



EVALUATION REPORT

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Academic Parent Teacher Teams (APTT): How did the new parent-involvement model impact student achievement in HISD?

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During the 2014–2015 school year, the Houston Independent School District (HISD) Family and Community Engagement (FACE) Department implemented a parent engagement program in 24 elementary schools. Most schools began implementation of the program in grades 3 through 5, although some chose to include PK through 5. Grades 3 through 5 students were used for the sample in this report. Over the course of the program, 3,800 students in grades 3 through 5 had a parent/guardian participate in an APTT meeting(s). School data were collected throughout the course of the program to provide a snapshot of parent participation and student achievement. Available data include parent participation rates, demographic data, and the 2015 STAAR reading results. The Level II Satisfactory, phase-in 1 standard STAAR results suggest that APTT schools had fewer students on average who met the reading satisfactory standard than the district; nonetheless, students whose parents participated in APTT performed better compared to students in the same school whose parents did not attend meetings. Other findings suggest that there is a relationship between the number of APTT meetings parents attended and their child's performance on the STAAR reading assessment.

Background

The Academic Parent-Teacher Teams (APTT) is a program designed by Dr. Maria Paredes and serviced by WestEd, a corporation that conducts research and provides educational programs and services. APTT is an evidence-based initiative that was created to systematically engage parents in their child's learning process (WestEd, n.d.). The APTT program was developed in the Creighton School District in Phoenix, Arizona with the goal to provide parents with tools and strategies needed to assist their children with their academic growth. This was done by facilitating the development of academic teams made up of the student's parents and teachers. The program equips teachers with necessary tools and skills to communicate with parents and build collaborative parent-teacher teams. The teachers' goal is for parents to acquire strategies that create home learning environments that will reinforce and supplement fundamental skills that the student learns in the classroom. APTT staff train teachers to effectively communicate student progress with parents by using data. Familiarity with students' progress and goal setting allow parents to become effective partners in their student's learning process.

The APTT program was piloted during the 2013–2014

academic year in nine Houston Independent School District (HISD) schools. Individual school summary data provided a guide for fidelity adjustments at the conclusion of the pilot year.

The HISD Family and Community Engagement (FACE) Department and School Support Offices (SSOs) selected 30 elementary schools, primarily targeting 3rd, 4th, and 5th grade students, to participate in the program for the 2014–2015 school year. However, only 24 schools completed the entire program and received support from the APTT consultants and HISD FACE staff throughout the 2014–2015 school year. Some campuses declined to participate due to conflicting programs at their school, teachers not having the amount of time needed to prepare for meetings, and the perception that parents would not attend school meetings.

APTT Program Overview:

The APTT program includes three components: professional development for teachers by APTT consultants and HISD FACE staff, three 75-minute group meetings for parents held by the teacher of each class, and one individual parent-teacher conference. Each of the three meetings uses a format that consists of four parts. The first part is the *welcome and icebreaker*, where teachers acknowledge and celebrate student progress as

well as have parents share strategies that they have used with students at home. Next, *foundational skills and data* are shared with parents. Teachers share the most important skills students should learn in this grade level, how the entire class is doing on these skills, as well as individual student results. Teachers, then, share *home learning activities* that families can use with their child at home. Parents and teachers practice these skills to make sure they can successfully implement them at home. Finally, parents complete the *goal-setting* component of the meeting. Parents set SMART (Specific, Measurable, Actionable, Realistic, and Time-Bound) academic goals for their child to achieve between the current and next meeting. This report provides a summary of the APTT program activities as well as parent and student outcomes.

Review of the Literature

Parental involvement in schools is the cornerstone of how parents influence their child’s educational outcomes. The United States Department of Education (ED) uses parental involvement as a major factor to demonstrate levels of student academic achievement. ED suggests that academic achievement cannot happen without the support of parents (including guardians and caregivers) (No Child Left Behind, 2002). Hill et al. (2004) define parental involvement as “parents’ interactions with schools and with their children to promote academic success” (p.1491). A substantial body of work that shows that parental involvement has a significant impact on student academic achievement, however, definitions that pertain to parental involvement are inconsistent across studies (Fan & Chen, 2001; Jeynes, 2005).

