MEMORANDUM   November 7, 2016

TO: Caleen Allen
               General Manager of Strategic Partnerships

FROM: Carla Stevens
               Assistant Superintendent, Research and Accountability

SUBJECT: **TO EDUCATE ALL CHILDREN (TEACH), 2015–2016**

To Educate All Children (TEACH) has implemented programs in the Houston Independent School District (HISD) for more than 10 years. During the 2014–2015 academic year, TEACH operated at Mading Elementary, Revere Middle, Cullen Middle, and Furr High schools. During the 2015–2016 academic year, TEACH expanded to Walnut Bend, MacGregor, and Tinsley elementary schools. TEACH provides educators with intensive one-on-one training in classroom culture, focusing on de-escalation, conflict resolution, nonverbal communication, and building student's self-confidence.

Key Findings:
- The study sample included 241 students at MacGregor, Mading, and Walnut Bend elementary schools as well as Revere middle school. The sample was comprised of students whose teachers were trained using the TEACH model during the 2015–2016 academic year, and who completed both the pre- and post-Classroom Environment surveys.
- There were significant decreases in the mean number of excused, unexcused, and total absences of the TEACH study sample from 2014–2015 to 2015–2016. TEACH had a small program effect on the student samples' excused, unexcused, and total absences.
- There was a decrease in the percentage of out-of-school suspensions for the sample in 2015–2016 compared to 2014–2015.
- Significant increases were noted in the English STAAR reading scale scores of students in the study sample who progressed in grade level from 2015 to 2016 (first test administration).
- There were increases in the English STAAR math scale scores of students in the study sample from 2015 (Level II, Phase-in 1 Standard) to 2016 (Progression Standard, first test administration).

Further distribution of this report is at your discretion. Should you have any further questions, please contact me at 713-556-6700.

_____ CJS

Attachment

cc: Grenita Lathan
    Gloria Cavazos

HOUSTON INDEPENDENT SCHOOL DISTRICT

RESEARCH
Educational Program Report

TO EDUCATE ALL CHILDREN (TEACH)
2015-2016

HISD | Research and Accountability
ANALYZING DATA, MEASURING PERFORMANCE.

TO EDUCATE ALL CHILDREN (TEACH), 2015–2016

Executive Summary

To Educate All Children (TEACH) has implemented programs in the Houston Independent School District (HISD) for more than 10 years. During the 2014–2015 academic year, TEACH operated at Mading Elementary, Revere Middle, Cullen Middle, and Furr High schools. During the 2015–2016 academic year, TEACH expanded to Walnut Bend, MacGregor, and Tinsley elementary schools. TEACH was founded on the premise that the teacher advances the educational system from prekindergarten to the job market (TEACH, n.d.). TEACH provides educators with intensive one-on-one training in classroom culture, focusing on de-escalation, conflict resolution, nonverbal communication, and building student's self-confidence. Through intensive educator training, TEACH helps educators create safe, calm learning environments for students (TEACH, n.d.). Trained educators develop skills that support positive classroom management. Consequently, it is expected that schools experience a decrease in student disciplinary referrals, calmer and more productive classrooms, and improvements in student achievement. Kerr et al. (2004) found that the more successful teacher development programs are those that are incorporated into the school curriculum and embedded with the school community.

Research has shown that students' perceptions of teacher support play a central role in feeling connected to school and to socio-emotional well-being (Stracuzzi and Mills, 2010). Student connectedness also has been found to protect students against risky and problem behaviors in school (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; CDC, 2009). There is a need for research that focuses on programs that are designed to improve classroom climate through teacher development and how these programs affect the social, emotional, and academic development of students (Thapa, Cohen, Guffey, and Higgins-D'Alessandro, 2013). To that end, this evaluation explored specific outcomes that may be affected through the implementation of the TEACH model in HISD schools. These areas include:

- Attendance,
- Disciplinary actions,
- Academic achievement, and
- Student perceptions of the classroom environment where teachers were trained using the TEACH model.

There were several limitations to the study. The study population only included students at MacGregor, Mading, Revere, and Walnut Bend schools whose teachers were trained on the TEACH model and who completed both the pre- and post-*Classroom Environment* surveys. The schools were selected by TEACH administrators. Although all students of selected teachers at targeted schools were trained on the TEACH model, students whose teachers allowed them to access the survey were included in the analyses. Moreover, the number of students who completed both pre- and post- surveys varied across schools. Although mitigation strategies to reduce threats to the study's validity were taken with periodic reviews of the data, student participation was voluntary. This may have resulted in selection bias due to the underrepresentation of specific subgroups in the evaluation of outcomes for the targeted student population.

Highlights
- The study sample included 241 students at MacGregor, Mading, and Walnut Bend elementary schools as well as Revere middle school. The study sample was comprised of students whose teachers were trained using the TEACH model during the 2015–2016 academic year, and who

completed both the pre- and post-*Classroom Environment* surveys. The majority of students in the sample were female and economically disadvantaged. Fifteen percent of the students were limited English proficient (LEP), 6 percent were classified as special education, 46 percent were at risk for dropping out of school, and 20 percent were identified as gifted/talented. There was a higher proportion of African American students and lower proportions of Asian, Hispanic, and White students in the survey sample relative to all students at the sampled TEACH schools.

- There were statistically significant decreases in the mean number of excused, unexcused, and total absences of the TEACH study sample from 2014–2015 to 2015–2016. TEACH had a small program effect on the student samples' excused, unexcused, and total absences.

- The TEACH student sample had a higher percentage of in-school suspensions (33.3 percent vs. 25.0 percent), alternative placements (3.7 percent vs. 0.0 percent), and "other" disciplinary actions (25.9 percent vs. 20.0 percent) in 2015–2016 (post) compared to 2014–2015 (pre). "Other" disciplinary actions included a student or parent conference, detention, behavior/conduct contract, and referral to a counseling agency. However, there was a decrease in the percentage of out-of-school suspensions for the sample in 2015–2016 (post) compared to 2014–2015 (pre) (37.0 percent vs. 55.0 percent).

- Paired t-test analyses revealed increases in the English STAAR reading scale scores of students in the study sample who progressed in grade level from 2015 to 2016 (first test admnistration). The highest increase was noted as students progressed from third to fourth grades (96 points); whereas, the lowest increase was found as students progressed from fifth to sixth grades (12 points). The results were highly statistically significant as students progressed third to fourth and fourth to fifth grades ($p < .001$). Statisticaly significance was also found as students progressed from grades six to seven and seven to eight ($p < .05$).

- The impact of TEACH on students' reading performance based on Cohen's d effect size analyses revealed a medium effect as students advanced from third to fourth grades ($d = 0.739$). A medium effect was also found as students advanced from seventh to eighth and from fourth to fifth grades ($d = 0.61$ and $d = 0.485$, respectively).

- There were increases in the English STAAR math scale scores of students in the study sample from 2015 (Level II, Phase-in 1 Standard) to 2016 (Progression Standard, first test administration). The highest increase was noted as students progressed from third to fourth grades (122 points); while, the lowest increase was found as students progressed from sixth to seventh grades (44 points). The results were highly statistically significant as students progressed from grades three to four, four to five, six to seven, and seven to eight ($p < .001$). Statisticaly significance was also observed as students progressed from grade five to six ($p < .05$).

- The impact of TEACH on students' STAAR math performance using Cohen's d effect size analyses revealed that the program was most effective as students progressed from third to fourth grades. The Cohen's d was 0.939, which is considered high. The effect of the program as students progressed from seventh to eighth, fourth to fifth, and from fifth to sixth grades was medium ($d = 0.741$, $d = .589$, and $d = 0.487$, respectively). A small effect on students' STAAR math performance was observed as students progressed from sixth to seventh grades ($d = 0.325$).

- In general, positive changes in students' ratings of their teachers about the classroom enviroment were minimal. In most cases, the differences were statistically insignificant, except at Mading.

Positive increases were more prevalent on items related to Classroom Management and Teachers as Resource compared to a Safe Learning Environment. The sample size at Revere was small, therefore, the results should be viewed with caution.

Recommendations

1. Notable, positive outcomes relative to student attendance as well as reading and math achievement were found for a sample of students who were exposed to the TEACH model. In addition, moderate, positive changes in out-of-school suspensions were observed in the data. These findings suggest support for the TEACH model toward improving student outcomes that have been found to promote student success in school. Further research to explore trends in findings is warranted.

2. Student survey responses varied by school relative to their perceptions of the classroom environment. Extending the time between pre- and post-survey may provide more reliable results. In addition, survey data collection in targeted classrooms may help to explain outcomes in order to contribute toward more focused program implementation, planning, and decision-making. Exploration of teachers' perceptions of TEACH may also provide additional information to improve the program.

