MEMORANDUM December 8, 2016

TO: Jorge Arredondo
Assistant Superintendent, Family and Community Engagement

FROM: Carla Stevens
Assistant Superintendent, Research and Accountability

SUBJECT: **ACADEMIC PARENT TEACHER TEAMS (APTT), 2015–2016**

The Academic Parent-Teacher Teams (APTT) program targeted students in 10 predominately Title I HISD elementary schools during the 2015–2016 academic year. School administrators volunteered to participate in APTT. The program was designed to help parents prepare their children at home for academic success in the classroom. Research has shown that students are more successful when home, school, and community work together to support students' learning and development.

Key findings include:

- The study sample consisted of 4,974 students. Students were predominately economically disadvantaged, at risk, and Title I.
- The highest percentage of the students' parents attended none of the APTT meetings (32 percent), while 28 percent attended one meeting, 21 percent attended two meetings, and 19 percent attended three meetings.
- There were increases in the mean scale scores of students on the combined English or Spanish versions of the reading STAAR, from 2015 to 2016, regardless of the number of APTT sessions that their parents attended.
- There was a medium effect of the program on the reading scores of fourth-grade students and a small effect of the program on the reading scores of fifth grade students from 2015 to 2016.
- Students whose parents attended three APTT sessions scored proficient at higher rates at Waves 1, 2, and 3 on the 2016 Spanish version of the test.

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

Carla J. Stevens CJS

Attachment

cc: Grenita Lathan
Gloria Cavazos

HOUSTON INDEPENDENT SCHOOL DISTRICT

RESEARCH

Educational Program Report

ACADEMIC PARENT TEACHER TEAMS (APTT) 2015–2016

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Houston Independent School District
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4400 West 18th StreetHouston, Texas 77092-8501

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EVALUATION REPORT
BUREAU OF PROGRAM EVALUATION
Volume 10, Issue 1, August 2016

Family and Community Engagement through Academic Parent Teacher Teams (APTT): Comparative Analysis of Student Achievement in 10 Targeted Schools, 2015–2016

By Venita Holmes, Dr.P.H.

During the 2015–2016 academic year, the parents of 4,974 students participated in APTT at 10 Title 1 elementary schools in the Houston Independent School District (HISD). Students were predominately economically disadvantaged and at risk of dropping out of school. The impact of the program was assessed using the combined English and Spanish STAAR reading results and CIRCLE reading assessment performance of students whose parents attended 0, 1, 2, or 3 APTT sessions during the school year. There were increases in the mean scale scores of fourth and fifth-grade students on the reading STAAR, considering their previous year performance on the tests, regardless of the number of APTT sessions attended. However, fourth grade students whose parents attended three sessions had the highest reading scores in 2015 and 2016. Cohen's d analyses estimated that the effect of the program was medium for fourth grade students and small for fifth-grade students. In contrast to findings on the English version of CIRCLE, performance on the Spanish version of the test revealed that kindergarten students whose parents attended three APTT sessions scored proficient at higher rates at Waves 1, 2, and 3 compared to students whose parents attended less than three sessions. Parents' perceptions of the program were positive relative to their satisfaction with the quality of the training. These findings support the collaboration among teachers and parents to increase student academic achievement.

Background

The Academic Parent-Teacher Teams (APTT) program was implemented in 10 HISD elementary schools[1] during the 2015–2016 academic year. Targeted schools enrolled predominately Title I students who were in need of academic improvement. Participating schools volunteered to participate in the program.

APTT was designed to help parents prepare their children at home for academic success in the classroom. Parents learned foundational skills, examined assessment data, set goals for their children's achievement, while learning simple games and activities to foster competencies in academic areas at home (National Education Association (NEA, n.d.). Through a collaborative partnership between the parent, teacher, and child, parents were empowered to help their children learn, teachers gained instructional partners, and children were better prepared to develop academically at school and at home. NEA supports using the APTT model to establish priorities and focus strategies that address areas of weakness in students' knowledge and skills.

APTT Program Overview:

The APTT program included three fundamental components: (1) professional development for teachers conducted by APTT consultants and HISD Family and Community Engagement (FACE) staff, (2) three 75-minute group meetings for parents facilitated by the child's classroom teacher, and (3) a parent-teacher conference. APTT meetings included activities, such as a *welcome and icebreaker*, where teachers acknowledged and celebrated student progress and parents shared strategies used with their child at home. *Foundational skills and data* at the

[1] See **Appendix A** for APTT schools.

individual and classroom-levels were shared with parents by teachers. Additional *home learning activities* and practice provided parents with information on improving their child's skills at home. Finally, parents completed 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 meetings. This report provides information of the impact of APTT on student academic performance considering their parents' participation in APTT.

