MEMORANDUM October 18, 2017

TO: Lance Menster
Officer, Elementary Curriculum and Development

FROM: Carla Stevens
Assistant Superintendent, Research and Accountability

SUBJECT: **HOME INSTRUCTION FOR PARENTS OF PRESCHOOL YOUNGSTERS (HIPPY)/HOME VISITING GRANT, 2016–2017**

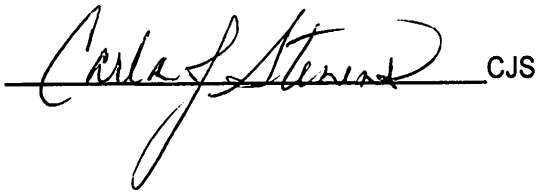
CONTACT: Carla Stevens, (713) 556-6700

Attached is the 2016–2017 evaluation on the Home Instruction for Parents of Preschool Youngsters (HIPPY)/Home Visiting Grant program. HIPPY is a school readiness program that helps parents prepare their preschool children for academic success. A total of 762 children ages 3 to 5 and their parents participated in the Houston Independent School District (HISD) HIPPY program during the 2016–2017 academic year compared to 637 students in the previous year. HIPPY program sites expanded from 57 schools to 71 schools over the past two years.

Key findings include:

- The 2016–2017 HISD HIPPY cohort attained a higher mean standard score on the 2017 Logramos ELA assessment compared to HISD kindergarten students districtwide (169.2 vs. 165.3). The difference between the groups was 3.9 points in favor of HIPPY students. This HIPPY cohort also outperformed the district on the Logramos mathematics assessment (166.9 vs. 160.3). The difference between the groups was 6.6 points.
- The mean standard score on the Iowa ELA assessment was lower for HISD HIPPY students than students districtwide by 2.7 points (122.0 vs. 124.7). Similar findings were observed on the Iowa mathematics assessment. Specifically, the mean standard score on the Iowa mathematics assessment was lower for HISD HIPPY students compared to students districtwide (119.5 vs. 123.0). The difference between the groups was 3.5 points.
- There were substantial increases in the percent of 2016–2017 HIPPY prekindergarten students who met benchmark from BOY to EOY on the 2017 English and Spanish language and literacy Rapid Letter Naming, Words in Sentence, and Alliteration CIRCLE subtests. These were the only language and literacy CIRCLE subtests analyzed in this evaluation.
- There were substantial increases in the percent of 2016–2017 HIPPY prekindergarten students who met benchmark from BOY to EOY on the 2017 English and Spanish Patterns, Shape Naming, and Shape Discrimination CIRCLE mathematics subtests. These were the only CIRCLE mathematics subtests measured in this evaluation.

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



Attachment

cc: Grenita Lathan
Gabrielle Coleman
Rachelle Vincent

HOUSTON INDEPENDENT SCHOOL DISTRICT

RESEARCH

Educational Program Report

HOME INSTRUCTION FOR PARENTS OF PRESCHOOL YOUNGSTERS (HIPPY)/HOME VISITING GRANT, 2016–2017

HISD | Research and Accountability

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HOME INSTRUCTION FOR PARENTS OF PRESCHOOL YOUNGSTERS (HIPPY)
HOME VISITING GRANT PROGRAM, 2016–2017

Executive Summary

Home Instruction for Parents of Preschool Youngsters (HIPPY) was established more than 40 years ago in over 10 countries globally (Texas HIPPY Center, 2015). HIPPY was initiated in the Houston Independent School District (HISD) during the 1993–1994 school year to offer academic enrichment opportunities to parents and children from economically-disadvantaged backgrounds. The program is considered an effective educational practice that promotes school readiness and removes barriers for poverty-stricken children who are at risk of academic failure (Zuckerman and Halfon, 2003; Texas HIPPY Center, 2015). HIPPY provides an opportunity for early childhood experiences that are "consistent, developmentally sound, and emotionally supportive" for the child and the family (High, 2008, p. 1008). This model of early education is aligned with the governor of Texas' priority for building a better education system for all children (The State of Texas, 2015).

During the 2015–2016 academic year, HISD was awarded a five-year, $5,880,967 Texas Home Visiting Grant to expand HIPPY to reach children and parents in more schools within HISD geographic boundaries. At that time, the Collaborative for Children partnered with HISD HIPPY to implement the *Parents as Teachers* component of the grant to support healthy development and school readiness in children. As of the 2016–2017 academic year, the Collaborative for Children component was no longer a part of the HISD HIPPY program, and was not addressed in this evaluation. The organization received funding independently of HISD. Also, beginning in the 2016–2017 academic year, HISD HIPPY was no longer funded by the Texas Home Visiting Grant. Instead, HISD HIPPY received funding through the Texas Maternal, Infant and Early Childhood Home Visiting (MIECHV) program. Both grants were awarded through the Texas Health and Human Services Commission. Additional program modifications that occurred during the 2016–2017 academic year was HISD's participation in A+HIPPY. This was a pilot program designed to serve families who have children with Autism. A+HIPPY was sponsored through the Texas HIPPY Center at the University of North Texas (UNT).

HIPPY utilized a home-based, family-focused approach to help parents prepare their children for academic success prior to enrolling in school (Texas HIPPY Center, 2015)**.** HIPPY USA provided technical assistance to participating school districts. Targeted parents had preschool children ages three to five years old**.** However, recruitment efforts mainly focused on parents with three-year-old children.

HIPPY lessons were delivered by home instructors who were parents within the community. These instructors were trained to cover a highly-structured, 30-week curriculum in English and Spanish for an hour every week in the parents' home. Home instructors engaged in role play to teach parents educational activities to practice with their children. Parents were encouraged to help their children recognize shapes and colors, tell stories, follow directions, solve logical problems, and acquire other school readiness skills. Consistent with HIPPY objectives, this evaluation addressed the following areas:

- Longitudinal participation trends,
- Academic enrichment activities,
- 2017 Iowa and Logramos reading and mathematics performance,
- 2017 CIRCLE English and Spanish literacy and mathematics assessment results, and
- Bracken school readiness performance.

A limitation of this evaluation is that HISD students were identified based on background information, including name and birthdate extracted from HIPPY parent enrollment forms submitted to UNT. UNT

houses the state-wide HIPPY Center, which provides administrative oversight for local HIPPY programs in Texas. Only children who could be verified based on these background characteristics through the Public Education Information Management System (PEIMS), annually, were included in the longitudinal participation trends of HISD HIPPY students. Academic performance analyses were conducted only for these students. A mitigation strategy consisted of working directly with HISD HIPPY staff to verify students captured through PEIMS to ensure an accurate account of students whose parents participated in the program.

Highlights

- In 2015–2016, HISD HIPPY received $750,000 from Title 1 and $1,200,000 from the Home Visiting grant. In 2016–2017, HIPPY received $907,336 from the Home Visiting grant and $750,000 from Title 1. During both years, HIPPY received supplemental funds from the National Counsel of Jewish Women, for $10,000 and $12,500, in the respective years. An additional $20,359 and $44,000 were donated by the University of North Texas AmeriCorps over the past two respective years. Cash donations were used to purchase HIPPY curriculum materials and supplies as well as books for the summer extension program. HIPPY USA supported HISD HIPPY by offering technical assistance and financial support to deliver the program model.

- During the 2015–2016 academic year, HISD HIPPY was implemented in 21 Title 1-funded school sites and 36 Home Visiting grant-funded school sites, across the nine HISD Board Districts. In 2016–2017, HIPPY operated in 35 Title-1 funded sites and 41 Home Visiting grant-funded sites.

- A total of 762 three to five-year old children, along with their parents, participated in HISD HIPPY during the 2016–2017 academic year. Among the 762 children, 360 of them were identified as HISD students. While the number of three to five-year old students increased over the past year by 125 students (16.4 percent), the number of children who were identified as HISD students decreased from 423 in 2015–2016 to 360 in 2016–2017 (14.9 percent).

- Comparatively, in 2016–2017, there was an increase in the proportion of female (51.2 percent vs. 52.8 percent), Hispanic (74.6 percent vs. 82.2 percent), and LEP (63.3 percent vs. 69.4 percent) students relative to 2015–2016. At the same time, the proportion of economically-disadvantaged (95.0 percent vs. 93.1 percent) and at-risk students decreased (92.8 percent vs. 88.3 percent) from the previous year.

- There has been a decline in participation of African American (21.6 percent vs. 16.4 percent), White (2.7 percent vs. 1.1 percent), Asian (0.7 percent vs. 0.0 percent), and students with two or more races (0.2 percent vs. 0.0 percent) from 2015–2016 to 2016–2017.

- Grade enrollment trends revealed that prekindergarten and kindergarten students have consistently dominated HISD HIPPY, representing 95.9 percent of the total student group in 2015–2016 and 93.3 percent in 2016–2017.

- In addition to home instruction lessons, 1,841 HISD HIPPY parents, students, and families participated in the *End of Year HIPPY Celebrations* enrichment activity during the 2015–2016 school year. An increase in participation was reported in 2016–2017 to 1,943 parents, students, and families. The activity supported parental involvement and leadership skill development of parents and their children.

- The 2016–2017 HISD HIPPY cohort attained a higher mean standard score on the 2017 Logramos ELA assessment compared to HISD kindergarten students districtwide (169.2 vs. 165.3). The difference between the groups was 3.9 points in favor of HIPPY students.

- The 2016–2017 HISD HIPPY students outperformed the district on the Logramos mathematics assessment (166.9 vs. 160.3). The difference between the groups was 6.6 points.

- The mean standard score on the Iowa ELA assessment was lower for HISD HIPPY students than students districtwide by 2.7 points (122.0 vs. 124.7). Similar findings were observed on the Iowa mathematics assessment. Specifically, the mean standard score on the Iowa mathematics assessment was lower for HISD HIPPY students compared to students districtwide (119.5 vs. 123.0). The difference between the groups was 3.5 points.

- There was a substantial increase in the percent of 2016–2017 HIPPY prekindergarten students who met benchmark on the 2017 English language and literacy CIRCLE assessment from BOY to EOY. The largest increase was on the Rapid Letter Naming subtest (10.5 percent to 89.5 percent), followed by the Words in Sentence subtest (10.5 pecent to 72.1 percent). In addition, the percent of students who met benchmark on the ABC Names subtest increased from 10.7 percent at BOY to 71.4 percent at EOY. The Alliteration subtest had the highest percentage of students who met benchmark at BOY (27.5 percent). At EOY, 76.8 percent of the student group met benchmark on the Alliteration subtest.

- On the Spanish language and literacy CIRCLE, there was a substantial increase in the percent of students who met benchmark from BOY to EOY in 2016–2017. The largest increase was on the Rapid Letter Naming subtest (6.1 percent to 76.2 percent) along with the Words in Sentence subtest (6.1 pecent to 76.2 percent). In addition, the percent of students who met benchmark on the Alliteration subtest increased from 6.1 percent at BOY to 73.9 percent at EOY. The ABC Names subtest had the highest percentage of students who met benchmark at BOY (6.8 percent). At EOY, 75.0 percent of the student group met benchmark.