Introduction

TEACH was founded in 2005 by business leader Susan Sarofim and educator Mary Yenik. The TEACH model consists of four components: (1) Leadership Support, (2) Training for Staff, (3) Follow-up Coaching, and (4) Tuesday Tips from TEACH. The components of the TEACH model are as follows.

Leadership Support
TEACH is a partner that values collaboration and community. The program is designed around the needs of school campuses. TEACH instructors work, first, with the principal and leadership team before working with teachers and staff. Planning relative to program goals, training schedule, and specific site-based supports are outlined. The principal and administrative team meet monthly with the TEACH Director of Principal Support to discuss program updates and discuss additional supports needed.

Training for Staff
TEACH emphasizes collaboration among staff. TEACH instructors provide educators with practical strategies to engage every child in the classroom, build students' self-image, and enhance classroom management. TEACH trainings are designed to leave educators with more energy than when they arrived in class. Teachers and staff participate in monthly Professional Learning Communities (PLCs) where they meet with TEACH instructors to gain strategies and skills for working with their most difficult students.

Follow-up Coaching
TEACH provides each teacher with an Educational Coach to help them implement new skills at their own pace, in their own classroom. Sessions take place in each teacher's classroom, are strictly confidential, and serve as a genuine resource of support.

Tuesday Tips from TEACH
Educators can subscribe to Tuesday Tips from TEACH and receive weekly videos of real teachers using skills in the classroom. Tuesday Tips serves as an effective way to reinforce strategies introduced during training and practiced during coaching. Tips include:
(1) **Points of Focus** (3 Point) – look at student work for comprehension and management, modeling focused learning, support learning by pointing to the information, support greater comprehension by keeping your eyes on student work
(2) **Frozen Hand Gesture** – Use frozen hand gesture to get attention from class without using voice.
(3) **Side by Side** – A one-on-one variation of the "Influence Approach." When working with students one-on-one, it is often more effective to address tough issues without making direct eye contact, standing side by side with the student. Using a soft voice and still body helps the teacher establish positive rapport with the student. Successfully using the "influence approach" allows teachers and administrators to preserve student relationships while fostering a positive school climate.
(4) **Voice Variation** – Use different voice patterns to capture interest and increase attention. When in doubt, speak softly. This draws students in, fosters curiosity, and calms the class.

Review of Literature

There has been growing emphasis on school climate as an evidence-based school improvement strategy at the local, state, and federal levels across the United States (Thapa, Cohen, Guffey, and Higgins-D'Alessandro, 2013). At the forefront of reform efforts is the development of strategies to create safer, more supportive and engaging K–12 schools. The Institute for Educational Sciences considers school

climate as a sound strategy for dropout prevention (Dynarski et al., 2008). The Centers for Disease Control and Prevention (CDC, 2009) maintains that students feel more connected to their school when they believe that adults and other students care about how well they learn and about them as individuals. Students who feel more connected to school are more likely to achieve academic success and make healthy life choices (CDC, 2009).

School climate improvement efforts are grounded in ecological systems theories of youth development in that the environment (e.g., student, family, school, community), has a direct impact on student's learning and behavior (Bronfenbrenner, 1979; Kohlberg & Mayer, 1972). Consistent with authoritative school climate theory, research supports the notion that "when students perceive their teachers as supportive, high academic expectations are associated with lower dropout rates" (Jia, Konold, and Cornell, 2015).

Research has also found a lower frequency of behavioral problems in schools where students are in a structured school environment, with fair discipline practices, and experience positive student-teacher interactions (Power et al., 1989; Gregory and Cornell, 2009; Wang, Selman, Dishion, and Stormshak, 2010; Thapa, Cohen, Guffey, and Higgins-D'Alessandro, 2013). Skinner and Belmont (1993) found that teachers' interactions with students can influence students' behavioral and emotional engagement in the classroom (Skinner and Belmont, 1993). Consequently, when teachers support and interact positively with students, students are more likely to be engaged and behave appropriately in the classroom. Research conducted by Gregory et al. (2010) of more than 7,300 ninth-grade students and 2,900 teachers randomly selected from 290 high schools, revealed that "consistent enforcement of school discipline (structure) and availability of caring adults (support) were associated with school safety" (p. 483).

Teacher professional development and coaching opportunities focused on using classroom management, effective teaching methods, and engaging students in problem-solving were identified as effective strategies to promote a positive environment and improve student achievement (CDC, 2009). The more successful programs tend to be embedded, at minimum, in the school (Kerr, 2004). Effective teacher professional development programs shared common features, including assisting teachers with learning, providing follow-up reinforcement of learning, offering assistance with program implementation, and delivering support to teachers from mentors and colleagues in their schools (Blank & Alas, 2009).

Methods

Data Collection and Analysis

- The study population consisted of a sample of students whose teachers were trained using the TEACH model (see **Appendix A**). The student sample was selected using a non-probability sampling procedure of classrooms at MacGregor, Mading, and Walnut Bend elementary schools as well as Revere middle school. Most of the student samples' teachers had no experience using the TEACH model prior to the 2015–2016 academic year. Only students who completed the *Classroom Environment* pre- and post-survey comprised the final student sample. Outcome data (academic achievement, attendance, and discipline) were analyzed for these students.

- Demographic characteristics of the student sample and all students at the sampled TEACH schools were extracted from the Public Education Information Management System (PEIMS) for the 2015−2016 academic year to determine how the student sample compared to all students at the sampled TEACH schools.

- The student sample was administered the *Classroom Environment* survey in January 2016 and in May 2016 **(Appendix B)**. These points in time were selected to ensure that teachers had a sufficient amount of time to implement the TEACH model, with the intent of increasing the reliability in students' survey responses. The surveys were administered using the HISD HUB. Students in grades 3, 4, and 5 were targeted study participants at MacGregor, Mading, and Walnut Bend elementary schools. Students at Revere were asked to rate their English language arts teacher.

- On the *Classroom Environment* survey, students were asked to direct their responses to their teacher. Students rated 21 survey items using the following 4-point Likert-type scale: 4 = agree a lot, 3 = agree a little, 2 = disagree a little, and 1 = disagree a lot. The 21 survey items were categorized as three constructs: "Teacher as a Resource," "Safe Learning Environment," and "Classroom Management". The Cronbach alpha coefficient was used to measure the internal consistency of the survey items, i.e., how closely the items were related during the survey administration in 2014–2015. The Cronbach alpha for the complete survey was .925, which is preferable. The "Teacher as Resource" construct had preferable internal consistency (Cronbach alpha=.879). The Cronbach alpha coefficients for Classroom Management and Safe Learning Environment were acceptable (.790 and .671, respectively).

- Attendance data included excused, unexcused, and total absences in the 2014–2015 and the 2015–2016 academic years for a paired sample of 193 students who completed the *Classroom Environment* survey in 2015–2016. Attendance data were captured from the Cognos data system on August 9, 2016. A paired t-test was conducted to determine statistical significance of attendance outcomes. Cohen's d provided a standardized measure of the size of the treatment effect. Rosenthal (1991) recommended using the paired t-test value in computing the effect size (ES). Borenstein (2009) provides research on calculations using dependent samples taken into account the t-test statistic, sample size, and correlation between the pre- and post-survey variables.

- Student discipline was based on the number of in-school and out-of-school suspensions, alternative placements, and expulsions that students received during the 2014–2015 and the 2015–2016 academic years. Discipline actions were presented for students who completed both the pre- and post- *Classroom Environment* surveys. Disciplinary data were extracted from Chancery in July 2016.

- Academic reading and math achievement scale scores were obtained from the State of Texas Assessment of Academic Readiness (STAAR) data files (July 11, 2016) of students in the study sample. Only English reading and mathematics performance were assessed, considering the preponderance of research that links performance in these areas to student success (Espin & Deno, 1993; Duncan et al., 2007; Balfanz, Herzog, & Mac Iver, 2007; Kena, et al., 2016). Paired t-tests were conducted for students in the study sample who progressed to the next grade level. The level of statistical significant was $p < .05$ and statistically highly significant as $p < 0.001$.

- Effect size analyses, based on Cohen's, were conducted using academic achievement, attendance, and discipline outcomes. Rosenthal (1991) recommended using effect sizes for paired t-test data. Interpretation of Cohen's is: .2 = small effect; .5 = medium effect, and .8 = large effect (Cohen, 1988). According to the What Works Clearinghouse (n.d.), effect sizes of 0.25 standard deviations or larger are considered to be substantively important. Effect sizes at least this large are interpreted as a qualified positive (or negative) effect, even though they may not reach statistical significance in a given study.

Results

What was the profile of the study sample compared to all students at sampled TEACH schools?

Figure 1 reflects a profile of students who completed both the pre- and post-Classroom Environment surveys. Survey respondents were compared to all students at the sampled TEACH schools.