Review of the Literature

There is widespread consensus that parent involvement in schools improves the parent–child relationship, while enhancing the child's academic success in school (Epstein, 2001; Henderson, 1987). Jeynes (2005, 2013) determined that parental involvement is associated with higher student achievement. Henderson and Mapp (2002) found that when parents are involved, their children have higher grades, test scores, attend school on a regular basis, are more motivated, have higher levels of self-esteem, have lower rates of suspension, and show improved behavior at home and school (Jeynes, 2005). Hilado, Kallemeyn, and Phillips (2013) highlighted research on the positive relationship between parental involvement, children's brain development, and school readiness. There were strong indicators that the most effective forms of involvement are those that engage parents by working directly with their children on learning activities in the home (Henderson & Mapp, 2002). The research also shows that the earlier in a child's educational process that parent engagement begins, the more powerful the effects (Kagitcibasi, Sunar, & Bekman, 2001).

The significance of parent engagement in education is further underscored in the Family Engagement in Education Act of 2011. The ACT highlights that the "positive benefits for children, youth, families, and schools are maximized through effective family engagement that is continuous across a child's life from birth through young adulthood" (Civic Impulse, 2016, p. 3). Based on the theory of overlapping spheres, Epstein and Sanders (2006) acknowledged six types of activities that foster productive parental engagement, including ''parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community'' (Epstein and Sanders, 2006, p. 87). While these activities can be defined by numerous practices, theoretically, "students learn more and succeed at higher levels when home, school, and community work together to support students' learning and development" (Epstein & Sander, 2006, p. 87).

NEA (n.d.) reports the use of the APTT model in schools. The research showed significant short-term gains among first graders in APTT classes. Among students tested in the fall of 2009, oral reading fluency scores in APTT classrooms rose nearly 25 points, compared to only 10 points for other students.

Methods

Study Design

A mixed-methods research design, consisting of both quantitative and qualitative measures was used in this evaluation. The quantitative measure included academic performance data for students at the 10 targeted schools whose parents participated in APTT during the 2015–2016 academic year. The qualitative measure consisted of parent survey data about APTT training over the same time period. School administrators voluntarily agreed to have their schools implement APTT and parents volunteered to participate in the program. Appendix A provides a list of the targeted schools and school enrollment.

Data Collection and Analysis

APTT administrative staff provided an electronic database of students whose parents attended APTT meetings according to the number of meetings that parents attended, students' HISD identification number, and school. Demographic characteristics of the targeted student population were obtained using the 2015–2016 Public Education Information Management System (PEIMS).

The study sample consisted of 4,974 students. The highest percentage of parents attended none of the APTT meetings, while 28 percent attended one meeting, 21 percent attended two meetings, and 19 percent attended three meetings (**Figure 1)**. In addition, students whose parents attended three APTT meetings were most likely to be economically disadvantaged (90%) compared to students whose parents attended two meetings (88%), none of the meetings (86%), and one meeting (85%), respectively (**Figure 2**). Figure 2 shows that students whose parents attended three meetings were most likely to be at risk (85%) and limited English proficient (LEP) (73%) compared to students whose parents attended a lower number of meetings. At the same time, there was a higher percentage of gifted/talented (G/T) students represented in the group whose parents attended three meetings compared to students whose parents attended a lower number of meetings.

Academic performance data for the evaluation were extracted from the 2015 and 2016 State of Texas

Assessments of Academic Readiness (STAAR). The STAAR is aligned with the state curriculum standards and the Texas Essential Knowledge and Skills (TEKS). Combined English and Spanish reading results were used to assess student performance. During the 2015–2016 academic year, by commissioner's rule, the Level II Phase-in 1 Satisfactory standard was increased to the Level II Satisfactory 2016 progression standard. This means that students taking the STAAR grades 3-8 assessments had to answer more items correctly to "pass" the exams than in the previous year. Any comparisons to prior performance should be made with caution.