- On the English mathematics CIRCLE assessment, there was a substantial increase in the percent of students who met benchmark from BOY to EOY in 2016–2017. The largest increase was on the Patterns subtest (26.8 percent to 76.1 percent). In addition, the percent of students who met benchmark on the Shape Naming subtest increased from 27.8 percent at BOY to 76.4 percent at EOY. The Shape Discrimination subtest had the highest percentage of students who met benchmark at BOY (28.2 percent). At EOY, 76.1 percent of the student group met benchmark.

- On the Spanish mathematics CIRCLE assessment, there was a substantial increase in the percent of students who met benchmark from BOY to EOY in 2016–2017. The largest increase was on the Shape Naming subtest (5.7 percent to 74.1 percent). In addition, the percent of students who met benchmark on the Patterns subtest increased from 5.7 percent at BOY to 74.1 percent at EOY. The Shape Discrimination subtest had the highest percentage of students who met benchmark at BOY (28.2 percent). At EOY, 76.1 percent of the student group met benchmark on the Shape Discrimination subtest.

- On the Bracken assessment, there was a statistically significant increase in the mean number of items correct on the six subscales (colors, letters, numbers/counting, sizes, comparisons; and shapes) as well as on the overall school readiness composite subscale ($p < .001$). Cohen's d effect sizes on the various subtests ranged from .78 to .90, indicating positive impact of HIPPY on

school readiness. The magnitude of the total effect of HIPPY on school readiness was large (Cohen's d = .99).

Recommendations

1. In this report, positive differences were noted in the academic achievement of HISD HIPPY cohorts compared to students districtwide, particularly on Spanish language assessments. This finding was inconsistent among students on English language assessments. HISD should continue to support the HIPPY program to develop the academic potential of targeted students. Additional strategies designed to build on students' academic performance in English should be considered. Strategies include linking HIPPY parents to Early Childhood department resources and providing follow-up services to HIPPY parents after exiting the program. Expanding the number of hours worked by part-time HIPPY instructors to work with HIPPY parents after their children exit the program may help to implement these strategies.

2. The HISD HIPPY program facilitates school readiness and literacy development in preschool children. HISD should consider expanding the HIPPY program to additional elementary school sites to address the literacy needs of more economically-disadvantaged students across the district. Recruitment efforts should focus on students of all ethnic backgrounds to augment their educational and academic experiences through parental involvement and support offered by HIPPY.

Introduction

For more than 20 years, the Home Instruction for Parents of Preschool Youngsters (HIPPY) offered educational enrichment opportunities to parents and children from disadvantaged backgrounds in the Houston Independent School District (HISD). In HISD, targeted HIPPY parents had preschool children ages three to five years old and resided within the district's geographical boundaries. HIPPY utilized a home-based, family-focused model to help parents prepare their children for academic success prior to enrolling in school. HIPPY promoted school readiness and early literacy by creating an environment that supported parents in their role as the child's first teacher. By providing a curriculum with activities for preschool children, HIPPY offered practice in skills that research has proven crucial to school readiness and to help children learn and achieve better academic, social, economic, and health outcomes (Zuckerman and Halfon, 2003; Texas HIPPY Center, 2015). The HIPPY curriculum was designed with the intention that parents from disadvantaged backgrounds (i.e., those with limited or unsuccessful schooling, and/or limited financial resources) can be successful teachers of their own children. Parents were empowered to understand what their child needed to learn as they entered school and to support their child's future learning.

For HISD HIPPY children, the model supported the development of basic academic readiness concepts and skills, including values and attitudes, concentration, confidence, successful transition from the home to school environment, empathy toward others, and positive relationships with parents (Texas HIPPY Center, 2015). Program participation was designed to generate the following outcomes:

- Parents with an enhanced sense of their own abilities and the satisfaction of teaching their children;
- Children with an opportunity for both fun and learning with their parents at home;
- Families with the support and guidance of trained peer home visitors and a professional coordinator;
- Schools with children who enter school ready to succeed and parents who are active and supportive; and

- Home instructors with a means of assuming leadership in the community and steps toward self-sufficiency and marketable skills (Texas HIPPY Center, 2015).

Beginning in 1993–1994, HISD HIPPY was funded by Title I and implemented through the Early Childhood department as a pilot program. From 2013–2014 through 2015–2016, HIPPY operated in the Family and Community Empowerment department (FACE)[1], which oversees parent-related activities. During the 2016–2017 school year, HIPPY again resided in Early Childhood, which is a division of the Elementary Curriculum and Development department.

An expansion of HISD HIPPY occurred in the 2015–2016 academic year to reach more parents whose children may enroll in HISD schools. During that year, the primary funding sources for HISD HIPPY were Title 1 and the Texas Home Visiting Grant. In 2016–2017, the grant funding was managed by the Texas Maternal, Infant and Early Childhood Home Visiting (MIECHV) program. Both grants were awarded by the Texas Health and Human Services Commission.

Figure 1 depicts the distribution of revenue by funding sources in 2015–2016 and in 2016–2017. In 2015–2016, HISD HIPPY received $750,000 from Title 1 and $1,200,000 from the Home Visiting grant. In 2016–2017, HIPPY received $907,336 from the Home Visiting grant and $750,000 from Title 1. In 2015–2016 and 2016–2017, HIPPY received supplemental funds from the National Counsel of Jewish Women, for $10,000 and $12,500, in the respective years. In addition, $20,359 and $44,000 were donated by the University of North Texas AmeriCorps over the past two years. Cash donations were used to purchase HIPPY curriculum materials and supplies as well as books for the summer extension program. Moreover, HIPPY USA supported HIPPY programs nationwide by offering technical assistance and financial support to deliver the model.

Figure 2 provides information on the number of Title 1-funded and Home Visiting grant-funded school sites and HISD Board Districts impacted by the program. During the 2012–2013 academic year, HIPPY operated in 12 HISD elementary schools, covering six Board of Trustee Districts. HIPPY was staffed by one coordinator at that time. During the 2013–2014 academic year, HIPPY operated at 34 elementary schools, covering six of the nine HISD Board Districts, and was staffed by two coordinators and 35 home instructors. In 2014–2015, HIPPY operated in 40 targeted elementary schools, staffed with three coordinators, one assistant, one lead specialist, and 43 home instructors. In the 2015–2016 academic year, HIPPY was implemented in 21 Title 1-funded school sites and 36 Home Visiting grant-funded school sites, across the nine HISD Board Districts. Finally, in 2016–2017, HIPPY operated in 35 Title-1 funded sites and 41 Home Visiting grant-funded sites (see **Appendix A**, p. 26) for the list of schools by funding source). The Home Visiting grant funded a total of 30 staff, including 23 home visitors, 3 HIPPY coordinators, a project director, and 3 clerks or administrative assistants. Title 1 funded 30 home visitors and a program manager.

[1] The Family and Community Empowerment department was formerly known as Family and Community Engagement.

Figure 1. HIPPY Revenue by Funding Source, 2016–2017

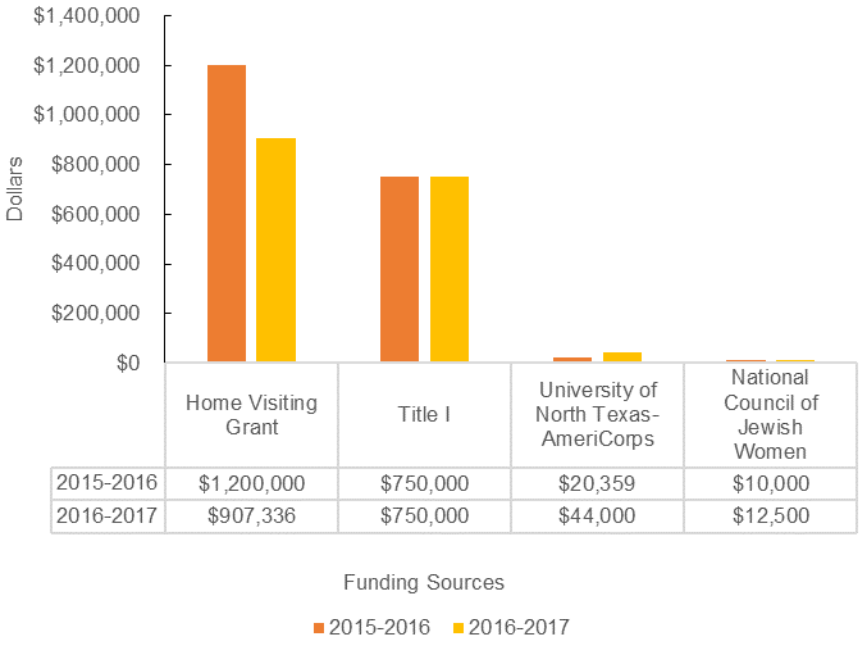


Figure 2. Number of HISD HIPPY School Sites and Board Districts, 2012–2013 to 2016–2017

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Title 1-funded School Sites	12	34	40	21	35
Home Visiting Grant-funded School Sites				36	41
Board Districts	6	6	9	9	9
Total HIPPY Schools				57	71

The HIPPY Model

The HIPPY program model uses the following strategies: (1) a developmentally-appropriate 30-week curriculum in English or Spanish; (2) role-play as the method of teaching, (3) part-time home instructors and a coordinator; and (4) home visits combined with group meetings to provide parents with the tools and materials that enable them to work directly and effectively with their child (HIPPY USA, n.d.). A typical HIPPY program site can serve up to 180 children and their families, with one coordinator and 12 to 18 part-time home instructors. HIPPY staff conducts monthly meetings with parents in the community to discuss issues, such as gang awareness and mental health.

The HIPPY Curriculum

HIPPY instructional materials are standardized and include story books, weekly activity packets, and manipulatives. There are 30 activity packets for use throughout the school year. A packet for each week includes approximately 10 activities for parents and children. These activity packets include language development, sensory and perception discrimination skills, and problem solving. The materials are available in both Spanish and English and are designed to enable parents with little or no formal schooling to teach their children successfully.

Home Instructors and Program Coordinator

A typical home instructor provides services to up to 16 parents with children. The home instructor's main responsibility is to deliver the curriculum to his/her assigned parents. As such, home instructors are required to schedule their own appointments and meet with their assigned parents at the parent's home once a week for a period of 30 weeks. During a home visit, home instructors provide parents with a packet containing the week's activities. The home instructor engages in role-play with the parents, often using his or her own child. However, the home instructor does not work directly with the child participant.

Home instructors are part-time employees of HISD, and work approximately 30 hours a week. The recruitment procedure for home instructors required that they have (1) a child of appropriate age to engage in the HIPPY curriculum, (2) a Graduation Equivalent Diploma (GED), (3) a valid Texas Driver's License, (4) transportation, and (5) a valid permit to work in the United States. The home instructors receive weekly HIPPY training conducted by a full-time HIPPY coordinator. The program coordinator recruits and trains home instructors, organizes group meetings, develops enrichment activities, and helps to recruit parents into the program. All home instructors are parents of preschoolers and/or have young children attending the school to which they are assigned. The HIPPY manager supports the team by conducting home observations, telephone surveys to the family, trainings, and recruiting guest speakers for families.