- Figure 1 reveals that the student survey sample was more likely to be female and less likely to be male than all students at the sampled schools. A lower percentage of the survey sample was economically disadvantaged (74 percent vs. 84 percent), limited English proficient (15 percent vs. 25 percent), classified as special education (6 percent vs. 7 percent), and at risk for dropping out of school (46 percent vs. 62 percent) compared to all students at the sampled TEACH schools. In addition, a higher percentage of the survey sample was gifted/talented compared to all students at the sampled schools (20 percent vs. 10 percent).

- **Appendix A** shows that a higher proportion of African American students and lower proportions of Asian, Hispanic, and White students comprised the survey sample relative to all students at the sampled TEACH schools.

Figure 1: Profile of TEACH survey sample relative to all students at sampled TEACH schools
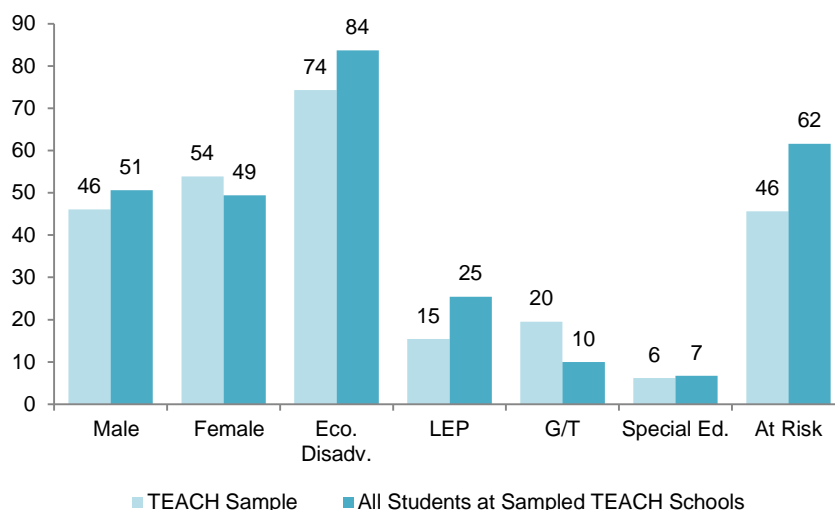
What was the impact of TEACH on student achievement of the student sample?

- **Figure 2** provides the STAAR reading performance (English version) for a paired sample of students who were administered the 2015 STAAR English reading test (Level II, Phase-in 1 Standard) and progressed to the next grade level, where they took the 2016 STAAR English reading test (Standard Progression).

- There were increases in the English STAAR reading scale scores of students in the study sample from 2015 to 2016. The highest increase was noted as students progressed from third to fourth

grades (96 points); whereas, the lowest increase was found as students progressed from fifth to sixth grades (12 points). The results were highly statistically significant as students progressed from third to fourth and fourth to fifth grades (p < .001). Statistical significance was also found as students progressed from grades six to seven and seven to eight (p < .05) (see **Appendix C**).

Figure 2: STAAR reading paired t-test for sampled students
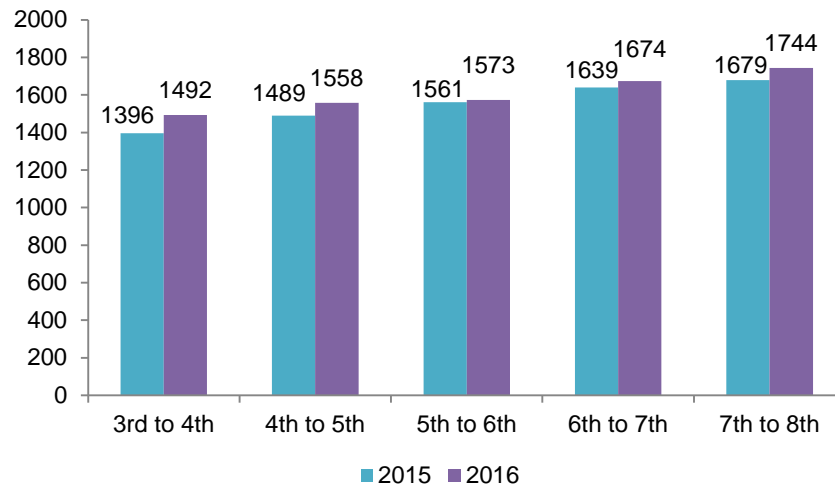
Note: For 3rd to 4th grades, n = 45; 4th to 5th grades, n = 46; 5th to 6th grades, n =11; 6th to 7th grades, n = 31; 7th to 8th grades, n = 17

- **Figure 3** presents the impact of TEACH on students' STAAR reading performance using Cohen's d effect size analyses. The program had a medium effect as students advanced from third to fourth grades (d = 0.739). A medium effect was also found as students advanced from seventh to eighth and from fourth to fifth grades (d = 0.61 and d = 0.485, respectively).

Figure 3: STAAR reading effect sizes
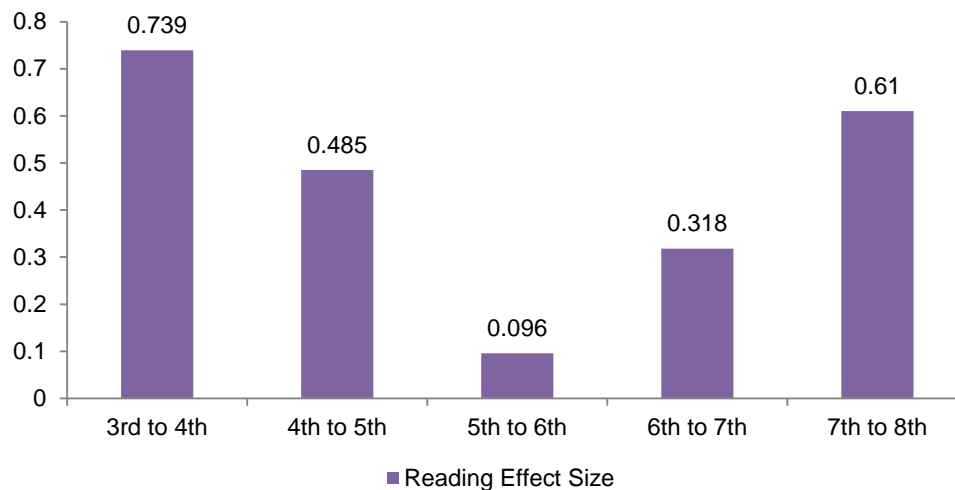
Cohen (1988) reports the following intervals for d: .2 to .4: small effect; .5 to .7: medium effect; .8 and higher: large effect.

- **Figure 4** depicts the STAAR math performance of a paired sample of students who were administered both the 2015 and 2016 STAAR math test and progressed to the next grade level.

- There were increases in the STAAR math scale scores of students in the study sample from 2015 to 2016. The highest increase was noted as students progressed from third to fourth grades (122 points); while, the lowest increase was found as students progressed from sixth to seventh grades (44 points). The results were highly statistically significant as students progressed from grades three to four, four to five, six to seven, and seven to eight ($p < .001$). Statistical significance was also found as students progressed from grade five to six ($p < .05$).

Figure 4: STAAR math paired t-test for sampled students

Note: For 3rd to 4th grades, n = 43; 4th to 5th grades, n = 46; 5th to 6th grades, n = 9; 6th to 7th grades, n = 30; 7th to 8th grades, n = 16

- **Figure 5** shows the impact of TEACH on students' STAAR math performance using Cohen's d effect size analyses. The program was most effective as students advanced from third to fourth grades. The Cohen's d was 0.939, which is considered large. The effect of the program as students advanced from seventh to eighth, fourth to fifth, and from fifth to sixth grades was medium (d = 0.741, d = .589, and d = 0.487, respectively). A small effect was observed as students progressed from sixth to seventh grades (d = 0.325).
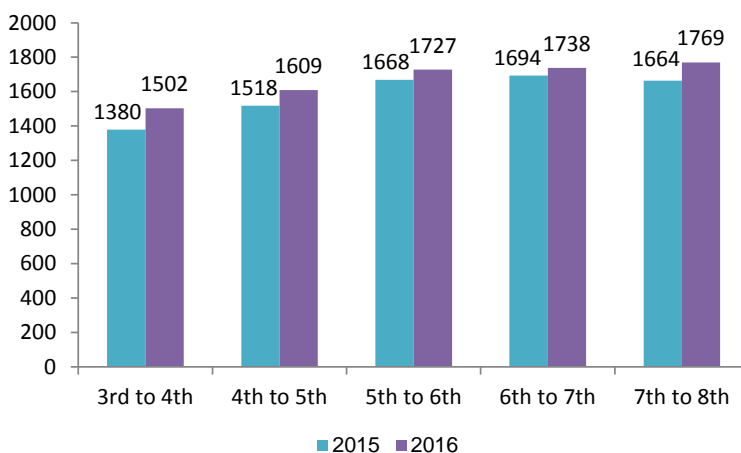
Figure 5: STAAR math effect sizes
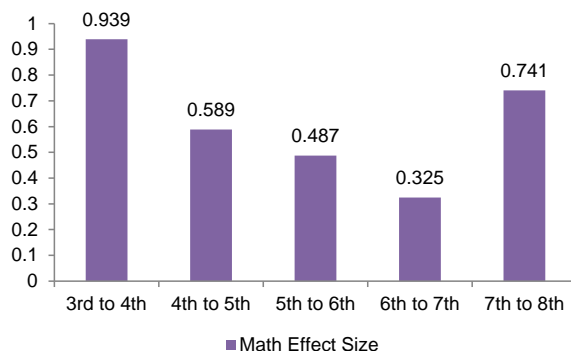
Cohen (1988) reports the following intervals for d: .2 to .4: small effect; .5 to .7: medium effect; .8 and higher: large effect.