Parental involvement has often been used to indicate the amount of time a parent spends at school, yet, multiple studies have included several other dimensions of parent engagement (Davidson et al., 2009; Hill et al., 2004). For example, Hill et al. (2004) operationalized parental involvement as “volunteering at school, parent–teacher contact or communication, involvement in academic-related activities at home, and the quality of parent–teacher relationships” (p.2). Additional parental involvement frameworks, including Epstein and Sanders (2002) and Comer (1995), outline specific categories to inform this body of research. Epstein’s model incorporates school-based involvement strategies (e.g., parent-teacher communication and school-based volunteering) as well as home-based involvement strategies, such as at-home educational activities. Similarly, Comer (1995) offers a framework that also consist of school-based involvement, inclusive of activities such as parent-teacher conferences, volunteering at school and having political capital within

the school. Comer’s home-based involvement approach includes parents reinforcing learning at home. Both Comer and Epstein posit that parent-teacher interactions can enhance parents’ awareness of the school/district-based curriculum and give parents tools to assist their child with educational needs at home.

The findings for parental involvement research are largely unanimous across studies, demonstrating that parental involvement and student achievement are positively correlated (Jeynes, 2005). Each construct of parental involvement (i.e. home-based, school-based) has a different effect on student achievement, thus it is imperative that parents be involved in multiple contexts related to their children’s education.

Data and Methods

Data Collection and Analysis

Student enrollment and academic performance data for the evaluation were obtained using a variety of sources. The HISD APTT administrative staff provided an electronic database of students whose parents attended APTT meetings during the 2014–2015 academic year. HISD student demographics were collected using the Public Education Information Management System (PEIMS). Group and district comparisons of the State of Texas Assessments of Academic Readiness (STAAR) test for reading (English and Spanish combined) were performed along with cohort analyses. The academic performance of students whose parents participated in APTT meetings was compared to the academic performance of students attending APTT schools whose parents did not participate (non-APTT students) as well as district performance. (District results represent all students, including students at APTT schools.) Cohort analyses were performed, comparing one group, in this case, students in a particular grade, to their academic outcomes from the previous year.

Sample

The HISD FACE Department and HISD School Support Officers (SSOs) selected APTT schools. These schools were selected, primarily, to assist with reading performance, parent involvement rates (Title I reports/data), and student attendance, which on average performed below the district mean. Weighted scores were assigned by the FACE Department to determine the schools that qualified for the program. Family engagement accounted for 50 percent of selection criteria, 25 percent from student attendance, and 25 percent from previous year STAAR reading scores. HISD elementary schools that had scores in the bottom 20 percent of the distribution were selected to implement

APTT on their campuses. The sub-sample (APTT students) were students whose parent(s)/ guardian(s) attended at least one APTT meeting at participating schools. Both samples included students in grades 3 through 5 who were in the 2015 fall PEIMS snapshot data and/or who tested in the district on the 2015 STAAR reading assessment. (Data for the ‘cohort comparisons’ are a repeated sample; only students who had data from the 2013–2014 and 2014–2015 STAAR reading assessment were included in the sample.)

Implementation of the Program

Parent Recruitment

Teachers, administrators, and school staff at each APTT site used various strategies to encourage parents to attend meetings (**Appendix, Table 1** and **Table 2, p. 9-10**). The APTT consultants provided suggestions on ways to recruit parents, however, the schools/district were responsible for motivating parents to attend meetings.

Materials

The APTT program required teachers to track students’ progress along with creating PowerPoint presentations and handouts in an APTT suggested format (**Figure 1**).

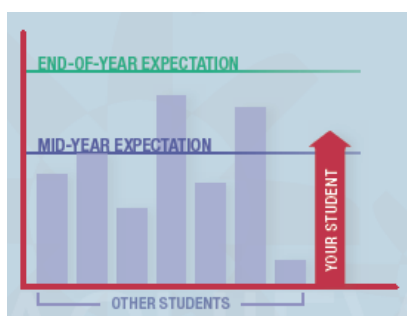


Figure 1. Example of student progress format shared with parents at APTT meetings.

This format was used to display students’ academic level on a specific skill as compared to other students in the class as well as the class expected achievement level. Teachers may have chosen knowledge of sight words, for example, displaying the number of words the student was able to read along with a short-term and long-term goal.

Support

Each school designated an APTT Champion, who was typically a non-classroom based staff member (e.g. assistant principal, instructional specialist), to act as a liaison to assist teachers with parent recruitment and data preparation for the meetings. Champions’ expected duties included the following: communicating with

HISD FACE staff and APTT consultants, ensuring all teachers were ready for APTT meetings (e.g., help prepare slide presentations, display student data, student folders, etc.), coordinating APTT implementation logistics (e.g., dates, times, locations, translation, childcare, family invitations, etc.), and ensuring that the family outreach plan was carried out.