Staff and Group Meetings

Staff meetings provided home instructors with practice of the week's activities. These meetings allow home instructors to review and practice role-playing lessons as it will be taught to the parent. Furthermore, home instructors learn from other home instructors and the coordinator about circumstances and situations that may arise while they are training parents. Group meetings are designed to network parents of HIPPY children to discuss information and provide parents a time to ask questions. These meetings often provide valuable information of available services on local resources that may potentially benefit the families of HIPPY children. In addition, group meetings allow parents an opportunity to meet with other program participants, to share and learn from each other's experiences, and to receive additional support and information from the community.

HIPPY has mandatory conferences and retreats including:

- Kickoff Agenda every year for all HIPPY personnel in Texas (**Appendix B**, p. 27),

- Coordinators Retreat (every year for administrators and coordinators in Texas),
- HIPPY National Conference every other year (mandatory for administrators and coordinators at the national level), and
- Once in life HIPPY International Pre-Service training (mandatory for all new administrators and coordinators at the international level).

HIPPY Advisory Board

During the 2015–2016 as well as the 2016–2017 academic years, HISD HIPPY had a 22-member Advisory Board, which was an expansion from the 13-member Advisory Board during the 2014–2015 year. The Advisory Board consisted of principals, an HISD Board member, community members, and parents. The expansion included more parents of HIPPY students. The Advisory Board was developed to help parents achieve expected outcomes related to teaching and learning for their child and themselves in the areas of literacy, self-concept, and interactions in their families, schools, and the community. Additional responsibilities of the HIPPY Advisory Board were to promote HIPPY in the community; assist in the procurement of funds; provide advice regarding planning, implementation, and problem solving; assist with program needs (e.g., special events, guest speakers); and foster cooperative working relationships with resource agencies, community and volunteer groups, and other early childhood/family support programs.

A+HIPPY

HISD HIPPY participated in the A+HIPPY pilot project during the 2016–2017 academic year. A+HIPPY was sponsored through the Texas HIPPY Center at the University of North Texas (UNT). The project was designed to recruit and retain families that have children with Autism**.** A+HIPPY will be fully implemented during the 2017–2018 school year. Additional goals of A+HIPPY are comparable to the goals for all HIPPY families, which are as follows:

- Families of children with autism will receive a weekly home visit for up to 30 weeks, to deliver the A+HIPPY curriculum through role play and autism learning support methods;
- Parents and children will be assessed to measure results of the A+HIPPY strategy, and this information will be input into Visit Tracker data collection system;
- Families will be provided with written learning support and transition materials, and
- HIPPY home visitors and coordinators will receive training, resource materials, and support in order to expand and improve services to children with autism (Texas HIPPY Backoffice, 2017).

Home Visiting Grant Framework

Early Childhood Coalition

Both the Texas Home Visiting Grant and the Texas Maternal, Infant and Early Childhood Home Visiting Grant focused on an existing local early childhood coalition, Early Matters. The coalition's purposes were to: (1) identify community-level needs as they relate to school readiness and to maternal/child health outcomes, (2) integrate services to create streamlined access across different business, faith-based, and government sectors throughout Harris County, (3) implement system-level strategies that address broad policy, practice or community infrastructure issues that impact young children and families and benefit the community at-large, and (4) build relationships with key stakeholders to create a foundation for long-term sustainability. Over the past two years, meetings were held with Early Matters at Kelly Court to develop strategies that support school-ready children, as well as health and safety for at-risk, economically-disadvantaged families.

Early Development Instrument (EDI)

The Early Development Instrument (EDI) was administered during the 2015–2016 academic year. EDI measured how young children were developing in local communities through the following domains: (1) physical health and well-being, (2) social competence, (3) emotional maturity, (4) language and cognitive skills, and (5) communication and general knowledge. The data supported the identification and characterization of specific neighborhoods that needed health, educational, and/or social services and the subsequent targeting of community resources to those areas of need. The EDI assessment was developed by UCLA and conducted with kindergarten students in HISD. Children had to be a student with the teacher for at least 3 months. The assessment was completed on the computer. Students' names were uploaded in the computer by HISD staff. Principals and school staff could use the data to determine whether students were developmentally on track and ready for success in school and life. HISD chose three neighborhoods, including a (1) predominately Hispanic community, a (2) predominately African American community, and a (3) predominately diverse community. The three schools according to when the survey was administered were Neff Elementary (May 11 and 12th); Reynolds Elementary (May 13th); and Hobby Elementary (May 19th). The results of the EDI were shared with HISD to use as needed.

Sustainability

The local early childhood coalition worked to strategically design and implement a local sustainability plan. The local sustainability plan enabled the local early childhood coalition to effectively leverage state and federal funds to ensure continued financial support beyond the initial state and federal investments. HISD networked with different communities to identify champions that were sensitive to the goals of the program. An Advisory Board was established to identify stakeholders to engage in the process, including the National Jewish Women, pharmacists, the Third Ward Fellowship of Churches, and local businesses.

Coordinated System of Referrals

The local early childhood coalition must implement activities to coordinate cross-sector services and address broader community-level issues. The coalition worked toward integrating services in ways such that young children and families had easy and coordinated access to an effective continuum of services that impacted them (e.g., home visiting, mental health, employment, education). To improve service coordination, local coalitions developed a coordinated referral system to ensure families could easily access services to best meet their needs, identify community-wide recruitment and retention strategies, and streamline intake processes to ensure easy access to varied services. HISD worked on developing a user-friendly website, where all available resources on housing, domestic violence, and mental health, for example, are stored. Home visitors shared these resources to families in their homes.

Review of Literature

Over the years, continuous efforts have been made by educators to prepare children to be successful in school. The role of parents toward strengthening the academic achievement of their child has long been recognized as key to successful early childhood education programs and building school readiness skills (Hilado, Kallemeyn, & Phillips, 2013). The significance of parents in early childhood education is further emphasized in the Family Engagement in Education Act of 2011. The Act notes that "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" (Family Engagement in Education Act of 2011, Section 3). The research points out that when parents are involved, students 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 (Henderson & Mapp, 2002). Hilado, Kallemeyn, and Phillips (2013) highlight 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 parent engagement begins; the more powerful the effects (Kagitcibasi, Sunar, & Bekman, 2001). Early childhood programs with strong parental involvement components have demonstrated effectiveness by applying this approach (Jordan, Snow, & Porche, 2000; Mathematica Policy Research, 2001; Starkey & Klein, 2000).

Over the years, numerous studies have been conducted on HIPPY programs across the United States. Many of these studies involved assessing children's academic outcomes as they entered school. A third-grade follow-up study conducted in Texas showed significantly higher mathematics achievement of HIPPY children compared to low-income Latino third graders in the same school district (Nievar, Jacobson, Chen, Johnson, & Dier, 2011, p. 268). In Arkansas, a modest positive impact on school suspensions, grades, classroom behavior, and achievement test scores were noted for third and sixth-grade students enrolled in the same classrooms, controlling for preschool experiences (Bradley & Gilkey, 2002). Another study examined the impact of the HIPPY program in a New York school district (Baker, Piotrkowski, & Brooks-Gunn, 1998). The study followed two cohorts of HIPPY program participants and control-group children over a two-year period, from kindergarten through first grade. In the first cohort, researchers found that HIPPY children outperformed control-group children on measures of cognitive skills at the end of kindergarten, on measures of classroom adaptation at the beginning of the first and second grades, and on a standardized reading test at the end of first grade. However, in the second cohort, the researchers found no significant differences between HIPPY and control-group students.

Methods

Data Collection and Analysis

- Student enrollment, demographic characteristics, and academic performance data for the evaluation were obtained using a variety of sources. First, an electronic database of three to five-year old children who participated in HISD HIPPY during the 2016–2017 academic year was acquired from HISD HIPPY administrative staff. Next, HISD student enrollment was verified using the Public Education Information Management System (PEIMS). Data on children who were verified as HISD students based on PEIMS were used in this analysis to form the 2016–2017 HISD HIPPY student cohort. Similar procedures were conducted to create student cohorts in previous years. Longitudinal demographic characteristics of HISD HIPPY student cohorts from 2009–2010 to 2016–2017 are presented in **Appendix C** (p. 28).

- Academic achievement measures included the Logramos and Iowa assessments for kindergarten students whose parents participated in HIPPY during the 2016–2017 academic year. The study sample consisted of 47 students on the Logramos ELA Total and mathematics subtests as well as for 23 students on the Iowa ELA Total and 24 students on the mathematics subtests. The results should be viewed with caution due to the small sample sizes. Performance comparisons between the district and HIPPY were made using standard scores. Riverside Publishing (1999) indicates that "the term scale score and standard score are often used interchangeably, even though these scores may be derived at by different methods, their purpose and use can be similar" (p. 31). In this report, the standard score was used as a continuous measure, like the scale score, that permits direct comparisons of different groups.

- CIRCLE is a Texas School Ready, technology-driven, progress monitoring tool that is designed to instantly test a child's skills in a particular skill area (Children's Learning Institute, 2016). The system has demonstrated high reliability and validity in multiple research studies (Children's Learning Institute, 2016). The assessment includes multiple components and is administered three times each year to HISD prekindergarten students. These windows are referred to as "waves," typically occurring at the Beginning-of-Year (Wave 1), Middle-of-Year (Wave 2), and End-of-Year (Wave 3). Wave 1 was used as a pre-test and Wave 3 was used as a post-test measure of school readiness for prekindergarten students whose parents participated in HIPPY during the 2016–2017 academic year. Only students with both BOY and EOY data were used in the analyses. The CIRCLE subtests used in the analyses were available in both English and Spanish. In addition, districtwide comparisons were made with the HISD HIPPY cohort; however, the results were limited to subtest data available on the 2016–2017 Children's Learning Institute's CIRCLE Progress Monitoring PreK Community Benchmark Report. The mean number of items correct and the percent of students who met the benchmark on each assessment were presented in the analyses.

- Results from the Bracken School Readiness Assessment (BSRA®) were used to measure the impact of HIPPY toward preparing children for school. The BSRA® is an individual, standardized, cognitive test developed by Pearson Education, Inc. The assessment is designed for children in prekindergarten through second grade. The test was administered as a pre- and post-test in the fall 2016 and spring 2017 by the University of North Texas to HISD HIPPY three to five-year old children. The assessment measured six basic skills: (1) colors – identification of common colors by name; (2) letters – identification of upper-case and lower-case letters; (3) numbers/counting – identification of single and double-digit numerals, and counting objects; (4) sizes – demonstration of knowledge of words used to depict size (e.g., tall, wide, etc.); (5) comparisons - matching or differentiation of objects based on a specific characteristic; and (6) shapes – identification of basic shapes by name (Think Tonight, 2014). Descriptive statistics were calculated. Paired t-test analysis also was conducted for children with both pre- and post-assessment data based on the number of items that students answered correctly.