What was the impact of TEACH on student attendance?

Attendance was measured using the mean number of excused, unexcused, and total absences of a paired study sample of students who completed the pre- and post-Classroom Environment surveys. This analysis was conducted to detect changes in absenteeism from pre to post TEACH.

- **Figure 6** shows statistically significant decreases in the mean number of excused, unexcused, and total absences of the TEACH study sample from 2014–2015 to 2015–2016 (see **Appendix D** for details).

Figure 6: Attendance of the study sample, 2014–2015 (pre) and 2015–2016 (post)
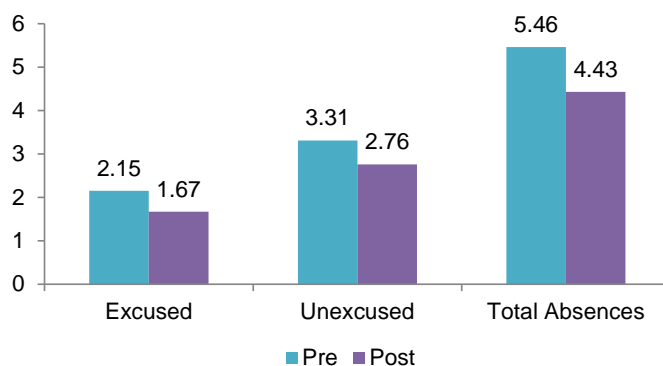
- **Figure 7** presents the magnitude of the effect related to the attendance (excused, unexcused, and total absences) of the study sample. Based on data from the study sample, TEACH had a small program effect on the student groups' excused, unexcused, and total absences (d = 0.18, d = 0.15, and d = 0.21, respectively).

Figure 7: Attendance effect sizes differences from pre (2014–2015) to post (2015–2016)
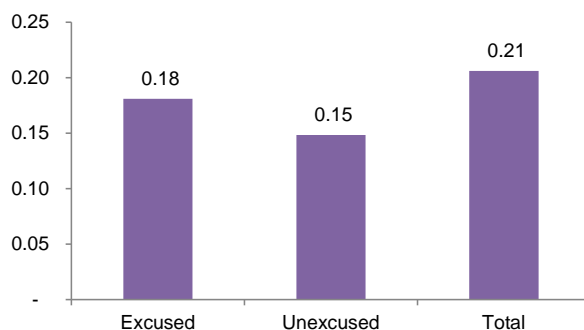
Cohen (1988) reports the following intervals for d: .2 to .4: small effect; .5 to .7: medium effect; .8 and higher: large effect.

How did the disciplinary actions of the student sample compare over the past two years, 2014–2015 and 2015–2016?

Disciplinary actions of the student sample are presented in **Figure 8** and **Appendix E**. In-school suspensions, out-of-school suspensions, alternative placements, and other disciplinary actions are included. Other disciplinary actions included a student or parent conference, detention, behavior/conduct contract, and referral to a counseling agency. Disciplinary actions were extracted from the Chancery data system in July 2016 for the current (2015–2016) and previous (2014–2015) academic years.

Figure 8: Percentage of disciplinary actions, 2014–2015 (pre) and 2015–2016 (post)
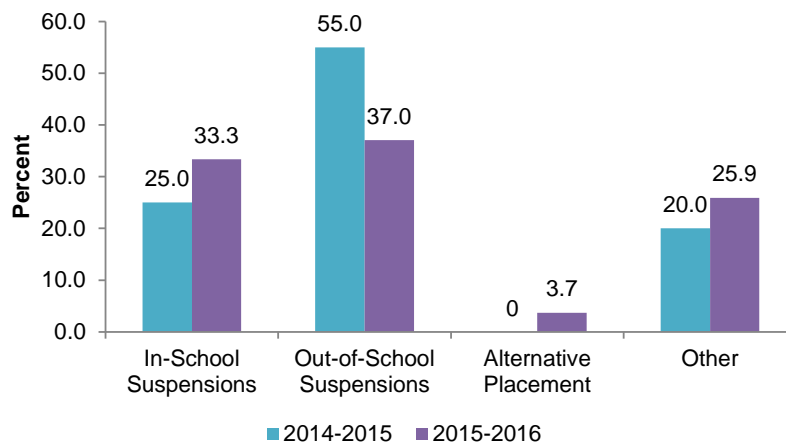
Note: 20 disciplinary actions were found in 2014–2015 and 27 disciplinary actions were found in 2015–2016.
"Other" disciplinary actions included a student or parent conference, detention, behavior/conduct contract, and referral to a counseling agency.

- Figure 8 shows that the TEACH student sample had a higher percentage of in-school suspensions (33.3 percent vs. 25.0 percent), alternative placements (3.7 percent vs. 0 percent), and "other" disciplinary actions (25.9 percent vs. 20.0 percent) in 2015–2016 (post) compared to 2014–2015 (pre).

- The percentage of out-of-school suspensions was lower for the TEACH student sample in 2015–2016 (post) compared to 2014–2015 (pre) (37.0 percent vs. 55.0 percent).

What were the perceptions of students relative to the classroom environment?

Students whose teachers were trained on the TEACH model at MacGregor, Mading, Revere, and Walnut Bend were surveyed regarding their perceptions of the classroom environment in January 2015 (pre-survey) and in May 2016 (post-survey) using the following 4-point Likert-type scale: 4 = agree a lot, 3 = agree a little, 2 = disagree a little, and 1 = disagree a lot. Detailed descriptive statistics of findings can be found in **Appendix F**.

- **Figure 9** indicates that students at MacGregor showed improved perceptions of their classroom environment on 3 of the 21 survey items (14 percent), decreased perceptions on 12

(57 percent) of the items, while students' responses on 6 items (29 percent) remained unchanged from pre- to post-survey.

- Among the 3 items showing improved perceptions for MacGregor students, two (20 percent) were among the 10 survey items that related to *Teacher as Resource.* The other item reflecting improved perceptions was among the 6 items that related to *Classroom Management* (17 percent). The items showing students' improved perceptions were "I can easily understand the teacher's instructions (Teacher as Resource)," "The teacher makes class time interesting (Classroom Management)," and "The teacher knows when students work hard" (Teacher as Resource) (Items 2, 7, and 17, respectively). None of the differences from pre- to post-survey on these items were statistically significant at the p < .05 level (two-tailed test).

- Although there were slight declines in the ratings, MacGregor students remained the most positive from pre- to post-survey on the item, "I feel that other students in the class help me learn" (Item 20) (M = 2.6 and M = 2.5, respectively) (*Safe Learning Environment*). Students remained the most negative on the items "The teacher makes the classroom a safe place" (Item 15) (*Safe Learning Environment*) and "The teacher talks about positive character traits and how to reach goals" (Item 16, *Teacher as Resource*) (pre-survey M = 1.2 and post-survey M = 1.1, on both items) (Figure 9).

- The survey results of the Mading student sample are shown in **Figure 10**. Technical issues in survey administration led to 19 out of 21 items being assessed at pre- and post-survey. Students reported improved perceptions on 15 of the 19 items (79 percent), decreased perception on one of the items (5 percent), while students' responses on three items (16 percent) remained unchanged.

- Mading students' ratings of their perceptions reflected improvements on 100 percent of the 9 items administered that addressed *Teacher as Resource,* 3 of the 5 items (60 percent) that addressed *Safe Learning Environment,* and 3 of the 5 items (60 percent) that addressed *Classroom Environment* (Figure 10).

- Statistically significant increases in students' ratings of their perceptions were found on four (44 percent) of the nine items administered for Mading students that addressed *Teacher as Resource*: "It helps me learn when the teacher uses whiteboards, smart boards, or other visual aids" (Item 4), "The teacher includes all students during class lessons" (Item 11), "The teacher keeps students on track for learning" (Item 13), and "The teacher knows when students work hard" (Item 17). A statistically significant increase was found on one (20 percent) of the five items administered that explored *Classroom Management*, which was "I am usually not distracted by other students in classes" (Item 12).