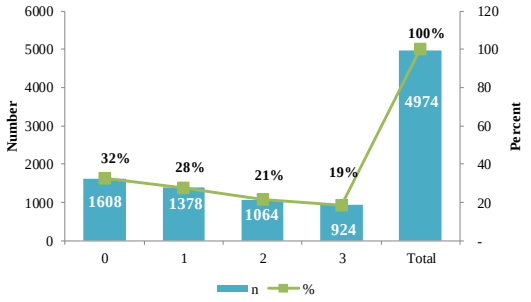

Figure 1: Number and percent of APTT students according to number of sessions attended by parents, 2015–2016

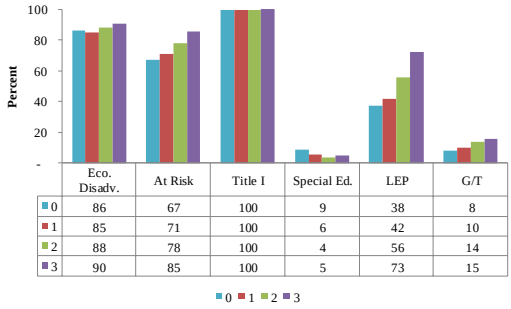

Figure 2: APTT students according to number of sessions attended by parents, 2015–2016

The scale scores of students in the targeted population who met the progression standard on the first administration of the combined reading English and Spanish STAAR during the 2015–2016 academic year was used as the post-test measure. The pre-test measure was the STAAR scale scores of these students during the 2014–2015 academic year, first test administration. Only the results of students who took the test over the two-year period and progressed to the next grade level were used in the analyses. The mean scale scores of APTT students were compared relative to the number of APTT sessions attended. Paired t-test analyses determined whether there were statistically significant differences between the dependent groups from 2015 to 2016.

Effect size analyses, based on Cohen's d, were conducted using STAAR scale score results. Interpretation of Cohen's d is: .2 = small effect; .5 = medium effect, and .8 = large effect (Cohen, 1988). According to the What Works Clearinghouse (2008), 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.

CIRCLE provided an academic performance measure for kindergarten students whose parents attended the APTT program. CIRCLE is a Texas School Ready, technology-driven, progress monitoring tool that was designed to instantly test a child's skills in a particular skill area (Children's Learning Institute, 2016). The system demonstrated high reliability and validity in multiple research studies (Children's Learning Institute, 2016). The assessment included multiple components and was administered three times during the school year: typically occurring at the Beginning-of-Year (Wave 1), Middle-of-Year (Wave 2), and End-of-Year (Wave 3). CIRCE results reflected students' performance over the 2015–2016 academic year.

Qualitative analysis was also conducted using a paper-and-pencil survey to determine parents' perceptions of the APTT training. The 4-point Likert-type scale was: 4 - strongly agree, 3 - agree, 2 - disagree, and 1- strongly disagree. Parents were also allowed to indicate not-applicable on the survey. Survey data were collected between July 1, 2015 and June 1, 2016 by APTT staff. The data were compiled by FACE staff and provided to the evaluator to incorporate in this report. A total of 138 parents completed the survey.

What was the impact of APTT on student's academic achievement?

Figure 3 and **Appendix B** depicts the combined STAAR English and Spanish reading results for fourth-grade students who took the STAAR at third grade (first test administrations). The 2015 results represent the pretest performance and the 2016 results reflect the posttest performance of the student sample. It is evident that there were increases in the mean scale scores of students regardless of the number of APTT sessions parents attended over the

two-year period. However, students whose parents attended three sessions had higher mean scale scores at pretest (2015) and maintained a higher level of performance at posttest (2016) compared to other student groups. This group also showed the largest gain of 88 scale score points.

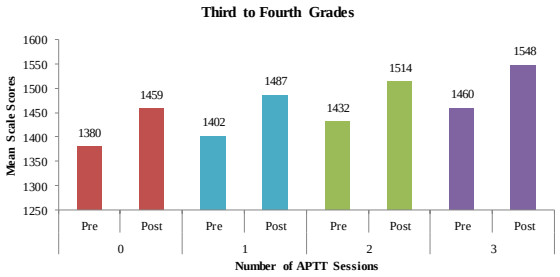

Figure 3: English or Spanish reading STAAR mean scale scores, for students with two years of data on the same test version, third-grade results in 2015 (pretest) and fourth-grade results in 2016 (posttest), by number of APTT sessions

Figure 4 presents effect size analyses for the fourth-grade student sample based on their STAAR reading performance. Parents' attendance in APTT had a medium effect on students' STAAR reading scores regardless of the number of sessions attended. However, the effect was largest for students whose parents attended one session, followed by three sessions, and lowest for students whose parents attended no sessions.