- Rosenthal (1991) recommended using effect sizes for paired t-test data. Effect size analyses, based on Cohen's, were conducted using Bracken results. 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 each study.

Results

What were the participation trends of HISD HIPPY children over the past seven years (2010–2011 through 2016–2017)?

Figure 3 reflects the total number of three to five-year old children whose parents participated in HISD HIPPY over the past seven years as well as the number of children of HIPPY parents who were enrolled in HISD elementary schools during the same time.

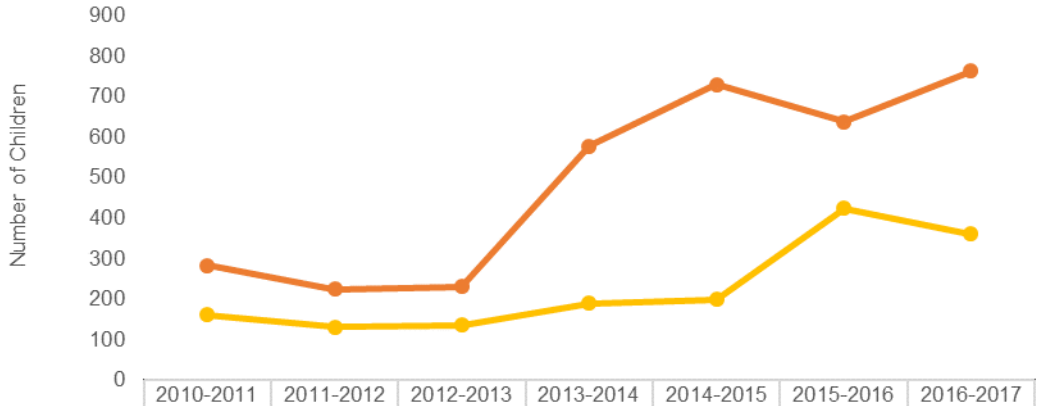
- A total of 762 three to five-year old children, along with their parents, participated in HISD HIPPY during the 2016–2017 academic year. Among the 762 children, 360 of them were identified as HISD students. While the number of three to five-year old students increased over the past year by 125 students (16.4 percent), the number of children who were identified as HISD students decreased from 423 in 2015–2016 to 360 in 2016–2017 (14.9 percent).

- Appendix C (p. 28) shows that, in 2015–2016, a higher percentage of HISD HIPPY students were female compared to male (51.2 percent) and Hispanic compared to other ethnic groups (74.6 percent). Moreover, 63.4 percent of HISD HIPPY students were identified as limited English proficient (LEP), 92.8 percent were at-risk of dropping out of school, and 95.0 percent were economically disadvantaged. Comparatively, in 2016–2017, there was an increase in the proportion of female (51.2 percent vs. 52.8 percent), Hispanic (74.6 percent vs. 82.2 percent), and LEP (63.3 percent vs. 69.4 percent) students relative to the previous year. At the same time, the proportion of economically-disadvantaged (95.0 percent vs. 93.1 percent) and at-risk students decreased (92.8 percent vs. 88.3 percent) from the previous year.

- There has been a decline in participation of African American (21.6 percent vs. 16.4 percent), White (2.7 percent vs. 1.1 percent), Asian (0.7 percent vs. 0.0 percent), and students with two or more races (0.2 percent vs. 0.0 percent) from 2015–2016 to 2016–2017 (Appendix C, p. 28).

- Grade enrollment trends revealed that prekindergarten and kindergarten students have consistently dominated HISD HIPPY participation, representing 95.9 percent of the total student group in 2015–2016 and 93.3 percent of the group in 2016–2017 (Appendix C, p. 28).

Figure 3. HISD HIPPY Participation, 2010–2011 through 2016–2017



	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
HIPPY 3-5 Year Olds	282	224	231	577	730	637	762
HISD HIPPY Students	159	131	136	189	198	423	360

Note: The HISD HIPPY student group are siblings of 3-5 year olds who attended HISD schools during the designated year.

What enrichment activities were offered to HISD HIPPY participants?

HISD HIPPY students and parents engaged in enrichment activities to complement home instruction lessons throughout the academic year. The activities were designed to encourage parents to be more involved in their child's learning and to develop leadership skills. During the 2013–2014 school year, the HISD Family and Community Engagement Department sponsored four *End of Year HIPPY Celebrations* for over 1,500 HIPPY students, parents, and their families. The events were hosted at Stevenson Middle School as well as Barbara Jordan, Sam Houston, and DeBakey high schools. During the 2014–2015 school year, *End of Year HIPPY Celebrations* were held at Hartman Middle School along with Austin, Reagan, and Sam Houston high schools. Approximately 1,470 students, parents, and families attended in 2014–2015. Guest speakers were HISD Board Member Manuel Rodriguez and HISD central office and school administrators.

During the 2015–2016 school year, approximately 1,841 parents and families attended *End of Year HIPPY Celebrations*. Guest speakers were Claudia Macias and HISD Board member Manual Rodriguez. The events were held at Fondren Middle School as well as Sam Houston and Chavez high schools.

During the 2016–2017 school year, there were three celebration events held at Meyerland Middle School along with Sam Houston and Austin high schools. Approximately, 1,943 parents and their families attended the events. Mr. Carranza, HISD superintendent, was the guest speaker at Meyerland. Mr. Carranza shared the importance of the parents' role in the lives of young children. Principals and/or their representatives from HISD HIPPY schools acknowledged the achievements of parents and their children from respective campuses. Each HISD HIPPY child and parent was given a certificate for completing the 30-week curriculum. This annual event provided parents and their children with a sense of accomplishment for their challenging work throughout the school year. HISD Nutrition Services was contracted to provide lunch to families who attended the event.

In May 2017, the Houston Astros provided 300 free baseball game tickets to HISD HIPPY families. To encourage summer reading six books, in English and Spanish, were placed in the children's backpacks at the end of the school year. Backpacks were provided with funds donated by the National Council of Jewish Women. Training was held by HIPPYUSA. A flyer on the training can be found in Appendix B (p. 27).

Further, for the past 12 years, HISD HIPPY parents and their children have been provided free transportation and entrance to the Children's Museum of Houston. During the 2016–2017 school year, 1,083 parents and their families attended the event.

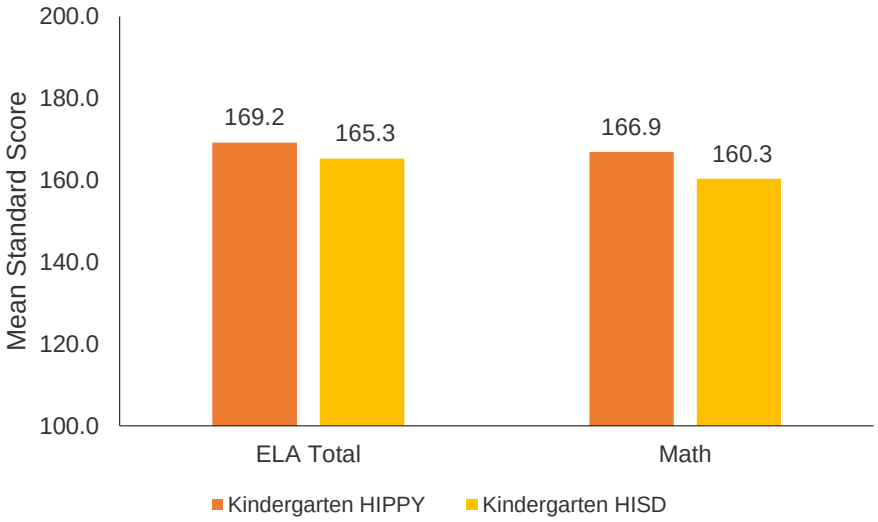
How did the 2016–2017 HISD HIPPY student cohort perform on the spring 2017 administration of Logramos and Iowa assessments?

Figure 4 presents the 2017 mean reading (ELA Total) and mathematics standard scores of kindergarten students whose parents participated in HISD HIPPY during the 2016–2017 academic year compared to kindergarten students districtwide on the Logramos assessment. Test results of 47 HIPPY students are reflected in Figure 4. (Additional descriptive statistics can be found in **Appendix D**, p. 29.)

- Figure 4 shows a higher mean standard score for the 2016–2017 HISD HIPPY cohort compared to HISD students districtwide at kindergarten on the 2017 Logramos ELA assessment (169.2 vs. 165.3). The difference between the groups was 3.9 points in favor of HIPPY students.

- The 2016–2017 HISD HIPPY students outperformed the district on the Logramos mathematics assessment (166.9 vs. 160.3). The difference between the groups was 6.6 points (Figure 4).

Figure 4. 2017 Logramos Reading (ELA Total) and Math Performance, 2016–2017 HISD Kindergarten HIPPY Students Compared to All HISD Kindergarten Students



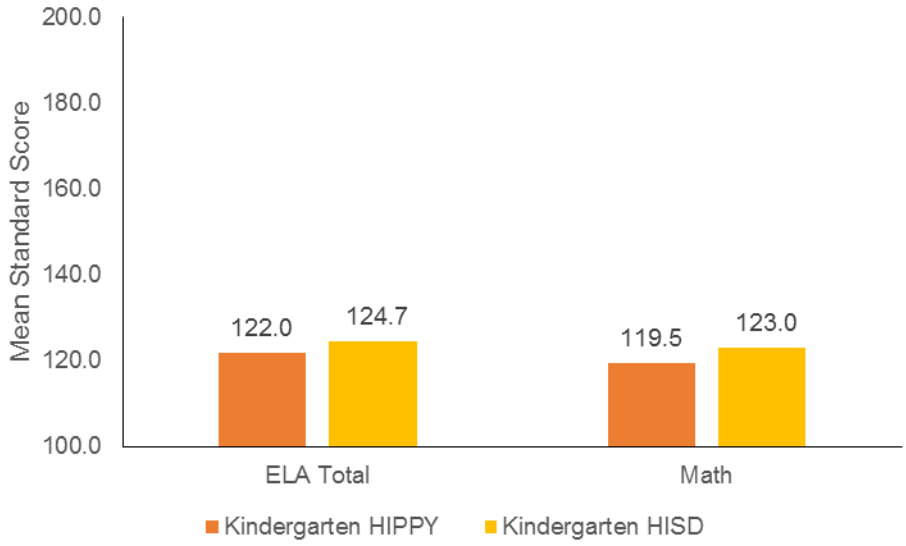
Note: HISD HIPPY kindergarten sample = 47 students.

Figure 5 depicts Iowa reading (ELA Total) and mathematics results for HISD kindergarten students whose parents participated in HIPPY during the 2016–2017 academic year compared to students districtwide. Results are presented for 23 HIPPY students on the ELA Total subtest and for 24 students on the mathematics subtest.