HISD FACE staff were assigned schools to monitor and assist with program implementation. They facilitated selection of foundational grade-level skills with grade-level teachers. It was highly suggested that teachers share existing or readily available data in order to reduce additional preparation for the meetings. Five APTT WestEd consultants, who had designated APTT schools, provided professional development services and planning for APTT implementation.

Results

How many HISD parents participated in APTT meetings?

Participation was defined as a student who had a representative at one or more APTT meetings. The data represent the percentage of students who had at least one parent/guardian who participated in the APTT meeting(s). Non-participants included students at selected APTT schools whose parents/guardians did not attend any meetings. There were 7,262 3rd through 5th grade students attending APTT selected schools who were included in the entire sample. A total of 3,575 (53 percent) students at APTT schools had parents who participated in APTT meetings compared to 3,115 (47 percent) students whose parents did not participate (**Figure 2**).

The 2015 HISD Title I Part A Parent Involvement Report states that overall HISD parent participation rates (parent/guardian conferences) reported in 2013–2014 and 2014–2015 were 47 percent and 43 percent, respectively. The APTT parent participation rate was 53 percent. This is a ten percentage-point difference between the 2014–2015 HISD Title I parent participation rates and the APTT parent participation rates.

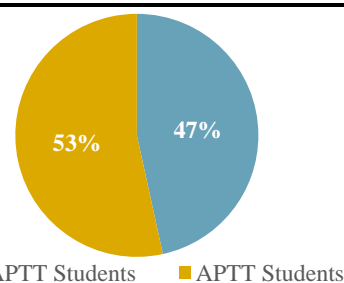


Figure 2. APTT meeting participation rates in APTT schools.

Figure 3 shows the number of meetings that the APTT parent/guardians attended. A total of 1,781 (27 percent) parents attended one meeting only, 1,157 (17 percent) parents attended two meetings only, and 636 (9 percent) parents attended three meetings. Parents who attended three meetings were considered to have received the full benefits of the program.

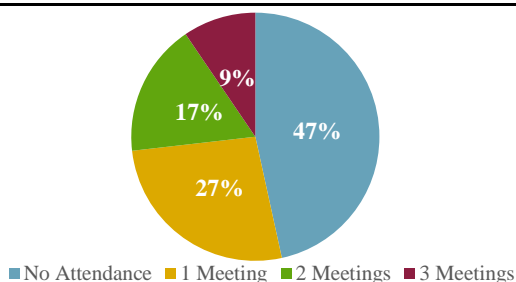


Figure 3. APTT meeting parent participation rates in APTT schools by number of meetings attended.

How did students whose parents participated in the APTT program compare academically to those whose parents did not?

Results in **Figure 4** show that students whose parents participated in APTT meetings were more successful across all grade levels compared to their peers at the school they attended. Specifically, APTT students in grade 3 were more likely to meet the 2015 reading Level II Satisfactory, phase-in 1 standard (69 percent) on the reading STAAR compared to non-APTT grade 3 students (59 percent). Grade 4 APTT students had higher Level II Satisfactory, phase-in 1 rates compared to other grade 4 students at APTT schools (61 percent vs. 49 percent). Similarly, there was a nine percentage-point difference for APTT students who met the standard in grade 5 compared to non-APTT grade 5 students, in favor of APTT (65 percent vs. 56 percent).

While more APTT students met the 2015 STAAR reading satisfactory standard than did non-APTT students, they did not exceed the HISD district average. Approximately 70 percent of HISD grade 3 students met the Level II Satisfactory, phase-in 1 standard; APTT students' results were slightly lower by one percentage point (69 percent). Grade 4 had a difference of two percentage points, with 63 percent of HISD students meeting standards compared to 61 percent of APTT students meeting standards. There were 68 percent of HISD grade 5 students who met the reading standard; a three percentage-point difference compared to APTT students (65 percent).

Figure 5 shows the percentage of students at APTT schools who met the Level II Satisfactory, phase-in 1 standard on the reading STAAR based on the number of meetings their parent(s) attended. Students in grades 3

and 5 whose parents attended all three of the APTT meetings had better outcomes compared to students whose parents only attended one or two meetings.

