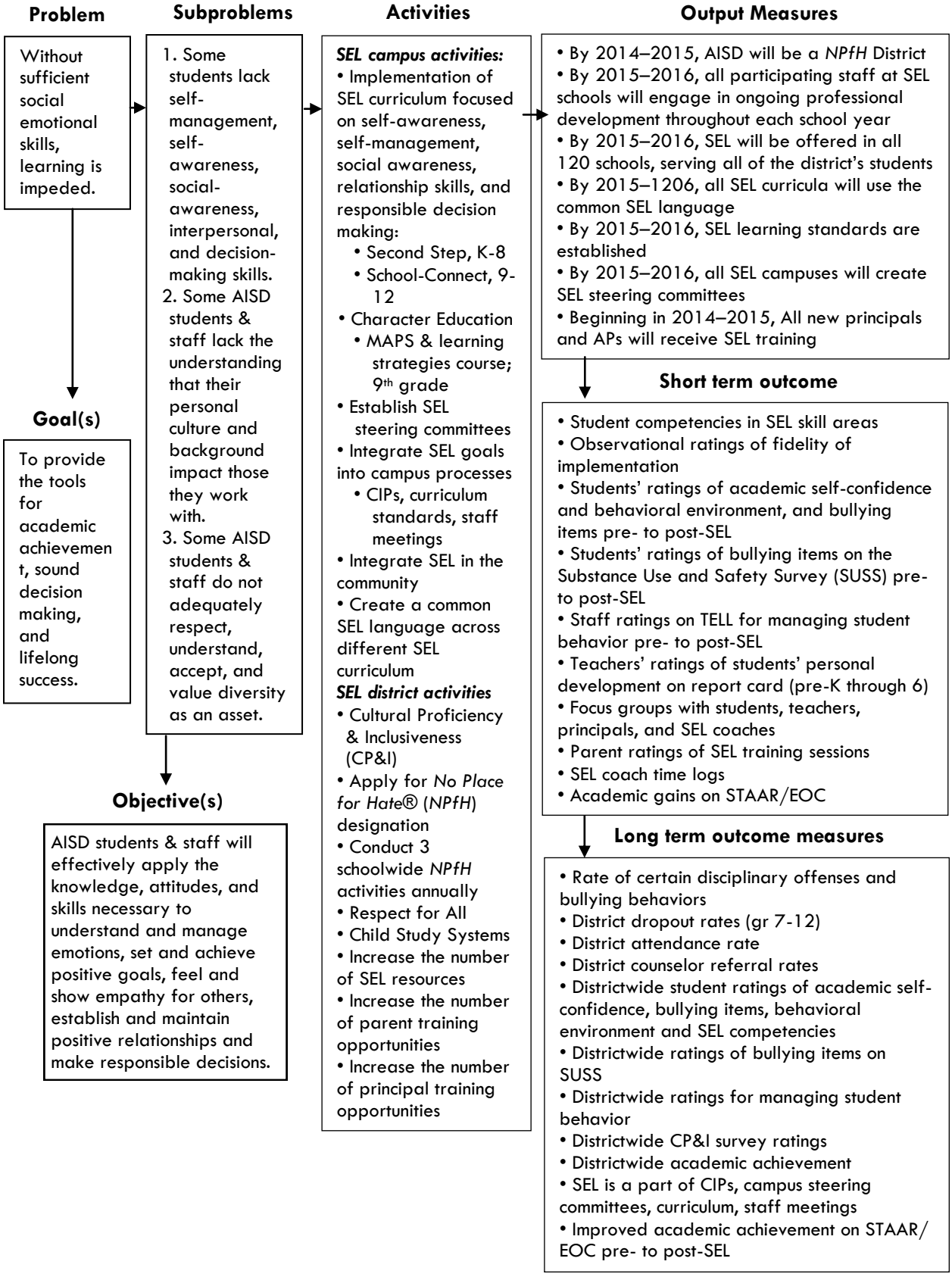
Appendix A. Social Emotional Learning (SEL) Campuses by Vertical Team and Cohort

2013-2014 Vertical team and SEL cohort	School
Austin, cohort 1 Implemented SEL in 2011–2012	Austin High School
	Barton Hills Elementary School
	Bryker Woods Elementary School
	Casis Elementary School
	Mathews Elementary School
	O. Henry Middle School
	Oak Hill Elementary School
	Patton Elementary School
	Pease Elementary School
	Sanchez Elementary School
	Small Middle School
	Zilker Elementary School
Crockett, cohort 1 Implemented SEL in 2011–2012	Bedichek Middle School
	Boone Elementary School
	Covington Middle School
	Crockett High School
	Cunningham Elementary School
	Galindo Elementary School
	Joslin Elementary School
	Odom Elementary School
	Pleasant Hill Elementary School
	St. Elmo Elementary School
	Sunset Valley Elementary School
	Williams Elementary School
Eastside, cohort 2 Implemented SEL in 2012–2013	Allison Elementary School
	Brooke Elementary School
	Eastside High School
	Govalle Elementary School
	Martin Middle School
	Metz Elementary School
	Ortega Elementary School
	Zavala Elementary School