- The mean standard score on the Iowa ELA assessment was lower for HISD HIPPY students than students districtwide by 2.7 points (122.0 vs. 124.7).

- Similar findings were observed on the Iowa mathematics assessment. Specifically, the mean standard score on the Iowa mathematics assessment was lower for HISD HIPPY students compared to students districtwide (119.5 vs. 123.0). The difference between the groups was 3.5 points (Figure 5).

Figure 5. 2017 Iowa Reading (ELA Total) and Math Performance, 2016–2017 HISD Kindergarten HIPPY Students Compared to All HISD Kindergarten Students



Note: HISD HIPPY kindergarten sample = 24 students.

How did HISD students whose parents participated in HIPPY during the 2016–2017 academic year perform on the 2017 CIRCLE assessment?

CIRCLE results were used as a prekindergarten school readiness measure for HISD students whose parents participated in HIPPY during the 2016–2017 academic year. Wave 1 of CIRCLE was designated as the pre-test measure and Wave 3 was used as the post-test measure. Both English and Spanish language literacy and mathematics CIRCLE assessment data are presented. Only students with both BOY and EOY data were used in the analyses, and the assessments chosen for this evaluation were available in both English and Spanish. The mean number of items correct and the percent of students who met the benchmark on the assessments were depicted. Details regarding CIRCLE subtest cut-point scores can be found in **Appendix E** (p. 30). The number of students in the sample and paired t-test statistics are displayed in **Appendix F** (p. 31).

- **Figure 6** shows the performance for the HISD HIPPY student group on the 2016–2017 English language and literacy CIRCLE assessment. There was an increase in the mean standard scores, from BOY to EOY, on ABC Names, Rapid Letter Naming, Words in Sentences, and Alliteration subtests.

- There was a substantial increase in the percent of students who met benchmark from BOY to EOY in 2016–2017 on the English language and literacy CIRCLE assessment (**Figure 7**). The largest increase was on the Rapid Letter Naming subtest (10.5 percent to 89.5 percent), followed by the Words in Sentence subtest (10.5 pecent to 72.1 percent). In addition, the percent of students who met benchmark on the ABC Names subtest increased from 10.7 percent at BOY to 71.4 percent at EOY. The Alliteration subtest had the highest percentage of students who met benchmark at BOY (27.5 percent). At EOY, 76.8 percent of the student group met benchmark.

Figure 6. English Language and Literacy CIRCLE Subtests, 2017, Mean Score, 2016–2017 Prekindergarten HIPPY Students

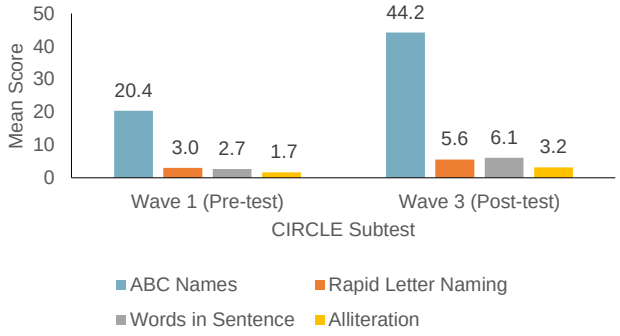
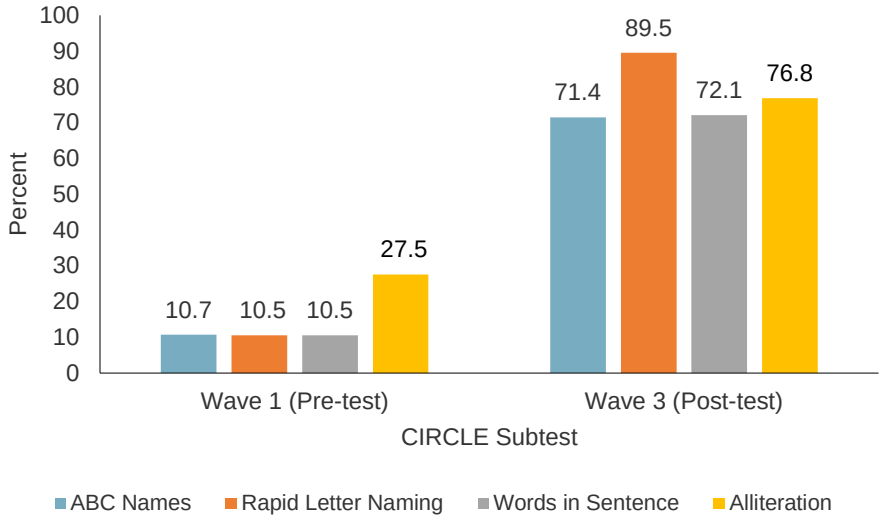


Figure 7. English Language and Literacy CIRCLE Subtests, 2017, Percent Met Benchmark, 2016–2017 Prekindergarten HIPPY Students



- **Figure 8** shows performance on the 2016–2017 Spanish language and literacy CIRCLE assessment for the 2016–2017 HISD HIPPY student group. There was an increase in the mean standard scores, from BOY to EOY, on ABC Names, Rapid Letter Naming, Words in Sentences, and Alliteration subtests.

- On the Spanish language and literacy CIRCLE, there was a substantial increase in the percent of students who met benchmark from BOY to EOY in 2016–2017 (**Figure 9**). The largest increase was on the Rapid Letter Naming subtest (6.1 percent to 76.2 percent) along with the Words in Sentence subtest (6.1 pecent to 76.2 percent). In addition, the percent of students who met benchmark on the Alliteration subtest increased from 6.1 percent at BOY to 73.9 percent at EOY. The ABC Names subtest had the highest percentage of students who met benchmark at BOY (6.8 percent). At EOY, 75.0 percent of the student group met benchmark.

Figure 8. Spanish Language and Literacy CIRCLE Subtests, 2017, Mean Score, 2016–2017 Prekindergarten HIPPY Students

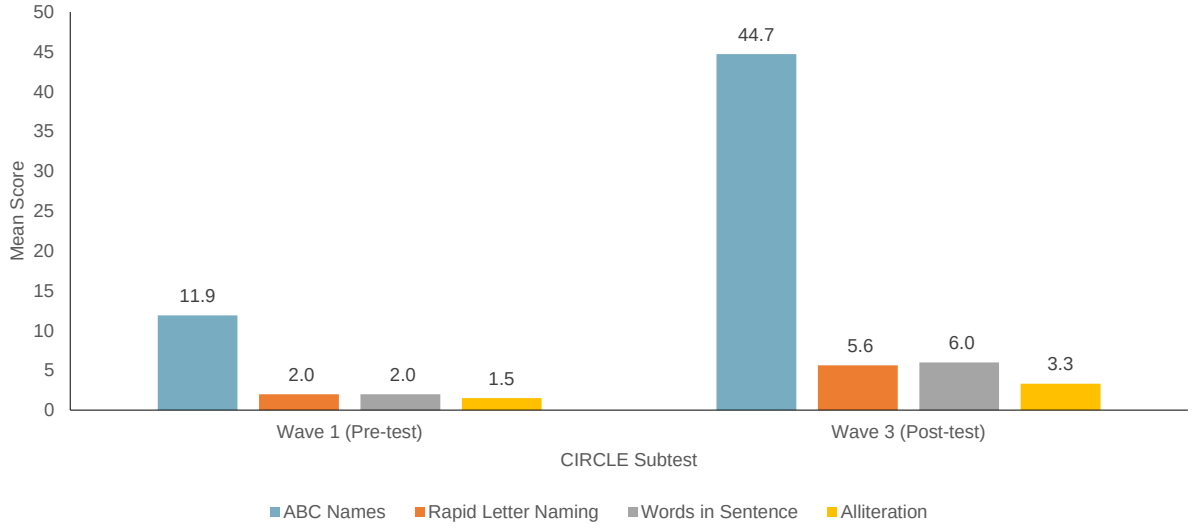
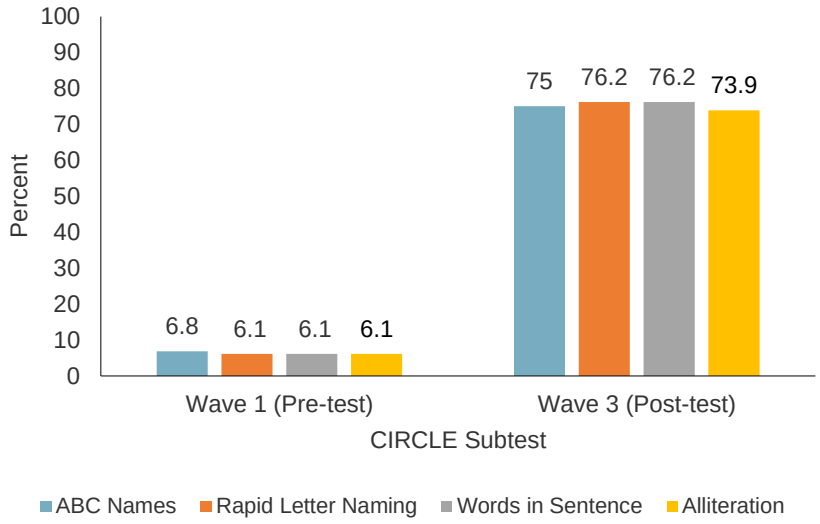


Figure 9. Spanish Language and Literacy CIRCLE Subtests, 2017, Percent Met Benchmark, 2016–2017 Prekindergarten HIPPY Students



- **Figure 10** shows performance on the 2016–2017 English mathematics CIRCLE assessment for the 2016–2017 HISD HIPPY student group. There was an increase in the mean standard scores, from BOY to EOY, on Patterns, Shape Naming, and Shape Discrimination subtests.

- There was a substantial increase in the percent of students who met benchmark from BOY to EOY in 2016–2017 on the English mathematics CIRCLE assessment (**Figure 11**). The largest increase was on the Patterns subtest (26.8 percent to 76.1 percent). In addition, the percent of students who met benchmark on the Shape Naming subtest increased from 27.8 percent at BOY to 76.4 percent at EOY. The Shape Discrimination subtest had the highest percentage of students who met benchmark at BOY (28.2 percent). At EOY, 76.1 percent of the student group met benchmark.