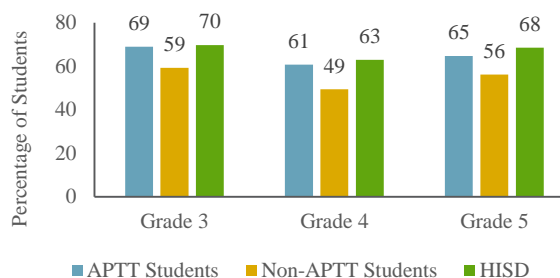


Figure 4. Comparison of percentage of APTT students, APTT schools, and HISD students who met the 2015 STAAR Reading Level II Satisfactory, phase-in 1 standard, grades 3-5.

Overall, 71 percent of students whose parents attended three meetings met the reading Level II Satisfactory, phase-in 1 standard. This rate is five percentage points higher than that of students whose parents attended two meetings, eight percentage-points higher than attendance at one meeting; and sixteen percentage-points higher than attendance at no meetings.

APTT students in grades 3 and 5 whose parents attended all three meetings had higher performance rates than the district. However, APTT students in grade 4 whose parents attended 3 meetings were one percentage-point lower than the district rate.

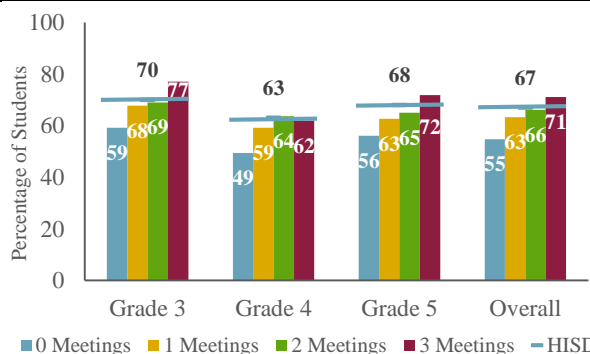


Figure 5. Percentage of students at APTT schools who met the 2015 STAAR Reading Level II Satisfactory, phase-in 1 standard by grade level and parent meeting attendance.

An analysis to demonstrate the differences in student outcomes based on parent attendance was conducted using a one-way between groups Analysis of Variance (ANOVA), which compared students' 2015 reading scale scores with the number of meetings their parents attended. The means and standard deviations are presented in **Table 3**. There was a statistically significant difference in students' 2015 reading scale scores based

on the number of meetings parents attended: $F(3, 6682) = 26.119, p < .01$. Students whose parents did not attend APTT meetings performed lower than students whose parents attended one or more meetings.

Table 3. One-way between groups Analysis of Variance (ANOVA) comparing 2015 Reading STAAR scale scores by number of meetings parents attended.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1498784.8	3	499594.9	26.1	.000
Within Groups	127811482.4	6682	19127.7		
Total	129310267.2	6685			

Post-hoc comparisons using the Bonferroni test (**Appendix, Table 4, p. 11**) revealed that most group differences contributed to the significance of the ANOVA; however, the difference between students scale scores for parents who attended one meeting ($M=1,440, SD=136.8$) compared to student scale scores for parents who attended two meetings ($M=1,448, SD=144.7$) was not significantly different (**Table 5**).

Table 5. Mean and Standard Deviation of 2015 Reading STAAR scale scores by number of meetings parents attended.

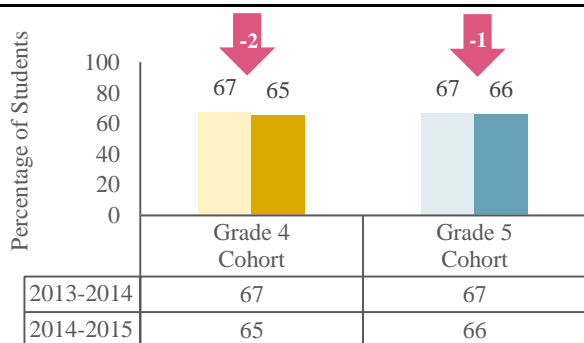
	N	Mean	Std. Deviation	Std. Error	Min.	Max.
0 Meetings	3112	1422.84	135.4	2.427	1046	2025
1 Meeting	1790	1440.34	136.8	3.232	1073	1885
2 Meetings	1150	1448.68	144.7	4.268	1026	2025
3 Meetings	634	1470.23	144.7	5.748	1140	2074
Total	6686	1436.46	139.1	1.701	1026	2074

To what extent did students whose parents participated in APTT meetings demonstrate growth from 2014 to 2015?

Students’ progress was tracked to examine their growth from the previous academic year (2013–2014) compared to the current academic year (2014–2015). **Figure 6** displays the percentage of APTT students who met the STAAR reading Level II Satisfactory, phase-in 1 standard who are currently in grades 4 and 5 compared to the percentage of the cohort that met the student level standard the previous year. (Note: results only include students who previous year data were available.)