Appendix A. Social Emotional Learning (SEL) Campuses by Vertical Team and Cohort, Continued

2013-2014 Vertical team and SEL cohort	School
McCallum, cohort 2 Implemented SEL in 2012–2013	Blackshear Elementary School
	Brentwood Elementary School
	Campbell Elementary School
	Gullett Elementary School
	Highland Park Elementary School
	Kealing Middle School
	Lamar Middle School
	Lee Elementary School
	Maplewood Elementary School
	McCallum High School
	Oak Springs Elementary School
	Reilly Elementary School
	Ridgetop Elementary School
Travis, cohort 2 Implemented SEL in 2012–2013	Becker Elementary School
	Dawson Elementary School
	Fulmore Middle School
	Houston Elementary School
	Linder Elementary School
	Mendez Elementary School
	Rodriguez Elementary School
	Travis High School
	Travis Heights Elementary School
	Uphaus Early Childhood Center
	Widen Elementary School
Akins, cohort 3 Implemented SEL in 2013–2014	Akins High School
	Blazier Elementary School
	Casey Elementary School
	Kocurek Elementary School
	Langford Elementary School
	Menchaca Elementary School
	Palm Elementary School
	Paredes Middle School
	Perez Elementary School
LBJ, cohort 3 Implemented SEL in 2013–2014	Andrews Elementary School
	Harris Elementary School
	LBJ High School
	Pecan Springs Elementary School
	Sims Elementary School

Appendix B. Social Emotional Learning (SEL) Logic Model



Appendix C. Social Emotional Learning (SEL) Tri-level Implementation Rubric Ratings

Domain	Implementation Level Level 1	Level 2	Level 3
1. Monthly steering committee	Monthly steering committee – meet 6 times	Monthly steering committee meetings – meet 7 times	Monthly steering committee meetings – include parents or students – meet 7 times
2. Weekly explicit SEL instruction	Weekly explicit SEL instruction (30 minutes/ week) using curriculum and resource provided by district – 50% of staff implementing (HS in advisory or seminar)	Weekly explicit SEL instruction – 70% of staff implementing	Weekly explicit SEL instruction – 90% of staff implementing
3. No Place for Hate®/ SEL school-wide activities	3 No Place for Hate/SEL school-wide activities	3 No Place for Hate/SEL school-wide activities – teachers involved in at least one activity	3 No Place for Hate/SEL school-wide activities – teachers and parents involved in at least one activity
4. Implementation of peace areas (PK-5)/ peacemaking process (6-12)	Implement Peace Areas (PK-5) / Peacemaking Process (6-12) in 50% classrooms/common areas	Implement Peace Areas (PK-5) / Peacemaking Process (6-12) in 70% classrooms/common areas	Implement Peace Areas (PK-5) / Peacemaking Process (6-12) in 90% classrooms/common areas
5. Parent education	Parent Education – 1 session SEL related	Parent Education – 2 sessions SEL related	Parent Education – 3 sessions SEL related
6. Monthly SEL facilitator/SEL coach meeting	Monthly facilitator/coach meeting – at least 6 meetings	Monthly facilitator/coach meeting – at least 7 meetings, including 3 collaborative classroom visits	Monthly facilitator/coach meeting – at least 8 meetings, including 4 collaborative classroom visits
7. Once per semester principal/SEL coach meeting	Once per semester principal/coach meeting	Once per semester principal/coach meeting – one administrative action goal agreed upon and implemented	Once per semester principal/coach meeting – two administrative action goals agreed upon and implemented
8. End of year reflection/planning with staff or steering committee	End of year reflection/ planning with staff or steering committee	End of year reflection/ planning with staff – 90% staff participating in person or in writing	End of year reflection/ planning with staff – 90% staff participating in person with facilitator and coach
9. American Institutes for Research (AIR) online student survey participation rate	AIR online survey at 3rd , 7th , 10th grades – 50% participation	AIR online survey at 3rd, 7th, 10th grades – 70% participation	AIR online survey at 3rd, 7th, 10th grades – 90% participation
10. Integration of SEL strategies or skills in instruction	Integration of SEL strategies or skills in instruction – evident in 30% of classrooms in campus visits	Integration of SEL skills or strategies in instruction – evident in 60% of classrooms in campus visits	Integration of SEL skills or strategies in instruction – evident in 90% of classrooms in campus visits

Source. 2013-2014 SEL Tri-level Implementation Plan for prekindergarten through 12th grade
Note. Schools received a score of 0 if their level of implementation was less than 1.