- **Appendix F**, p. 27 provides statistical analyses to detect more precise differentiation of pre- and post-survey findings. There were decreased ratings of students' perceptions on the items "The teacher is calm during class" (Item 5) and "The teacher does not hold it against me when I make a mistake or do something I'm not supposed to do" (Item 10). Both items assessed *Safe Learning Enviro*nment. The decreases in student ratings were not statistically significant (p < .05 level) (Figure 10).

Figure 9: Perceptions of MacGregor students relative to the classroom environment

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
■ Pre	2.0	1.5	2.2	1.4	1.6	1.6	1.4	1.9	1.3	1.7	1.3	2.1	1.5	1.6	1.2	1.2	1.1	1.2	1.5	2.6	1.3
■ Post	2.0	1.6	2.1	1.3	1.4	1.5	1.5	1.8	1.2	1.7	1.3	1.8	1.5	1.5	1.1	1.1	1.2	1.2	1.2	2.5	1.3
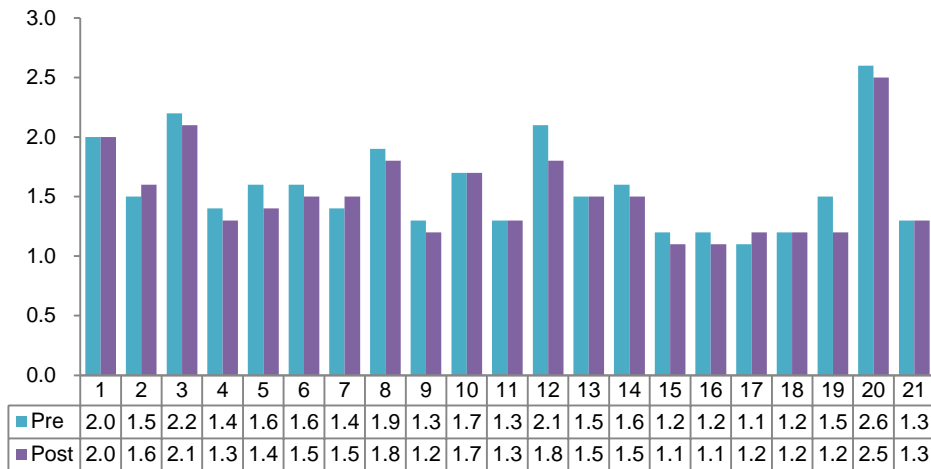
Figure 10: Perceptions of Mading students relative to the classroom environment

	1	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
■ Pre	2.4	1.5	2.1	2.2	1.9	2.2	1.5	2.1	1.7	2.1	1.8	1.7	1.6	1.4	1.4	1.4	1.6	2.4	1.7
■ Post	2.5	1.8	2.1	2.3	1.9	2.2	1.7	2.0	1.8	2.2	2.0	2.1	1.9	1.6	1.5	1.5	1.8	2.5	1.8
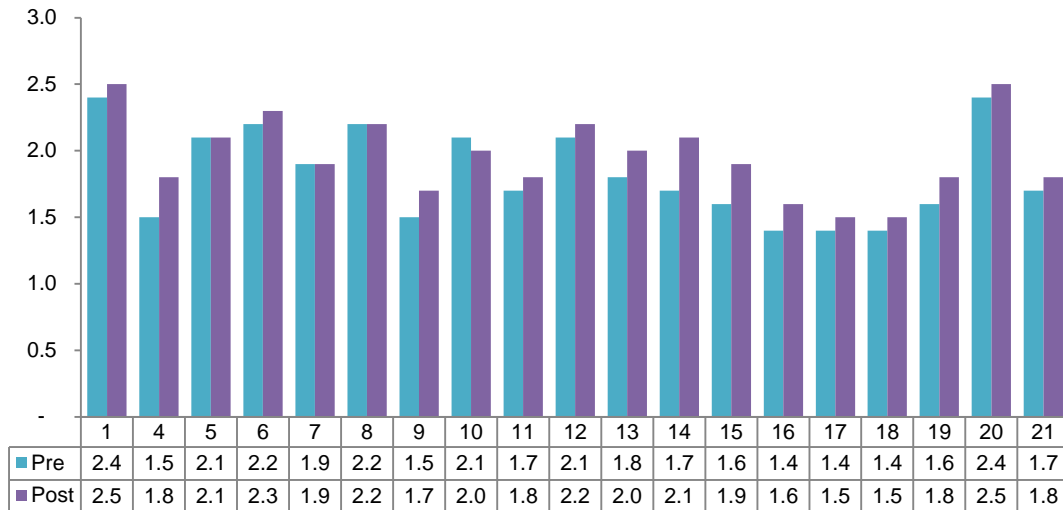
Note: 19 out of 21 items were assessed for Mading students at pre- and post-survey due to technical survey issues.

Survey Legend -	
1. Students in the class listen to the teacher.	12. I am usually not distracted by other students in class.
2. I can easily understand the teacher's instructions.	13. The teacher keeps students on track for learning.
3. The students in the class pay attention to the teacher.	14. The teacher makes me curious about things in class.
4. It helps me learn when the teacher uses whiteboards, smart boards, or other visual aids.	15. The teacher makes the classroom a safe place.
5. The teacher is calm during class.	16. The teacher talks about positive character traits and how to reach goals.
6. The teacher can keep students calm during class.	17. The teacher knows when students work hard.
7. The teacher makes class time interesting.	18. My teacher helps me make good decisions.
8. The teacher can get the attention of the class pretty quickly.	19. When I don't understand my school work, I can ask my teacher for help.
9. The teacher helps students when they need it.	20. I feel that other students help me learn.
10. The teacher doesn't hold it against me when I make a mistake or do something I'm not supposed to do.	21. The teacher treats students with respect.
11. The teacher includes all students during class lessons.	**Note: 4 = agree a lot, 3 = agree a little, 2 = disagree a little, 1 = disagree a lot**

- **Figure 11** depicts the level of agreement with items on the *Classroom Environment* survey for Revere students. Technical issues led to 20 out of 21 items being administered. There were improvements in students' perceptions on 9 of the 20 items (45 percent), decreases on 6 items (30 percent), while students' responses remained unchanged on 5 items (25 percent). The sample size was small; therefore, the results should be viewed with caution. (See Appendix F, p. 28.)

- Among the 9 items showing improvements in students' perceptions at Revere, 3 items were among the 9 items administered relating to *Teacher as Resource* (33 percent) ("When I don't understand my school work, I can ask my teacher (Item 19)," "The teacher helps students when they need it (Item 9)," and "The teacher knows when students work hard" (Item 17)). Four items (80 percent) showing improvements were among the 5 items that assessed *Safe Learning Environment* ("The teacher makes the classroom a safe place (Item 15)," "The teacher doesn't hold it against me when I make a mistake or do something I'm not supposed to do (Item 10)," "The teacher is calm during class (Item 5)," and "I feel that other students help me learn" (Item 20)). Finally, two items among the 6 items (33 percent) that measured *Classroom Management* showed improvements in students' perceptions, which were "The teacher can keep students calm during class" (Item 6) and "The teacher makes class time interesting" (Item 7).

- While declines in student ratings at Revere from pre- to post-survey were small, the largest decrease in ratings were noted on the item "The teacher talks about positive character traits and how to reach goals" (Item 16) (pre-survey, M = 1.9 to post-survey, M = 1.6) (*Teacher as Resource*) (Figure 11).

- Walnut Bend student survey responses are shown in **Figure 12**. Among the 20 out of 21 survey items administered, improvements in students' perceptions were documented for 2 (10 percent) of the 20 items, decreases on 12 (60 percent) of the items, and no change in students' responses on 6 (30 percent) of the items.

- According to Figure 12, the 2 items showing improvements in students' perceptions at Walnut Bend were among 9 items administered relating to *Teacher as Resource* "The teacher knows when students work hard (Item 17)" and "The teacher keeps students on track for learning" (Item 13).

- **Appendix F**, p. 29 provides statistical analyses to detect more precise differentiation of pre- and post-survey findings. Although minimal, the largest decrease in ratings of students' perceptions at Walnut Bend was on the item "The teacher can keep students calm during class" (pre-survey, M = 2.2 to post-survey, M = 1.8) (*Classroom Management*).