For example, 65 percent of the APTT students in grade 4, during the 2014–2015 academic year, met the STAAR reading satisfactory standard, which was a two percentage-point decrease from their previous year met

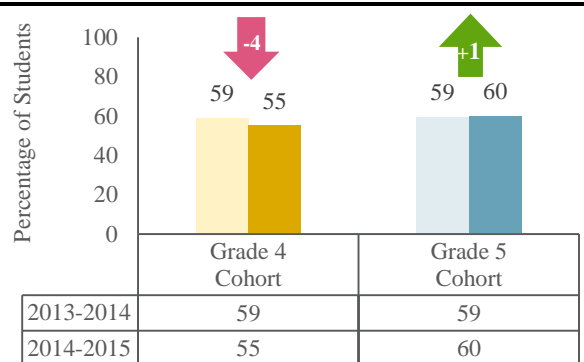
standard percentage (67 percent) when they were in grade 3. Sixty-six percent of the current cohort in grade 5 met the Level II Satisfactory, phase-in 1 standard, compared to 67 percent of their cohort that met the standard the previous year.



Note: Each cohort represents the same students each year.

Figure 6. Percentage of APTT student cohorts by grade who met 2015 STAAR reading Level II Satisfactory, phase-in 1 standard compared to their previous year met standards.

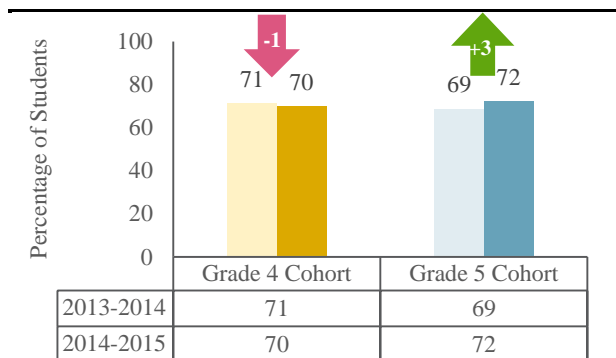
Non-APTT schools experienced a four percentage-point decrease in grade 4 students who met the Level II Satisfactory, phase-in 1 standard between 2013–2014 and 2014–2015. The outcomes for non-APTT students in grade 5 increased by one percentage point from 59 percent in the 2013–2014 school year to 60 percent in the 2014–2015 school year (**Figure 7**).



Note: Each cohort represents the same students each year.

Figure 7. Percentage of Non-APTT student cohorts by grade who met 2015 STAAR reading Level II Satisfactory, phase-in 1 standard compared to their previous year met-standard results.

The district experienced a similar trend with a one percentage-point decrease of grade 4 students who met the reading STAAR Level II Satisfactory, phase-in 1 standard in 2013–2014 compared to 2014–2015 (71 percent vs. 70 percent). There was a three percentage-point change in the district’s grade 5 cohort results between the 2013–2014 and 2014–2015 school year (**Figure 8**).



Note: Each cohort represents the same students each year.

Figure 8. Percentage of **HISD student** cohorts by grade who met 2015 STAAR reading Level II Satisfactory, phase-in 1 standard compared to their previous year met-standard results.

Conclusions

The APTT program was an initiative that targeted schools that were performing below district standards in multiple areas. Following implementation of this program, there continues to be an achievement gap between students attending APTT schools and the district. However, the major finding of this study supports existing literature on the positive relationship between parent involvement and academic achievement. STAAR scale scores for students whose parents attended more APTT meetings were significantly higher than STAAR scale scores for students whose parents attended fewer meetings.

The 2014–2015 implementation was not sufficient to make causal inferences about the effect of the program model. It is likely that parents who had high levels of parent engagement prior to the APTT program model being implemented were parents who attended all APTT meetings; therefore, a clear statement about the causality of the program regarding their children’s outcomes cannot be made. A survey of parent perspectives on the program including comparisons to previous traditional parent-teacher conference is recommended for future evaluations.

Program improvement should focus on the recruitment and retention of parents. While the program shows positive results for students whose parents attended at least one meeting, the most substantial STAAR reading results were seen in students whose parent(s) attended all three meetings. Only nine percent of the APTT students accounted for the highest achievement outcomes.

Additionally, restructuring APTT to increase parental involvement in the recruitment process should be considered. Inviting parent volunteers to help recruit parents was suggested by a parent at an APTT parent focus group meeting. With a structure designed to assist

teachers in forming parent relationships, the program could have a greater impact on involvement. Schools reported that the best ways to encourage parents to attend meetings were through personal invitations and phone calls.