Appendix D. Average Scores On The 2013–2014 SEL Tri-Level Program Implementation Rubric, By Level

SEL tri-level program implementation domains	Elementary (*n* = 53)	Secondary (*n* = 17)
1. Monthly steering committee	1.23	1.12
2.Weekly explicit SEL instruction	2.21*	1.35
3. No Place for Hate® school-wide activities	2.36*	1.76
4. Implementation of Peace Areas (prekindergarten–5)/Peacemaking process (6–12)	2.00*	0.35
5. Parent education	1.66	1.47
6. Monthly SEL facilitator/coach meeting	2.30	2.00
7. Once per semester principal/coach meetings	1.94	1.53
8. End-of-year reflection/planning with staff or steering committee	2.26*	1.12
9. American Institutes for Research (AIR) online student survey participation rate	2.26	1.88
10. Integration of SEL strategies or skills in instruction	2.23*	1.29
2013–2014 Total Implementation score	20.45*	13.88

Source. 2013-2014 SEL tri-level program implementation ratings
Note. Scores ranged from 0 (level 1 implementation not met) to 3 (highest level of implementation met).
* 2013–2014 rating was significantly higher at the elementary school level than at the secondary school level, $p < .05$

Source. 2013-2014 SEL Tri-level Implementation Plan for prekindergarten through 12th grade
Note. Schools received a score of 0 if their level of implementation was less than 1.

Appendix E. Discipline Incidents by SEL Vertical Team and Cohort

2013-2014 Vertical Team and SEL cohort	School	Baseline # of incidents per student	# of incidents per student 2013-2014	Δ (% change) in # of incidents per student from baseline year
Austin, cohort 1	Austin High School	0.26	0.13	-0.13 (-49%)
	Barton Hills Elementary School	0.00	0.00	0.00 n/a
	Bryker Woods Elementary School	0.00	0.00	0.00 n/a
	Casis Elementary School	0.00	0.00	0.00 n/a
	Mathews Elementary School	0.02	0.00	-0.02 (-90%)
	O. Henry Middle School	0.24	0.17	-0.06 (-27%)
	Oak Hill Elementary School	0.02	0.01	-0.01 (-69%)
	Patton Elementary School	0.01	0.00	-0.01 (-100%)
	Pease Elementary School	0.01	0.00	-0.01 (-67%)
	Sanchez Elementary School	0.06	0.02	-0.04 (-65%)
	Small Middle School	0.38	0.14	-0.25 (-65%)
	Zilker Elementary School	0.01	0.00	-0.01 (-100%)
Crockett, cohort 1	Bedichek Middle School	0.69	0.32	-0.37 (-53%)
	Boone Elementary School	0.00	0.00	0.00 n/a
	Covington Middle School	0.44	0.50	0.07 (15%)
	Crockett High School	0.24	0.22	-0.02 (-10%)
	Cunningham Elementary School	0.01	0.04	0.03 (503%)
	Galindo Elementary School	0.04	0.03	-0.01 (-30%)
	Joslin Elementary School	0.02	0.00	-0.02 (-100%)
	Odom Elementary School	0.02	0.01	-0.01 (-60%)
	Pleasant Hill Elementary School	0.02	0.00	-0.02 (-100%)
	St. Elmo Elementary School	0.10	0.04	-0.06 (-56%)
	Sunset Valley Elementary School	0.02	0.00	-0.02 (-100%)
	Williams Elementary School	0.02	0.02	0.00 (-14%)
Eastside, cohort 2	Allison Elementary School	0.04	0.04	0.00 (-5%)
	Brooke Elementary School	0.11	0.09	-0.02 (-20%)
	Eastside High School	0.57	0.49	-0.08 (-13%)
	Govalle Elementary School	0.13	0.08	-0.05 (-42%)
	Martin Middle School	1.07	0.62	-0.45 (-42%)
	Metz Elementary School	0.07	0.05	-0.02 (-29%)
	Ortega Elementary School	0.04	0.00	-0.04 (-100%)
	Zavala Elementary School	0.03	0.04	0.01 (23%)

Source. AISD discipline data from 2010–2011 through 2013–2014
Note. The baseline year for SEL campuses was the year prior to SEL implementation.
The number of incidents per student was computed based on the number of unique incidents per student on each campus, excluding truancy discipline offense codes and truancy disposition codes, divided by the campus weighted attendance rate. Change data were computed before rounding.