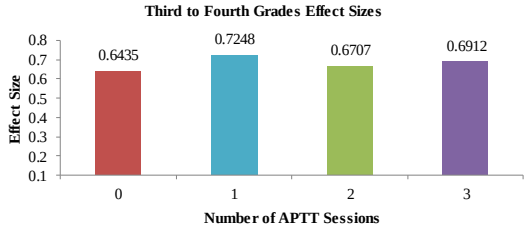

Figure 4: Effect sizes for students with third-grade reading STAAR in 2015 and fourth-grade reading STAAR in 2016 according to number of APTT sessions

Figure 5 and Appendix B display the combined STAAR English and Spanish reading results of fifth-grade students who took the STAAR at fourth grade and at fifth grade (first test administrations). The 2015 results represent the pretest performance and the 2016 results reflect the posttest performance of the student sample. Again, there were increases in the mean scale scores of students from 2015 to 2016 regardless of the number of APTT sessions that parents attended. Notably, students whose parents attended two APTT sessions had a higher mean scale score at pretest (2015) compared to other student groups. However, by 2016, students whose parents attended three sessions had the highest mean scale score at posttest. This group also had the largest gain of 67 scale score points from 2015 to 2016.

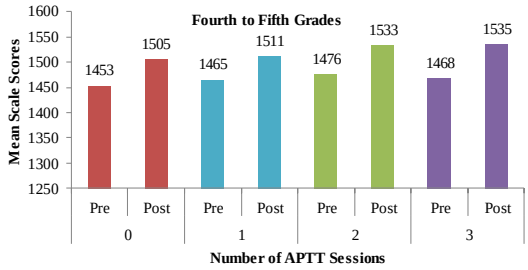

Figure 5: English or Spanish reading STAAR mean scale scores, for students with two years of data on the same test version, fourth-grade results in 2015 (pretest) and fifth-grade results in 2016 (posttest), by number of APTT sessions

Figure 6 depicts effect size analyses for the fifth-grade student sample based on their STAAR reading performance. Parents' attendance in APTT had a small effect on students' STAAR reading scores regardless of the number of sessions attended. However, the effect was largest for students whose parents attended three sessions and lowest for students whose parents attended one session.

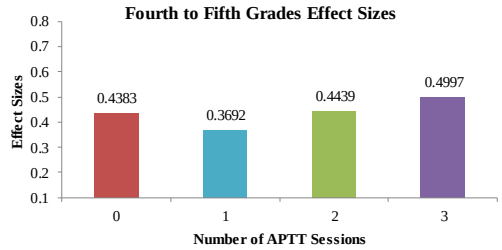

Figure 6: Effect sizes for students with fourth-grade reading STAAR in 2015 and fifth-grade reading STAAR in 2016 according to number of APTT sessions

Kindergarten CIRCLE Assessment

Figure 7 depicts results on the English version of the CIRCLE Total Literacy subtest for kindergarten students whose parents attended the APTT program by the number of sessions attended during the 2015–2016 academic year. The highest percentage (9%) of

students whose parents attended one or two APTT sessions scored proficient on the subtest at Wave 1 (BOY). This trend was maintained at Wave 2 (MOY) (36% and 32%) and at Wave 3 (EOY) (51% and 45%). The percentage of kindergarten students whose parents attended three APTT sessions was among the lowest subgroup at Wave 1 (4%) who scored proficient. This subgroup had the lowest percentage of students who scored proficient at Wave 3 (24%) on the CIRCLE Total Literacy subtest.

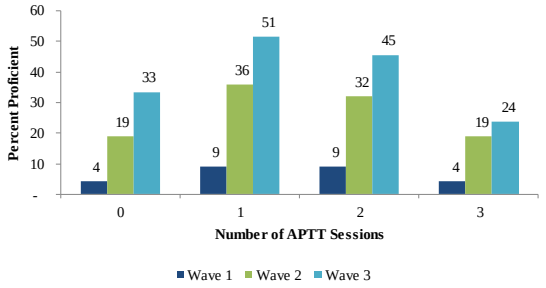

Figure 7: English, Total Literacy CIRCLE performance for kindergarten students whose parents attended APTT, 2015–2016

Figure 8 reflects results on the Spanish version of CIRCLE Total Literacy subtest for kindergarten students whose parents attended the APTT program by the number of sessions attended during the 2015–2016 academic year. In contrast to findings on the English version of CIRCLE, the highest percentage of students whose parents attended three APTT sessions scored proficient at Waves 1, 2, and 3.