Figure 11: Perceptions of Revere students relative to the classroom environment

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
■ Pre	1.6	2.1	1.6	1.6	2.1	2.2	2.1	1.7	1.7	1.8	2.1	1.9	2.1	1.5	1.9	1.4	1.6	1.6	2.1	1.8
■ Post	1.6	2.1	1.5	1.8	2.2	2.4	2.1	1.8	2.4	1.6	1.9	1.8	2.1	1.6	1.6	1.8	1.6	1.8	2.6	1.7
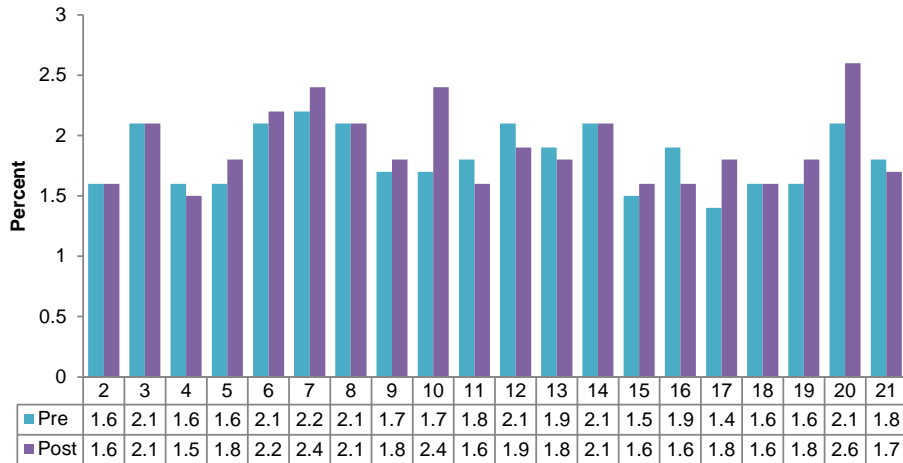
Note: 20 out of 21 items were assessed for Revere students at pre- and post-survey due to technical survey issues.

Figure 12: Perceptions of Walnut Bend students relative to the classroom environment

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
■ Pre	1.9	2.3	1.6	2	2.2	1.8	2.2	1.4	2.3	1.7	2.2	1.4	1.7	1.4	1.5	1.4	1.4	1.7	2.3	1.5
■ Post	1.7	2.2	1.3	1.8	1.8	1.8	2.2	1.3	2.2	1.5	2.2	1.7	1.7	1.3	1.5	1.5	1.3	1.4	2.1	1.5

Note: 20 out of 21 items were assessed for Walnut Bend students at pre- and post-survey due to technical survey issues.

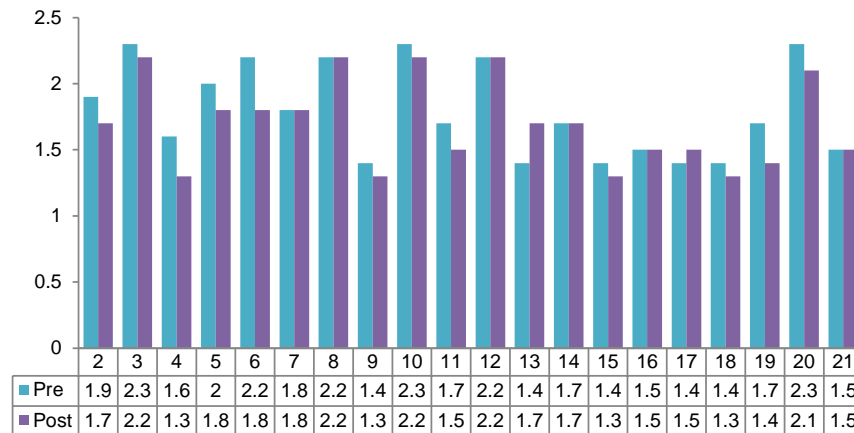| Survey Legend -	
1. Students in the class listen to the teacher.	12. I am usually not distracted by other students in class.
2. I can easily understand the teacher's instructions.	13. The teacher keeps students on track for learning.
3. The students in the class pay attention to the teacher.	14. The teacher makes me curious about things in class.
4. It helps me learn when the teacher uses whiteboards, smart boards, or other visual aids.	15. The teacher makes the classroom a safe place.
5. The teacher is calm during class.	16. The teacher talks about positive character traits and how to reach goals.
6. The teacher can keep students calm during class.	17. The teacher knows when students work hard.
7. The teacher makes class time interesting.	18. My teacher helps me make good decisions.
8. The teacher can get the attention of the class pretty quickly.	19. When I don't understand my school work, I can ask my teacher for help.
9. The teacher helps students when they need it.	20. I feel that other students help me learn.
10. The teacher doesn't hold it against me when I make a mistake or do something I'm not supposed to do.	21. The teacher treats students with respect.
11. The teacher includes all students during class lessons.	**Note: 4 = agree a lot, 3 = agree a little, 2 = disagree a little, 1 = disagree a lot**

Discussion

To Educate All Children (TEACH) has operated in the Houston Independent School District (HISD) for more than 10 years. During the 2014–2015 academic year, TEACH was implemented at Mading Elementary, Revere Middle, Cullen Middle, and Furr High schools. During the 2015–2016 academic year, TEACH expanded to Walnut Bend, MacGregor, and Tinsley Elementary schools. The TEACH program model consists of four components: (1) Leadership Support, (2) Training for Staff, (3) Follow-up Coaching, and (4) Tuesday Tips. TEACH was designed to improve classroom culture, focusing on de-escalation, conflict resolution, nonverbal communication, and building student's self-confidence. Expectations were for classrooms to experience a decrease in student disciplinary referrals, an increase in student attendance, and calmer, more productive classrooms. Indirect impact from the implementation of TEACH would be improvements in student achievement.

To that end, this evaluation assessed the impact of TEACH on attendance and disciplinary actions of students. Additional outcome measures included reading and math performance of students whose teachers participated in the program during the 2015–2016 academic year. There were limitations to the evaluation, considering that only students who completed both the pre- and post-*Classroom Environment* surveys were included in the study sample. This limited the sample size for analyses of impact, particularly at Revere Middle School.

TEACH's focus on classroom management was evident in attendance and disciplinary actions of the study sample. Specifically, there were statistically significant decreases in the mean number of excused, unexcused, and total absences of the TEACH study sample from 2014–2015 to 2015–2016. The percentage of out-of-school suspensions was lower over the same time period. The percentage of in-school suspensions, alternative placements, and "other" disciplinary actions were higher in 2015–2016 compared to 2014–2015 for the student sample. However, the number of actions reported increased from 20 in 2014–2015 to 27 in 2015–2016.

The study found higher mean scale scores on the English STAAR reading and math tests from 2015 to 2016 for the study sample based on paired t-test analyses. STAAR results for the 2015 academic year were based on the Level II, Phase-in 1 standard, while 2016 results were based on a more rigorous, Progression Standard. These findings were statistically significant in math as students progressed from third to fourth, fourth to fifth, fifth to sixth, sixth to seventh, and seventh to eighth grades. Relative to reading, increases in mean scale scores were statistically significant as students progressed from third to fourth, fourth to fifth, sixth to seventh, and seventh to eighth grades.

Survey results to explore the classroom environment detected minimal positive changes in students' ratings. In most cases, the differences were statistically insignificant, except at Mading. In addition, students' perceptions may have been influenced by the limited amount of time between pre- and post-survey to experience changes in the classroom enviroment. Nevertheless, the most notable positive increases across schools were on items related to Classroom Management and Teachers as Resource compared to Safe Learning Environment. The sample sizes, particularly at Revere, were small therefore, the results should be viewed with caution.

Extending the time between the pre- and post-survey may provide more reliable classroom environment survey results. In addition, survey data collection in targeted classrooms may help to explain outcomes in order to contribute toward more focused program implementation, planning, and decision-making. Exploration of teachers' perceptions of TEACH may also provide additional information to improve the

program. Given that there was some evidence of the impact of TEACH on student attendance, discipline, and academic achievement, more research should be conducted to determine whether findings are consistent over time.

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Schools: MacGregor, Mading, and Walnut Bend Elementary schools and Revere Middle school	TEACH Student Survey Sample (n = 241)		All Students at the Sampled TEACH Schools (n =956)	
	n	%	n	%
Gender				
Male	111	46.1	484	50.6
Female	130	53.9	472	49.4
Economically Disadvantaged	179	74.3	800	83.7
LEP	37	15.4	243	25.4
Gifted/Talented	47	19.5	96	10.0
Special Ed	15	6.2	64	6.7
At Risk	110	45.6	589	61.6
Dyslexia	2	0.8	4	0.4
Ethnicity				
African American	141	58.5	442	46.2
Asian	5	2.1	30	3.1
Hispanic	82	34.0	405	42.4
Native American/Indian	1	0.4	3	0.3
White	10	4.1	63	6.6
Two or More Races	2	0.8	12	1.3
Pacific Islander	0	0.0	1	0.1

TEACH Student Survey Sample by Grade Level, 2015–2016		
Grade Level	**Frequency**	**Percent**
First	1	.4
Second	4	1.7
Third	61	25.3
Fourth	53	22.0
Fifth	59	24.5
Sixth	12	5.0
Seventh	33	13.7
Eighth	18	7.5
Total	241	100.0

All Students at the Sampled TEACH Schools, 2015–2016		
Grade Level	**Frequency**	**Percent**
EE	3	.3
PK	67	7.0
KG	94	9.8
First	-	-
Second	81	8.5
Third	92	9.6
Fourth	68	7.1
Fifth	84	8.8
Sixth	139	14.5
Seventh	130	13.6
Eighth	101	10.6
Total	956	100.0

Appendix B

Student Classroom Environment Survey

For each item, select the bubble that best describes your feelings. Please answer all of the 21 items. Thank you!

Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
1. Students in the class listen to the teacher.					
2. I can easily understand the teacher's instructions.					
3. The students in the class pay attention to the teacher.					
4. It helps me learn when the teacher uses whiteboards, smart boards, or other visual aids.					
5. The teacher is calm during class.					
6. The teacher can keep students calm during class.					
7. The teacher makes class time interesting.					
8. The teacher can get the attention of the class pretty quickly.					
9. The teacher helps students when they need it.					
10. The teacher doesn't hold it against me when I make a mistake.					
11. The teacher includes all students during class lessons.					
12. I am usually not distracted by other students in class.					
13. The teacher keeps students on track for learning.					
14. The teacher makes me curious about things in class.					
15. The teacher makes the classroom a safe place.					
16. The teacher talks about positive character traits and how to reach goals.					
17. The teacher knows when students work hard.					
18. My teacher helps me make good decisions.					
19. When I don't understand my school work, I can ask my teacher.					
20. I feel that other students help me learn.					
21. The teacher treats students with respect.					

Reading	2015	2016	n	Std	Mean Diff	t	p	Effect Size
3rd to 4th	1396	1492	45	86.655	96.644	7.482	0.000***	0.739
4th to 5th	1489	1558	46	76.354	68.913	6.121	0.000***	0.485
5th to 6th	1561	1573	11	64.536	11.545	0.593	0.566	0.096
6th to 7th	1639	1674	31	66.378	34.968	2.933	0.006**	0.318
7th to 8th	1679	1744	17	97.907	65.412	2.755	0.014*	0.610

*** p < .001, ** p < .01, * p < .05

Math	2015	2016	n	Std	Mean Diff	t	p	Effect Size
3rd to 4th	1380	1502	43	80.171	122.419	10.013	0.000***	0.939
4th to 5th	1518	1609	46	92.338	90.326	6.635	0.000***	0.589
5th to 6th	1668	1727	9	60.688	59	2.917	0.019*	0.487
6th to 7th	1694	1738	30	60.638	43.633	3.941	0.000***	0.325
7th to 8th	1664	1769	16	66.713	105.125	6.303	0.000***	0.741

*** p < .001, ** p < .01, *p < .05

Appendix D

Absences of TEACH Student Survey Sample,

Pre TEACH (2014-2015) and Post TEACH (2015–2016)

Paired Samples Statistics				
	Mean	**N**	**Std. Deviation**	**Std. Error Mean**
Pre-Excused	2.15	193	2.952	.212
Post-Excused	1.67	193	2.314	.167
Pre-Unexcused	3.31	193	3.825	.275
Post-Unexcused	2.76	193	3.589	.258
Pre-Total	5.46	193	5.418	.390
Post-Total	4.43	193	4.534	.326

Paired Samples Test								
	Paired Differences					**t**	**df**	**Sig. (2-tailed)**
	Mean	**Std. Deviation**	**Std. Error Mean**	**95% Confidence Interval of the Difference**				
				Lower	**Upper**			
Excused -	.477	2.744	.198	.087	.866	2.413	192	.017
Unexcused	.549	2.974	.214	.127	.971	2.566	192	.011
Total Absences	1.026	4.060	.292	.449	1.602	3.510	192	.001

Appendix E

Disciplinary Actions, 2014-2015 and 2015-2016 for Student Sample

School Year	Disciplinary Action	Frequency	Percent
2014–2015	In-School Suspensions	5	25.0
	Other	4	20.0
	Out-of-School Suspensions	11	55.0
	Total	20	100.0
2015–2016	Alternative Placement	1	3.7
	In-School Suspensions	9	33.3
	Other	7	25.9
	Out-of-School Suspensions	10	37.0
	Total	27	100.0

Item Number/Teacher as Resource Items
19 - When I don't understand my school work, I can ask my teacher for help.
4 - It helps me learn when the teacher uses whiteboards, smart boards, or other visual aids.
9 - The teacher helps students when they need it.
2 - I can easily understand the teacher's instructions.
18 - My teacher helps me make good decisions.
11 - The teacher includes all students during class lessons.
17 - The teacher knows when students work hard.
13 - The teacher keeps students on track for learning.
16 - The teacher talks about positive character traits and how to reach goals.
14 - The teacher makes me curious about things in class.
Item Number/Safe Learning Environment Items
15 - The teacher makes the classroom a safe place.
10 - The teacher doesn't hold it against me when I make a mistake or do something I'm not supposed to do.
21 - The teacher treats students with respect.
5 - The teacher is calm during class.
20 - I feel that other students help me learn.
Item Number/Classroom Management Items
3 - The students in the class pay attention to the teacher.
6 - The teacher can keep students calm during class.
7 - The teacher makes class time interesting.
8 - The teacher can get the attention of the class pretty quickly.
12 - I am usually not distracted by other students in class.
1 - Students in the class listen to the teacher.

MacGregor		Mean	N	Std. Devia.	Mean Diff	t	p
22. Students in the class listen to the teacher.	Pre	2.023	44	.7621			
	Post	2.000	44	.7471	-.0227	-0.138	0.893
23. I can easily understand the teacher's instructions.	Pre	1.465	43	.6305			
	Post	1.605	43	.7910	.1395	0.422	0.675
24. The students in the class pay attention to the teacher.	Pre	2.167	42	.6595			
	Post	2.143	42	.8715	-.0238	-0.167	0.868
25. It helps me learn when the teacher uses whiteboards, smart boards, or other visual aids.	Pre	1.372	43	.6909			
	Post	1.302	43	.6375	-.0698	-0.489	0.628
26. The teacher is calm during class.	Pre	1.581	43	.6980			
	Post	1.372	43	.6181	-.2093	1.595	0.118
27. The teacher can keep students calm during class.	Pre	1.581	43	.7632			
	Post	1.488	43	.5925	-.0930	-0.813	0.421
28. The teacher makes class time interesting.	Pre	1.405	42	.7345			
	Post	1.452	42	.8025	.0476	0.374	0.71
29. The teacher can get the attention of the class pretty quickly.	Pre	1.884	43	.8510			
	Post	1.814	43	1.0061	-.0698	-0.424	0.673
30. The teacher helps students when they need it.	Pre	1.286	42	.6730			
	Post	1.238	42	.5323	-.0476	-0.422	0.675
31. The teacher doesn't hold it against me when I make a mistake.	Pre	1.725	40	.8767			
	Post	1.650	40	.9753	-.0750	-0.424	0.674
32. The teacher includes all students during class lessons.	Pre	1.349	43	.5725			
	Post	1.256	43	.6208	-.0930	-0.726	0.472
33. I am usually not distracted by other students in class.	Pre	2.095	42	.9830			
	Post	1.810	42	.9432	-.2857	-1.667	0.103
34. The teacher keeps students on track for learning.	Pre	1.537	41	.7777			
	Post	1.463	41	.8396	-.0732	-0.433	0.667
35. The teacher makes me curious about things in class.	Pre	1.585	41	.9480			
	Post	1.488	41	.8695	-.0976	-0.585	0.562
36. The teacher makes the classroom a safe place.	Pre	1.214	42	.6063			
	Post	1.095	42	.4844	-.1190	-0.961	0.342
37. The teacher talks about positive character traits and how to reach goals.	Pre	1.167	42	.5809			
	Post	1.095	42	.3702	-.0714	-0.65	0.519
38. The teacher knows when students work hard.	Pre	1.095	42	.2971			
	Post	1.238	42	.6555	.1429	1.432	0.16
39. My teacher helps me make good decisions.	Pre	1.195	41	.4593			
	Post	1.195	41	.6411	0.0000	0	1
40. When I don't understand my school work, I can ask my teacher.	Pre	1.450	40	.6775			
	Post	1.225	40	.4229	-.2250	-1.854	0.071
41. I feel that other students help me learn.	Pre	2.625	40	1.1022			
	Post	2.450	40	1.0365	-.1750	-0.774	0.444
42. The teacher treats students with respect.	Pre	1.342	38	.8471			
	Post	1.316	38	.8089	-.0263	-0.147	0.884