Appendix E. Discipline Incidents by SEL Vertical Team and Cohort, Continued

2013-2014 Vertical Team and SEL cohort	School	Baseline # of incidents per student	# of incidents per student 2013-2014	Δ (% change) in # of incidents per student from baseline year
McCallum, cohort 2	Blackshear Elementary School	0.03	0.00	-0.03 (-100%)
	Brentwood Elementary School	0.04	0.00	-0.03 (-90%)
	Campbell Elementary School	0.05	0.02	-0.03 (-60%)
	Gullett Elementary School	0.00	0.00	0.00 n/a
	Highland Park Elementary School	0.00	0.00	0.00 n/a
	Kealing Middle School	0.43	0.24	-0.19 (-44%)
	Lamar Middle School	1.59	0.31	-1.27 (-80%)
	Lee Elementary School	0.07	0.01	-0.06 (-82%)
	Maplewood Elementary School	0.03	0.03	0.00 (-14%)
	McCallum High School	0.33	0.15	-0.19 (-56%)
	Oak Springs Elementary School	0.11	0.00	-0.10 (-97%)
	Reilly Elementary School	0.02	0.00	-0.02 (-100%)
	Ridgetop Elementary School	0.02	0.00	-0.02 (-100%)
Travis, cohort 2	Becker Elementary School	0.04	0.03	-0.02 (-37%)
	Dawson Elementary School	0.03	0.02	-0.01 (-39%)
	Fulmore Middle School	0.96	0.44	-0.53 (-55%)
	Houston Elementary School	0.02	0.01	-0.01 (-68%)
	Linder Elementary School	0.02	0.01	-0.01 (-57%)
	Mendez Elementary School	1.05	0.45	-0.59 (-57%)
	Rodriguez Elementary School	0.08	0.10	0.03 (34%)
	Travis High School	0.30	0.31	0.01 (5%)
	Travis Heights Elementary School	0.01	0.00	-0.01 (-100%)
	Uphaus Early Childhood Center	0.00	0.01	0.01 (0%)
	Widen Elementary School	0.03	0.03	0.00 n/a
Akins, cohort 3	Akins High School	0.22	0.18	-0.04 (-18%)
	Blazier Elementary School	0.01	0.02	0.00 (18%)
	Casey Elementary School	0.12	0.02	-0.10 (-87%)
	Kocurek Elementary School	0.03	0.01	-0.02 (-71%)
	Langford Elementary School	0.01	0.01	-0.01 (-52%)
	Menchaca Elementary School	0.00	0.00	0.00 n/a
	Palm Elementary School	0.00	0.01	0.01 (0%)
	Paredes Middle School	0.77	0.53	-0.25 (-32%)
	Perez Elementary School	0.02	0.02	0.00 (-23%)
LBJ, cohort 3	Andrews Elementary School	0.03	0.03	0.00 (2%)
	Harris Elementary School	0.04	0.02	-0.02 (-48%)
	LBJ High School	0.47	0.33	-0.14 (-30%)
	Pecan Springs Elementary School	0.03	0.03	0.00 (4%)
	Sims Elementary School	0.04	0.05	0.00 (11%)

Source. AISD discipline data from 2010-2011 through 2013-2014
Note. The baseline year for SEL campuses is the year prior to SEL implementation.
The number of incidents per student computed based on the number of unique incidents per student by campus, excluding truancy discipline offense codes and truancy disposition codes, divided by the campus weighted attendance rate. Change data were computed before rounding.

Appendix F. Campus Level Percentage of Students Meeting the State Standard in the State of Texas Assessment of Academic Readiness (STAAR) for Elementary Schools During Their Baseline Year, by Subject and SEL Cohort

Percentage of students meeting the state standard based on their baseline year	SEL cohort		
	1	2	3
STAAR - Math	80%* (*n* = 18)	73%* (*n* = 23)	73% (*n* = 11)
STAAR - Reading	82% (*n* = 18)	75% (*n* = 23)	75% (*n* = 11)
STAAR - Science	80%* (*n* = 18)	74% (*n* = 23)	69%* (*n* =11)

Source. 2013–2014 State of Texas Assessment of Academic Readiness (STAAR)
Note. For cohort 1, the baseline year for STAAR data was 2011–2012, for cohort 2, the baseline year was 2011–2012, and for cohort 3, the baseline year was 2012–2013.
*Percentages are significantly different from each other within subject at $p < .10$.

References

CASEL, (n.d.) *What is social and emotional learning?* Retrieved from http://www.casel.org/social-and-emotional-learning/

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1): 405-432.

Greenberg, M. T., Weissberg, R. P., O'Brien, U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist 58(67)*: 466-474.

Lamb, L. M. (2013). *2012–2013 Austin Independent School District (AISD) Climate Update* (DRE Publication No. 12.94 RB). Austin, TX: Austin Independent School District.

Osher, D., Dwyer, K. P., Jimerson, S. R., & Brown, J. A., (2012). Developing safe, supportive, and effective schools: Facilitating student success to reduce school violence. In S. R. Jimerson, A. B. Nickerson, M. J. Mayer, & M. J. Furlong (Eds.), *The Handbook of School Violence and School Safety: International Research and Practice (2nd ed., pp. 27-44). New York, NY: Routledge.*

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