Figure 10. English Mathematics CIRCLE Subtests, 2017, Mean Score, 2016–2017 Prekindergarten HIPPY Students

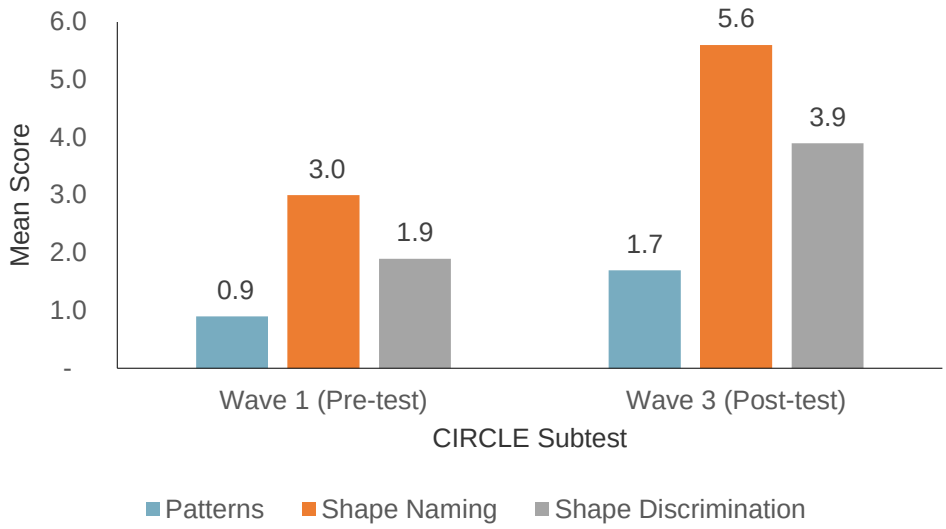
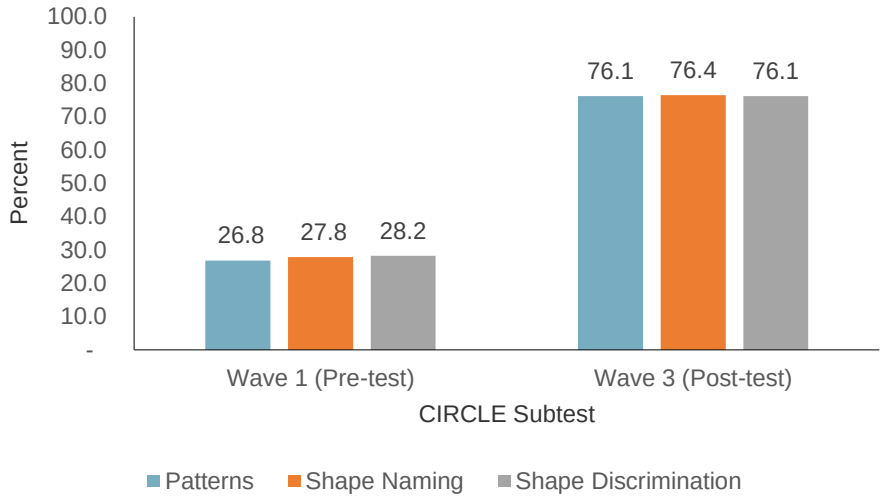


Figure 11. English Mathematics CIRCLE Subtests, 2017, Percent Met Benchmark, 2016–2017 Prekindergarten HIPPY Students



- **Figure 12** shows performance on the 2016–2017 Spanish mathematics CIRCLE assessment for the 2016–2017 HISD HIPPY student group. There was an increase in the mean standard scores, from BOY to EOY, on Patterns, Shape Naming, and Shape Discrimination subtests.

- On the Spanish mathematics CIRCLE assessment, there was a substantial increase in the percent of students who met benchmark from BOY to EOY in 2016–2017 (**Figure 13**). The largest increase was on the Shapes Naming subtest (5.7 percent to 74.1 percent). In addition, the percent of students who met benchmark on the Patterns subtest increased from 5.7 percent at BOY to 74.1 percent at EOY.

The Shape Discrimination subtest had the highest percentage of students who met benchmark at BOY (28.2 percent). At EOY, 76.1 percent of the student group met benchmark.

Figure 12. Spanish Language Mathematics CIRCLE Subtests, 2017, Mean Score, 2016–2017 Prekindergarten HIPPY Students

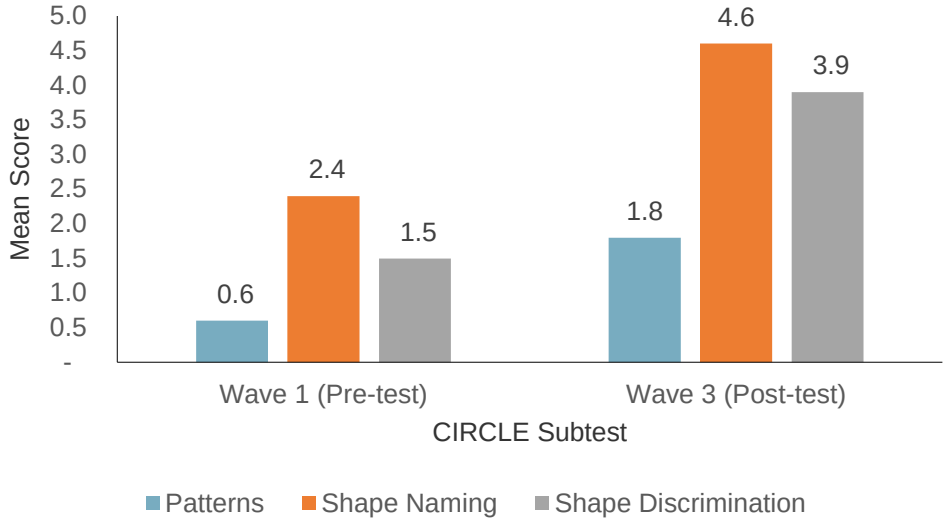
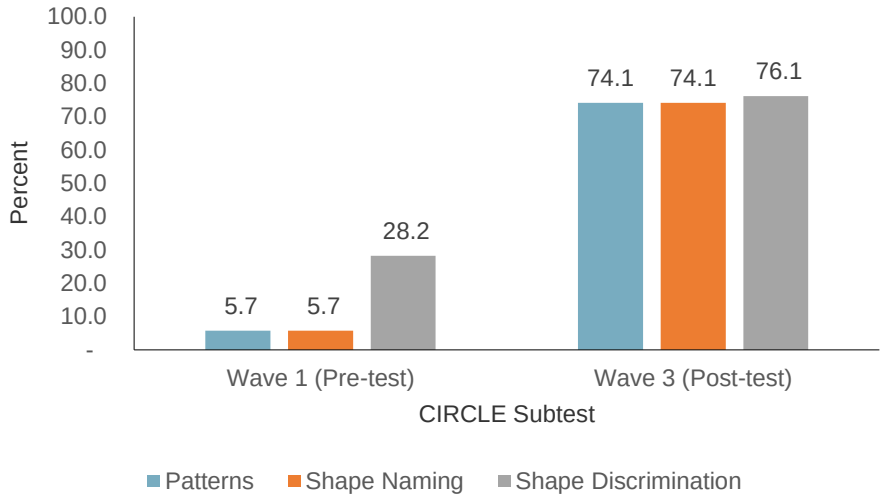


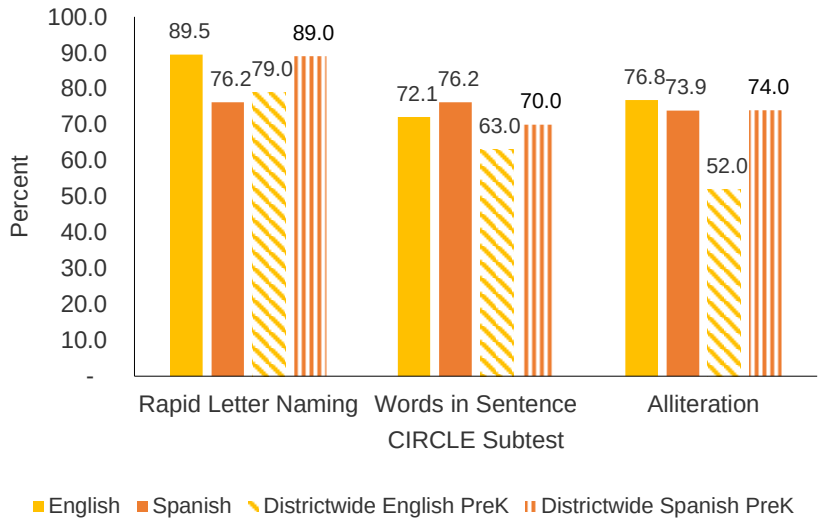
Figure 13. Spanish Language Mathematics CIRCLE Subtests, 2017, Percent Met Benchmark, 2016–2017 Prekindergarten HIPPY Students



- A comparison of EOY English and Spanish language and literacy CIRCLE performance of the 2016–2017 HISD HIPPY prekindergarten cohort with districtwide results are reflected in **Figure 14**. Comparisons were limited to subtest data available on the Children's Learning Institute's CIRCLE 2016–2017 Progress Monitoring PreK Community Benchmark Report.

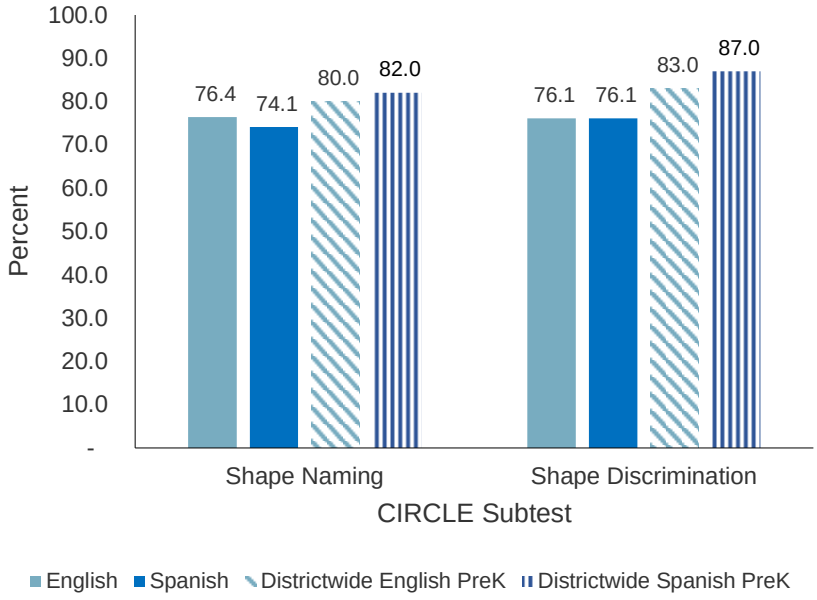
- A higher percentage of HIPPY students met the benchmark on the English language Rapid Letter Naming, Words in Sentence, and Alliteration subtests compared to comparable district-level English language subtests. In addition, a higher percentage of HIPPY students met the benchmark on the Spanish language Words in Sentence subtest compared to students districtwide. Comparable results were obtained by HIPPY students and students districtwide on the Spanish language Alliteration subtest.

Figure 14. EOY Language and Literacy CIRCLE Subtests, 2017, Percent Met Benchmark, 2016–2017 Prekindergarten HIPPY Students vs. Districtwide Comparison



- A comparison of EOY English and Spanish language mathematics CIRCLE performance of the 2016–2017 HISD HIPPY prekindergarten cohort with districtwide results are reflected in **Figure 15**. Comparisons were limited to subtest data available on the Children's Learning Institute's CIRCLE 2016–2017 Progress Monitoring PreK Community Benchmark Report. A lower percentage of HISD HIPPY students met the benchmark on the English language and Spanish language Shape Naming and Shape Discrimination subtests compared to the district.