Mading		Mean	N	Std. Devia.	Mean Diff	t	p
1. The students in the class pay attention to the teacher.	Pre	2.394	99	1.0863			
	Post	2.525	99	1.0912	0.131	1.059	0.29
4. It helps me learn when the teacher uses whiteboards, smart boards, or other aids.	Pre	1.490	104	.8004			
	Post	1.750	104	.9829	0.260	2.635	.010*
5. The teacher is calm during class.	Pre	2.135	104	1.1153			
	Post	2.087	104	1.0250	0.048	0.33	0.74
6. The teacher can keep students calm during class.	Pre	2.194	103	1.1120			
	Post	2.272	103	1.0864	0.078	0.588	0.56
7. The teacher makes class time interesting.	Pre	1.881	101	1.0704			
	Post	1.921	101	.8909	0.040	0.337	0.74
8. The teacher can get the attention of the class pretty quickly.	Pre	2.186	102	1.1145			
	Post	2.245	102	1.0382	0.059	0.461	0.65
9. The teacher helps students when they need it.	Pre	1.491	106	.7715			
	Post	1.651	106	.8733	0.160	0.948	0.35
10. The teacher doesn't hold it against me when I make a mistake.	Pre	2.060	100	1.1355			
	Post	2.040	100	1.0142	0.020	0.688	0.49
11. The teacher includes all students during class lessons.	Pre	1.708	106	.9151			
	Post	1.821	106	1.0028	0.113	1.87	0.06
12. I am usually not distracted by other students in class.	Pre	2.114	105	.9934			
	Post	2.210	105	1.1068	0.095	3.252	.002**
13. The teacher keeps students on track for learning.	Pre	1.800	100	.9744			
	Post	2.030	100	.9995	0.230	2.506	.014**
14. The teacher makes me curious about things in class.	Pre	1.701	97	.9148			
	Post	2.093	97	1.0417	0.392	1.418	0.16
15. The teacher makes the classroom a safe place.	Pre	1.583	103	.9854			
	Post	1.922	103	1.0818	0.340	1.271	0.21
16. The teacher talks about positive character traits and how to reach goals.	Pre	1.436	101	.8296			
	Post	1.584	101	.8862		1.502	0.14
17. The teacher knows when students work hard.	Pre	1.408	103	.8217			
	Post	1.544	103	.8492	0.136	2.004	.048*
18. My teacher helps me make good decisions.	Pre	1.367	98	.7091			
	Post	1.510	98	.8403	0.143	0.682	0.5
19. When I don't understand my school work, I can ask my teacher.	Pre	1.563	103	.8479			
	Post	1.767	103	.9822	0.204	0.835	0.41
20. I feel that other students help me learn.	Pre	2.369	103	1.2524			
	Post	2.466	103	1.1784	0.097		
21. The teacher treats students with respect.	Pre	1.657	102	1.0577			
	Post	1.765	102	1.0165	-0.108		

Classroom Environment Survey Results by School, 2015–2016

Revere		Mean	N	Std. Devia.	Mean Diff	t	p
2. I can easily understand the teacher's instructions.	Pre	1.647	17	.7019			
	Post	1.588	17	.7123	0.059	0.27	0.791
3. The students in the class pay attention to the teacher.	Pre	2.063	16	.7719			
	Post	2.063	16	.6801	0.000	0	1
4. It helps me learn when the teacher uses whiteboards, smart board, or other visual aids.	Pre	1.588	17	.7123			
	Post	1.529	17	.7174	-0.059	0.436	0.668
5. The teacher is calm during class.	Pre	1.647	17	.7859			
	Post	1.824	17	.7276	0.176	0.677	0.508
6. The teacher can keep students calm during class.	Pre	2.118	17	.9275			
	Post	2.235	17	.7524	0.118	0.489	0.632
7. The teacher makes class time interesting.	Pre	2.235	17	.8314			
	Post	2.412	17	1.0037	0.176	0.889	0.382
8. The teacher can get the attention of the class pretty quickly.	Pre	2.118	17	.9275			
	Post	2.118	17	1.0537	0.000	0	1
9. The teacher helps students when they need it.	Pre	1.706	17	.6860			
	Post	1.765	17	.8314	0.059	0.251	0.805
10. The teacher doesn't hold it against me when I make a mistake.	Pre	1.706	17	.7717			
	Post	2.353	17	.9963	0.647	2.393	0.029*
11. The teacher includes all students during class lessons.	Pre	1.824	17	.8828			
	Post	1.647	17	.7859	-0.177	0.643	0.529
12. I am usually not distracted by other students in class.	Pre	2.059	17	.8993			
	Post	1.941	17	.8269	-0.118	0.398	0.696
13. The teacher keeps students on track for learning.	Pre	1.882	17	.7812			
	Post	1.765	17	.9034	-0.117	0.416	0.683
14. The teacher makes me curious about things in class.	Pre	2.125	16	.6191			
	Post	2.063	16	1.1236	-0.062	0.235	0.817
15. The teacher makes the classroom a safe place.	Pre	1.500	16	.6325			
	Post	1.563	16	.7274	0.063	0.293	0.774
16. The teacher talks about positive character traits and how to reach goals.	Pre	1.882	17	.7812			
	Post	1.588	17	.7123	-0.294	1.319	0.206
17. The teacher knows when students work hard.	Pre	1.412	17	.8703			
	Post	1.765	17	1.0914	0.353	1.562	0.138
18. My teacher helps me make good decisions.	Pre	1.647	17	.8618			
	Post	1.647	17	.9963	0.000	0	1
19. When I don't understand my school work, I can ask my teacher.	Pre	1.563	16	.8139			
	Post	1.750	16	1.0000	0.187	0.676	0.509
20. I feel that other students help me learn.	Pre	2.118	17	1.0537			
	Post	2.647	17	1.1147	0.529	2.045	.058*
21. The teacher treats students with respect.	Pre	1.824	17	1.0744			
	Post	1.706	17	.9852	-0.398		0.696

Walnut Bend		Mean	N	Std. Devia.	Mean Diff.	t	p
1. I can easily understand the teacher's instructions.	Pre	1.944	72	.9914			
	Post	1.708	72	.8125	-0.236	1.751	.084*
2. The students in the class pay attention to the teacher.	Pre	2.265	68	1.0165			
	Post	2.176	68	.9765	-0.088	0.61	0.544
4. It helps me learn when the teacher uses whiteboards, smart board, or other visual aids	Pre	1.597	72	.9293			
	Post	1.347	72	.7152	-0.250	2.209	.030*
5. The teacher is calm during class.	Pre	1.958	72	1.0269			
	Post	1.792	72	1.0061	-0.167	1.256	0.213
6. The teacher can keep students calm during class.	Pre	2.169	71	1.1830			
	Post	1.831	71	.9854	-0.338	2.294	.025*
7. The teacher makes class time interesting.	Pre	1.845	71	1.0643			
	Post	1.831	71	.9854	-0.014	0.09	0.928
8. The teacher can get the attention of the class pretty quickly.	Pre	2.209	67	1.0081			
	Post	2.209	67	1.1219	0.000	0	1
9. The teacher helps students when they need it.	Pre	1.397	68	.7559			
	Post	1.338	68	.6604	-0.059	0.664	0.509
10. The teacher doesn't hold it against me when I make a mistake.	Pre	2.314	70	1.1489			
	Post	2.214	70	1.2498	-0.100	0.563	0.575
11. The teacher includes all students during class lessons.	Pre	1.653	72	.9518			
	Post	1.542	72	.7108	-0.111	0.893	0.375
12. I am usually not distracted by other students in class.	Pre	2.162	68	1.1145			
	Post	2.191	68	1.0686	0.029	0.191	0.849
13. The teacher keeps students on track for learning.	Pre	1.423	71	.7683			
	Post	1.662	71	.8935	0.239	0.207	0.837
14. The teacher makes me curious about things in class.	Pre	1.729	70	.9916			
	Post	1.700	70	.9978	-0.029	0.6	0.55
15. The teacher makes the classroom a safe place.	Pre	1.394	71	.8532			
	Post	1.338	71	.6534		0.087	0.931
16. The teacher talks about positive character traits and how to reach goals.	Pre	1.529	70	1.0317			
	Post	1.543	70	.9118	0.014	0.087	0.931
17. The teacher knows when students work hard.	Pre	1.386	70	.8391			
	Post	1.543	70	.8629	0.157	1.839	.070*
18. My teacher helps me make good decisions.	Pre	1.364	66	.7367			
	Post	1.303	66	.6556	-0.061	0.505	0.615
19. When I don't understand my school work, I can ask my teacher.	Pre	1.672	67	1.0925			
	Post	1.418	67	.7618	-0.254	1.649	0.104
20. I feel that other students help me learn.	Pre	2.250	68	1.1509			
	Post	2.088	68	1.1027	-0.162	1.035	0.304
21. The teacher treats students with respect.	Pre	1.515	68	.9383			
	Post	1.485	68	.8551	-0.029	0.27	0.788