Future research should include collecting and analyzing survey data from parents regarding best recruitment practices. It should also include formalizing the feedback from the teacher surveys and broadly communicating these results. Teacher feedback processes can provide insight for future recommendations on how to incorporate the program into the culture of the schools.

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For additional information, contact the HISD Department of Research and Accountability at 713-556-6700 or email: research@houstonisd.org

Appendix

List of Participating Schools 2014–2015

Benavidez ES	Looscan ES
Benbrook ES	Mitchell ES
Cook ES	Montgomery ES
De Anda ES	Peterson ES
Eliot DAEP	Piney Point ES
Foerster ES	Ross ES
Frost ES	Shadowbriar ES
Gallegos ES	Sherman ES
Herrera ES	Smith K ES
Highland Heights ES	Tijerina ES
Hines-Caldwell ES	Wainwright ES
Kennedy ES	Whidby ES

Table 1. Family outreach suggestions from WestEd APTT consultants, 2014-15

Indirect Outreach Strategies	Direct Outreach Strategies	Incentives
<ul style="list-style-type: none"> • Fliers • Posters • Robo-calls • School marquee • Banners • Post cards • Magnet with school mascot and APTT meeting information • APTT t-shirts, key chains, etc. 	<ul style="list-style-type: none"> • Principal phone calls to families • Teacher calls hard to reach families • Teacher writes a personal note to each family • Students write a personal letter to families • Students create a picture, cut it into puzzle pieces and take it home. However, there is a missing puzzle piece and it is at school. Families must attend meeting to get missing puzzle piece. • Create a label with APTT meeting information and personally hand it to families at dismissal. Label can be placed on a water bottle, blow pop, pencil, or any other treat or item. 	<ul style="list-style-type: none"> • Extra recess • Extra special area class (PE, music, art, etc.) • Free Homework passes • Free dress pass • Door Prizes for families • Classroom, grade level attendance competitions

Table 2: Examples of items in family outreach plan submitted by schools

Type of strategy	Personnel	Details
Direct	Teachers	<ul style="list-style-type: none"> • Teachers sent invitation letters home with students • Made individual phone call home to parents • Call-a-thon at 3:15 in the library • Reminded parents about upcoming meeting
	Students	<ul style="list-style-type: none"> • Students were made aware by all staff that the class with the most attendance would receive a pizza party • Students created individual invites in art class that were also sent home to remind parents • Students created personal invitations in homeroom
Indirect	APTT Champion/School based liaison	<ul style="list-style-type: none"> • Each grade level had posters in their hallway as a reminder to students • Champion placed posters in main entrance areas of the school for parents to see • Champion put posters up at car pick up and drop off areas • We used a system called Living tree to send information to parents • Champion asked the person in charge of the system to send several messages throughout the month before the meeting (Facebook/Twitter)
	Principal	<ul style="list-style-type: none"> • Principal did a call out the night before the event • Created flyer announcing the APTT family meeting • Used televised announcements to remind students of upcoming meeting • Create reminder stickers to be placed on each student • Provided Jean Pass incentive for any student whose parent/guardian attends the meeting • Signage in reception area • Create banner for school wide • Don't miss it sign (teaser for meeting)
	Teachers	<ul style="list-style-type: none"> • Teachers sent out flyers home the week of the event • Teachers sent home a half page reminder that day • Create class incentive for attendance goal • Broadcast the announcements • Place sticker on each student prior to leaving classroom for dismissal • Promote the Jeans or Free Dress pass

Table 4. Significance of mean differences of 2015 Reading STAAR scale scores by number of meetings parents attended.

Number of APTT Meetings Attended (mean differences were computed by subtracting the number of meetings in column B from the number of meetings in column A)		Mean Difference (A-B)	Std. Error	Sig.	
	A	B			
Bonferroni	0	1	-18.163*	4.132	.000
		2	-26.508*	4.807	.000
		3	-46.919*	6.066	.000
	1	0	18.163*	4.132	.000
		2	-8.345	5.265	.678
		3	-28.757*	6.435	.000
	2	0	26.508*	4.807	.000
		1	8.345	5.265	.678
		3	-20.412*	6.888	.018
	3	0	46.919*	6.066	.000
		1	28.757*	6.435	.000
		2	20.412*	6.888	.018

* The mean difference is significant at the 0.05 level.