Figure 15. Mathematics CIRCLE Subtests, 2017, Percent Met Benchmark, 2016–2017
Prekindergarten HIPPY Students vs. Districtwide Comparison



What was the impact of HISD HIPPY on school readiness of children whose parents participated in the program?

Bracken (BSRA®) results were used to assess school readiness, considering children's knowledge of concepts preschool and kindergarten teachers traditionally teach to prepare children for formal education. The six basic skills measured on the Bracken are colors, letters, numbers/counting, sizes, comparisons, and shapes. Scoring criteria on the Bracken are presented in **Appendix G** (p. 33) for 545 children whose parents participated in HIPPY during the 2016–2017 academic year.

- **Figure 16** shows that there was an increase in the mean number of items correct on all Bracken subscales from pre- to posttest for children whose parents participated in HISD HIPPY. The differences in the scores from pre- to posttest were statistically significant ($p < .001$) (Appendix G, p. 33).

- The most gain on the Bracken was on the subscale that measured children's knowledge of basic shapes (5.6 mean items correct at pretest and 11.2 mean items correct at posttest). Children made the least gain in the subscale that measured their knowledge of numbers (6.5 vs. 8.9). On the numbers subscale, children must identify single- and double-digit numerals, and must count objects.

Figure 16. Bracken School Readiness Results on the Six Subscales for Children whose Parents Participated in HISD HIPPY, 2016–2017

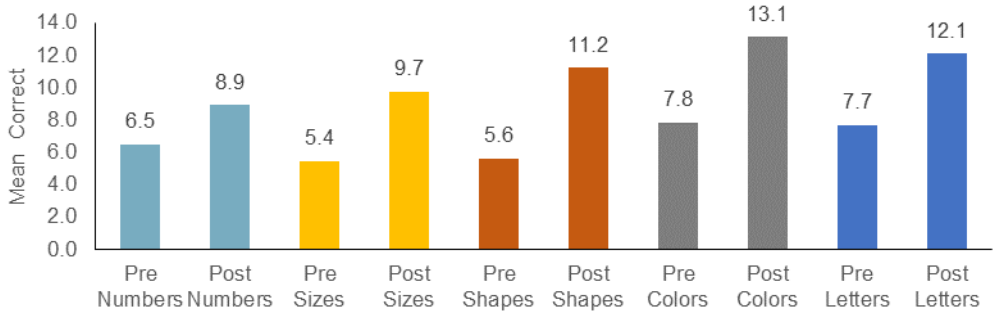
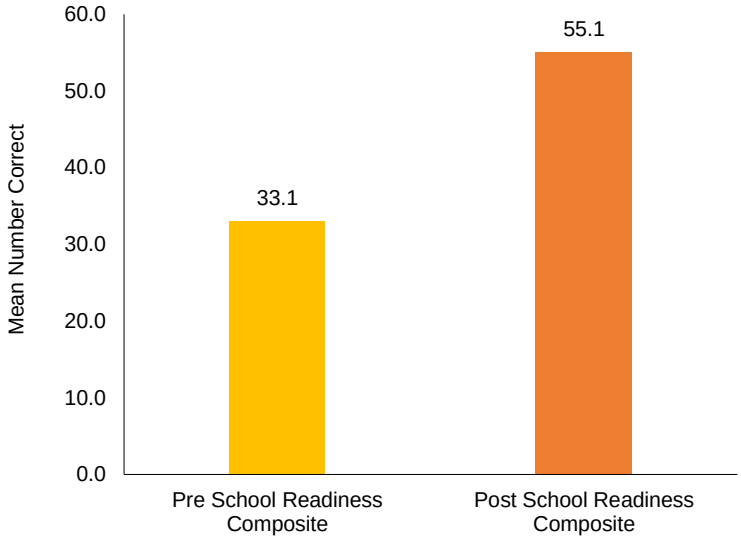


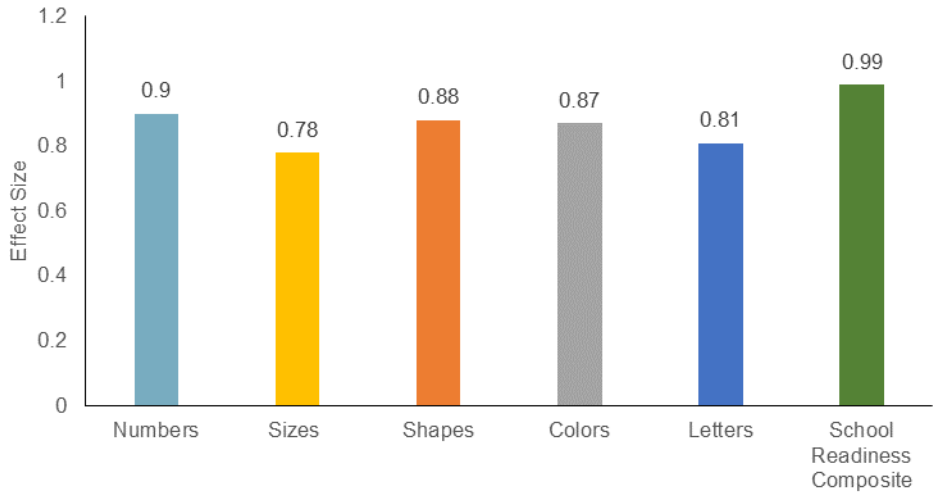
Figure 17 reveals that there was a statistically significant increase in the mean pre- to posttest school readiness composite score for children whose parents participated in HISD HIPPY ($p < .001$) (Appendix G, p. 34). Out of 85 items, the mean number of items correct at pretest was 33.1 compared to 55.1 items correct at posttest.

Figure 17. Bracken Pre- and Post-school Readiness Composite Scores for Children whose Parents Participated in HISD HIPPY, 2016–2017



- Rosenthal (1991) recommended conducting effect size analyses using paired t-test data. Cohen's d effect sizes for children whose parents participated in HISD HIPPY are presented in **Figure 18** on the Bracken six subscales as well as on the school readiness composite subscale. The effect sizes ranged from .78 to .90 on the numbers, sizes, shapes, colors, and letters subscales. The effect size on the overall school readiness composite was .99. Thus, the effect of HIPPY on school readiness was positive. The magnitude of the effect on each subscale was large.

Figure 18. Bracken effect sizes on six subscales and school readiness composite of children whose parents participated in HISD HIPPY, 2016–2017



Discussion

HIPPY was designed to assist parents from disadvantaged backgrounds with educational opportunities to prepare their child for school**.** HIPPY operated in 71 elementary schools during the 2016–2017 academic year, which was an increase from 57 HISD elementary schools during the 2015–2016 academic year. A five-year, $5,880,967 Texas Home Visiting Grant contributed to the expansion of the program. The vast majority of students whose parents participated in HISD HIPPY were Hispanic, and moderate percentages of parents of African American and low percentages of parents of White and Asian students participated in HIPPY over the past six years.

Academic performance of HISD HIPPY kindergarten students was assessed using the 2017 Logramos and Iowa reading (ELA) and mathematics assessments and the CIRCLE assessment. HISD HIPPY kindergarten students attained a higher mean standard score on the Logramos reading and mathematics assessments and lower mean standard scores on the Iowa reading and mathematics assessments compared to the district overall averages. CIRCLE assessment results identified an increase in the percentages of students who met benchmark on the Spanish and English reading and math subtests measured in this evaluation Systems are being developed to take into consideration the length of time that students' parents participated in HIPPY to account for student performance progress.

The Bracken was used to measure school readiness of children whose parents participated in HISD HIPPY. Bracken results reflected statistically significant increases in children's basic academic skills to prepare them for school from pre-test to post-test. Effect size analyses indicated a positive effect of HIPPY on the children's school readiness.

There were several limitations to the evaluation related to identification of HIPPY students.

Specifically, student identification was based on demographic data captured on parent enrollment forms. Verification of this information at enrollment rather than at the end of the year may help to ensure that all students whose parents participated in the program are captured for longitudinal tracking of academic outcomes.

Considering the program model, the HISD HIPPY program facilitates reading and mathematics achievement, school readiness, and literacy development in preschool children. Longitudinal tracking and reporting of student participation and academic performance may continue to support the need to help parents educate their children at early ages.

References

Baker, A. J. L., Piotrkowski, C. S., & Brooks-Gunn, J. (1998). The effects of the Home Instruction Program for Preschool Youngsters (HIPPY) on children's school performance at the end of the program and one year later. *Early Childhood Research Quarterly, 13*(4), 571–588. EJ580313.

Bradley, R. H., & Gilkey, B. (2002). The impact of the Home Instructional Program for Preschool Youngsters (HIPPY) on school performance in 3rd and 6th Grades. Early Education and Development, 13(3), 301-311.

Children's Learning Institute. (2016). CIRCLE Progress Monitoring. Retrieved from, https://www.childrenslearninginstitute.org/resources/circle-progress-monitoring/

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.

Family Engagement in Education Act of 2011, H.R. 1821/S. 941, 112d Cong. (2011).

Henderson, A.T., & Mapp, K. (2002). A new wave of evidence: The impact of school, family, and community connections on student achievement. Austin, TX: National Center for Family & Community Connections with Schools.

High, P. (2008). School Readiness. Pediatrics. Vol. 121 No. 4 April 1, 2008 pp. e1008 -e1015 (doi: 10.1542/peds.2008-0079). Retrieved from, http://pediatrics.aappublications.org/content/121/4/e1008.full.html

Hilado, A., Kallemeyn, L., & Phillips, L. (2013). Examining Understandings of Parent Involvement in Early Childhood Programs. *Early Childhood Research and Practice*. 15(2).

HIPPY USA Public Policy. (n.d.). Retrieved from, http://hippyusa.org/ Public_Policy/ public _policy.html

Jordan, G. E., Snow, C. E., & Porche, M. V. (2000). Project EASE: The effect of a family literacy project on kindergarten students' early literacy skills. *Reading Research Quarterly, 35*(4), 524–546. EJ616175.

Kagitcibasi, C., Sunar, D., & Bekman, S. (2001). Long-term effects of early intervention: Turkish low-income mothers and children. *Applied Developmental Psychology, 22*, 333–361.

Mathematica Policy Research, Inc., and Center for Children and Families at Teachers College, Columbia University. (2001). *Building their futures: How Early Head Start programs are enhancing the lives of infants and toddlers in low-income families.* Washington, DC: Administration on Children, Youth, and Families, Department of Health and Human Services. Article retrieved June 17, 2008, from http://www.acf.dhhs.gov/programs/core/ongoing_research/ehs/ehs_reports.html

Nievar, A. M., Jacobson, A., Chen, Q., Johnson, U., & Dier, S. (2011). Impact of HIPPY on home learning environments of Latino families. Early Childhood Research Quarterly, 26(3), 268-277.