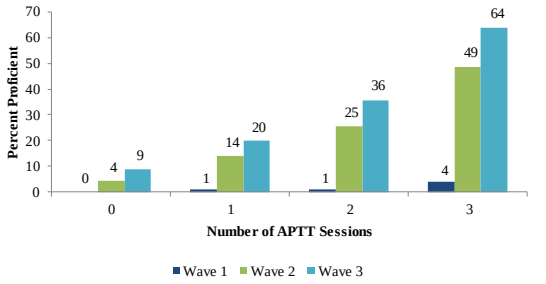

Figure 8: Spanish, Total Literacy CIRCLE performance for kindergarten students whose parents attended APTT, 2015–2016

What were parents' perceptions of the APTT program during the 2015-2016 academic year?

Figure 9 presents analyses of survey responses of 138 parents who participated in the APTT program during the 2015–2016 academic year. **Appendix C** provides additional survey results disaggregated by APTT schoo1. Parents rated the program using a 4-point Likert-type scale (4 - strongly agree, 3 - agree, 2 - disagree, and 1- strongly disagree). Survey items are ordered from the item with the highest mean rating to the lowest mean rating.

Figure 9 shows that parents expressed the highest level of agreement on the item "The APTT Facilitator demonstrated expertise of the APTT model" (M = 3.66). In addition, parents indicated high agreement on the items: "The APTT training included opportunities for active engagement" (M = 3.63) and "The goals of the APTT model were made clear through the training" (M = 3.61). The lowest level of agreement was found on the item that explored parents' understanding of the topic before attending APTT training (M = 2.78).

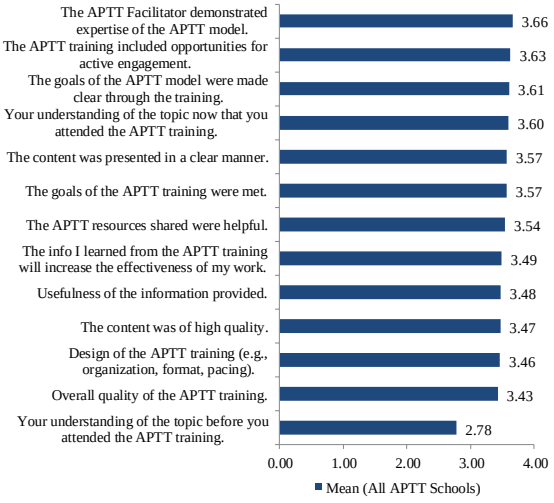

Figure 9: APTT parents' perceptions of the program, 2015–2016

Discussion

The Academic Parent-Teacher Teams (APTT) program targeted students in 10 predominately Title I HISD elementary schools during the 2015–2016 academic year. School administrators volunteered to participate in APTT. The program was designed to help parents prepare their children at home for academic success in the classroom. Research has shown that students are more successful when home,

school, and community work together to support students' learning and development.

The impact of APTT on students whose parents participated in the program was measured in this evaluation. Paired t-test analyses revealed increases in the mean scale scores of students on the combined English or Spanish versions of the reading STAAR regardless of the number of APTT sessions that their parents attended. Effect size analyses revealed a medium effect of the program on the reading scores of fourth-grade students and a small effect of the program on the reading scores of fifth grade students from 2015 to 2016. In contrast to findings on the English version of CIRCLE, students whose parents attended three APTT sessions scored proficient at higher rates at Waves 1, 2, and 3 on the Spanish version of the test. Finally, parents provided positive feedback regarding the quality of APTT training and engagement.

There were several limitations to this evaluation. The sample size of the APTT student group was relatively small compared to all students at APTT schools. Thus, the generalizability of the findings to the school population cannot be supported. However, paired t-test analyses, using data that were normally distributed, provided important inferences for the study sample that may be used for planning similar programs at schools with high proportions of economically-disadvantaged, Title I students. Future evaluations should continue to monitor the academic achievement of students whose parents participate in APTT. Longitudinal tracking of student outcomes may reveal additional information about program impact over time.

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For additional information contact the HISD Department of Research and Accountability at 713-556-6700 or e-mail Research@Houstonisd.org.

Appendix A

APTT School	Total PEIMS Enrollment, 2015–2016
Eliot ES	615
Fonwood ECC	485
Gallegos ES	487
Kennedy ES	746
Mitchell ES	553
Piney Point ES	1,171
Shadowbriar ES	562
Sherman ES	659
Tijerina ES	436
Wharton K-8 Academy	491

Note: ES = Elementary School

Appendix B

Paired sample of 4th-grade APTT students with 2015 STAAR reading scale scores as 3rd-grade pretest measure and 2016 STAAR reading scale scores as 4th-grade posttest measure (English or Spanish STAAR for both years)								
Number of Sessions	N Tested	2015 (Pretest)	2016 (Posttest	Mean Diff	SD	t	p	Effect Size
0	178	1380.32	1459.47	79.15	89.69	11.773	.000	.6435
1	125	1402.18	1487.14	84.96	79.26	11.984	.000	.7248
2	94	1431.60	1514.22	82.63	76.55	10.465	.000	.6707
3	52	1460.44	1548.25	87.81	90.33	7.010	.000	.6912

Paired sample of 5th-grade APTT students with 2015 STAAR reading scale scores as 4th-grade pretest measure and 2016 STAAR reading scale scores as 5th-grade posttest measure (English or Spanish STAAR for both years)								
Number of Sessions	N Tested	2015 (Pretest)	2016 (Posttest	Mean Diff	SD	t	p	Effect Size
0	230	1452.77	1504.93	52.17	84.31	9.39	.000	.4383
1	177	1464.97	1510.60	45.63	80.01	7.59	.000	.3692
2	100	1475.88	1532.92	57.04	86.53	6.59	.000	.4439
3	64	1468.28	1534.84	66.56	75.37	7.065	.000	.4997

Appendix C

	Piney Point ES	Kennedy ES	Eliot ES	Shadowbriar ES	Tijerina ES	Mitchell ES	Fonwood ECC		
EVALUATION								**Mean**	**Median**
1. Overall quality of the APTT training.	3.18	3.5	3.68	3.56	2.93	3.54	3.60	3.43	3.54
2. Usefulness of the information provided.	3.30	3.2	3.77	3.56	3.20	3.69	3.60	3.48	3.56
3. Design of the APTT training (e.g., organization, format, pacing).	3.25	3.5	3.42	3.56	3.13	3.77	3.60	3.46	3.50
4. Your understanding of the topic before you attended the APTT training.	2.75	2.9	2.97	2.44	3.00	2.15	3.20	2.78	2.93
5. Your understanding of the topic now that you attended the APTT training.	3.50	3.6	3.74	3.69	3.40	3.62	3.60	3.60	3.62
6. The content was of high quality.	3.30	3.6	3.68	3.31	3.13	3.69	3.60	3.47	3.57
7. The content was presented in a clear manner.	3.41	3.6	3.77	3.69	3.27	3.69	3.60	3.57	3.60
8. The APTT resources shared were helpful.	3.30	3.4	3.74	3.63	3.40	3.69	3.60	3.54	3.60
9. The goals of the APTT training were met.	3.25	3.6	3.71	3.75	3.40	3.69	3.60	3.57	3.60
10. The goals of the APTT model were made clear through the training.	3.41	3.4	3.74	3.75	3.47	3.85	3.60	3.61	3.60
11. The APTT training included opportunities for active engagement.	3.41	3.7	3.81	3.63	3.47	3.77	3.60	3.63	3.63
12. The APTT Facilitator demonstrated expertise of the APTT model.	3.57	3.4	3.77	3.81	3.47	3.77	3.80	3.66	3.77
13. The info I learned from the APTT training will increase the effectiveness of my work.	3.20	3.6	3.71	3.31	3.20	3.77	3.60	3.49	3.60
Mean	3.29	3.5	3.66	3.51	3.27	3.59	3.58	3.48	3.51

Raters	44	14	31	16	15	13	5	138	15
Attendance Signatures	47	18	33	19	19	17	5	158	19

Reporting Period:	**July 1, 2015-June 1, 2016**
Total Teacher Workshops:	5
Total Attendance:	158
Total Workshop Raters:	138
APTT Evaluation Form:	13 Scaled Questions
Rating Scale:	1 to 4
Average Ratings:	3.48
Median Ratings:	3.51