Riverside Publishing. (1999). Glossary of Testing, Measurement, and Statistical Terms. Retrieved from, http://www.riversidepublishing.com/pdfs/WebGlossary.pdf

Rosenthal, R. (1991). Meta-analytic procedures for social research. Newbury Park, CA: Sage.

Starkey, P., & Klein, A. (2000). Fostering parental support for children's mathematical development: An intervention with Head Start families. *Early Education and Development, 11*(5), 659–680. EJ618579.

Texas HIPPY Center. (2015). Our Story. Retrieved from, http://www.unt.edu/hippy/story/pages/story.html

Texas HIPPY. (n.d.). Retrieved from, http://www.unt.edu/hippy/story/pages/story.html

Texas HIPPY Backoffice. (2017). A+HIPPY. Retrieved from, http://backoffice.texashippy.org/p/ahippy.html

The State of Texas, Office of the Governor. (2015). Governor Abbott Delivers State Of The State Address, Releases Governor's Budget. [Press Release]. Retrieved from, http://gov.texas.gov/news/press-release/20543

Think Tonight. (2014). About the Bracken School Readiness Assessment (BRSA). Retrieved from, http://www.thinktonight.com/BSRA_s/248.htm

What Work's Clearinghouse. (n.d.). Procedures and Standards Handbook (Version 3.0). Retrieved from, http://ies.ed.gov/ncee/wwc/pdf/reference_resources/wwc_procedures_v3_0_draft_standards_handbook.pdf

Zuckerman, B., & Halfon, N. (2003). School readiness: an idea whose time has arrived. Pediatrics.111 (6):1433– 1436.

Appendix A
Title 1-funded and Texas Home Visiting Grant-funded HIPPY School Sites, 2016-2017

2016-2017 Title 1 Schools (N = 35)	2016-2017 Maternal, Infant and Early Childhood Home Visiting Grant (N = 41)	
Alcott ES	Anderson ES	Thompson ES
Brookline ES	Ashford ES	Tinsley ES
Bruce ES	Bellfort EC	Wainwright ES
Burrus ES	Blackshear ES	Woodson ES
Cook ES	Bonham ES	Young ES
Coop ES	Burnet ES	Young Scholars
Crespo ES	Cunningham ES	
De Anda ES	Durkee ES	
Dogan ES	Foerster ES	
Durham ES	Foster ES	
Eliot ES	Franklin ES	
Elmore ES	Frost ES	
Farias EC	Garcia ES	
Fonwood EC	Grissom ES	
Garden Oaks ES	Hartsfield ES	
Harris, J.R. ES	Herrera ES	
Helms ES	Highland Heights ES	
Henderson NQ ES	Hinds Caldwell ES	
Hilliard ES	Hobby ES	
Isaacs ES	Kandy Stripe	
Jefferson ES	Kelso ES	
Kashmere Gardens	King, M.L. EC	
Lantrip ES	Lockhart ES	
Laurenzo EC	Martinez, C. ES	
Law ES	McGowen ES	
Martinez, R.C. ES	McGregor ES	
McNamara ES	Montgomery ES	
Mistral EC	Neff EC	
Mitchell ES	Petersen ES	
Oates ES	Pugh ES	
Park Place ES	Reynolds ES	
Port Houston ES	Rodriguez	
Robinson ES	Ross ES	
Rucker ES	Shearn ES	
Shadydale ES	Sutton ES	

EC= Early Childhood Center; ES = Elementary School

Appendix B

2016 TEXAS HIPPY KICKOFF

MONDAY, NOVEMBER 14th	TUESDAY, NOVEMBER 15th	WEDNESDAY, NOVEMBER 16th
12pm Check-in and Registration 1pm-5pm Statewide Teambuilding 6pm Dinner 7pm OPENING CEREMONY	Breakfast 9am-11:30am WHOLE GROUP SESSIONS 10:30am-2:30am A+ HIPPY Training SPLIT SESSION 11:30am LUNCH 12:30pm-4:30pm SMALL GROUP SESSIONS 5:30pm Dinner 6:30pm WHOLE GROUP SESSION 7pm Civic Reflection 8pm Teambuilding	Breakfast 9am-11:30am WHOLE GROUP SESSION (Role Play and Visit Tracker) 10:00am-11:30am Coordinators SPLIT SESSION 11:30am CLOSING CEREMONY 12:15pm LUNCH 1:00pm Load Buses

SESSION CONTENTS: Autism Awareness, Disability Inclusion, HIPPY Model, Role Play, Recruitment, HIPPY Connections, National Service Safety Stand Down

*Agenda subject to change

Appendix C
Student Demographic Characteristics of HIPPY Students Enrolled in HISD During Cohort Year, 2009–2010 through 2016–2017
(based on PEIMS, October 2017 snapshot)

Academic Year	2010–2011		2011–2012		2012–2013		2013–2014		2014–2015		2015–2016		2016–2017	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Total	**131**	**100.0**	**136**	**100.0**	**159**	**100.0**	**131**	**100.0**	**136**	**100.0**	**402**	**100.0**	**360**	**100.0**
Gender														
Male	63	48.1	70	51.5	70	44.0	63	48.1	70	51.5	196	48.8	170	47.2
Female	68	51.9	66	48.5	89	56.0	68	51.9	66	48.5	206	51.2	190	52.8
Ethnicity														
Asian	2	1.5	0	-	1	0.6	2	1.5	0	-	3	0.7	0	-
African Amer.	12	9.2	11	8.1	5	3.1	12	9.2	11	8.1	87	21.6	59	16.4
Hispanic	117	89.3	124	91.2	150	94.3	117	89.3	124	91.2	300	74.6	296	82.2
White	0	-	0	-	2	1.3	0	-	0	-	11	2.7	4	1.1
Two or More Races	0	-	1	0.7	1	0.6	0	-	1	0.7	1	0.2	0	-
Grade														
EE	2	1.5	0	-	0	-	2	1.5	0	-	6	1.5	7	1.9
PK	90	68.7	82	63.2	134	84.3	90	68.7	82	63.2	312	77.6	256	71.1
K	39	29.8	49	36.0	25	15.7	39	29.8	49	36.0	72	17.9	80	22.2
First	0	-	1	0.7	0	-	0	-	1	0.7	5	1.2	12	3.3
Second	0	-	0	-	0	-	0	-	0	-	4	1.0	2	.6
Third	0	-	0	-	0	-	0	-	0	-	1	0.2	2	.6
Fourth	0	-	0	-	0	-	0	-	0	-	1	0.2	1	.3
Limited English Proficient	104	79.4	107	78.7	126	79.3	104	79.4	107	78.7	255	63.4	250	69.4
Economically Disadvantaged	125	95.4	135	99.3	152	95.6	125	95.4	135	99.3	382	95.0	335	93.1
At-Risk	120	91.6	129	94.9	140	88.0	120	91.6	129	94.9	373	92.8	318	88.3

Appendix D
2017 Iowa and Logramos
English Language Arts (ELA) and Mathematics Performance
2016–2017 HISD HIPPY Kindergarten Cohort

Assessment	ELA Total					Math				
	n	Min.	Max.	Mean	Std. Devia.	n	Min.	Max.	Mean	Std. Devia.
Iowa	23	111	133	122.04	6.146	24	98	136	119.50	10.401
Logramos	47	141	200	169.17	15.652	47	145	210	166.91	13.171

Appendix E
CIRCLE Cut-point Scores by Subtest and Language

Cut-Point Scores on the HISD CIRCLE EOY Assessments by Subtest and Test Language included in this Evaluation		
Subtest: Language and Literacy	**English**	**Spanish**
ABC Names (untimed)	40	40
Alliteration	6	5
Rapid Letter Naming	8	6
Words in a Sentence	4	3
Subtest: Mathematics	**English**	**Spanish**
Patterns	3	3
Shape Discrimination	5	5
Shape Naming	4	4

Source. Adapted from Children's Learning Institute (September 2016). *CIRCLE Progress Monitoring Cut Points*. University of Texas Children's Learning Institute: Houston, TX.

Note. If a student scores at or above cut points determined for a particular measure, she or he is considered proficient. If a student scores below the benchmark, she or he is considered 'developing' (refers to students younger than four years old) or 'emerging' (for students four years old and older).

Appendix F
2017 CIRCLE English and Spanish Language and Literacy Performance
2016–2017 HISD HIPPY Prekindergarten Cohort

English Language and Literacy	Mean	Paired Differences				t	df	Sig. (2-tailed)
		Mean Diff.	Std. Deviation	95% Confidence Interval of the Difference				
				Lower	Upper			
ABC Names (Wave 1)	20.429	23.5500	16.3079	27.2890	20.2110	13.348	83	.000
ABC Names (Wave 3)	44.179							
Rapid Letter Naming (Wave 1)	3.000	2.6163	2.2864	3.1065	2.1261	10.612	85	.000
Rapid Letter Naming (Wave 3)	5.616							
Words in Sentence (Wave 1)	2.686	3.3837	2.6664	3.9554	2.8120	11.768	85	.000
Words in Sentence (Wave 3)	6.070							
Alliteration (Wave 1)	1.710	1.4638	1.6050	1.8493	1.0782	7.576	68	.000
Alliteration (Wave 3)	3.174							

Spanish Language and Literacy	Mean	Paired Differences				t	df	Sig. (2-tailed)
		Mean Diff.	Std. Deviation	95% Confidence Interval of the Difference				
				Lower	Upper			
ABC Names (Wave 1)	11.946	32.7095	15.2901	35.1933	30.2257	26.025	147	.000
ABC Names (Wave 3)	44.655							
Rapid Letter Naming (Wave 1)	1.982	3.6341	2.2430	3.9800	3.2883	20.749	163	.000
Rapid Letter Naming (Wave 3)	5.616							
Words in Sentence (Wave 1)	2.006	3.9451	2.2976	4.2994	3.5908	21.989	163	.000
Words in Sentence (Wave 3)	5.951							
Alliteration (Wave 1)	1.509	1.7636	1.5496	2.0018	1.5254	14.620	164	.000
Alliteration (Wave 3)	3.273							

Appendix F (cont'd)
2017 CIRCLE English and Spanish Mathematics Performance
2016–2017 HISD HIPPY Prekindergarten Cohort

English Language Mathematics	Mean	Paired Differences				t	df	Sig. (2-tailed)
		Mean Diff.	Std. Deviation	95% Confidence Interval of the Difference				
				Lower	Upper			
Patterns (BOY)	.901	.8169	.7618	.99720	.6366	9.036	70	.000
Patterns (EOY)	1.718							
Shape Naming (BOY)	3.000	2.6163	2.2864	3.1065	2.1261	10.612	85	.000
Shape Naming (EOY)	5.616							
Shape Discrimination (BOY)	1.915	2.000	1.442	2.3418	1.6582	11.669	70	.000
Shape Discrimination (EOY)	3.915							

Spanish Language Mathematics	Mean	Paired Differences				t	df	Sig. (2-tailed)
		Mean Diff.	Std. Deviation	95% Confidence Interval of the Difference				
				Lower	Upper			
Patterns (BOY)	.603	1.1609	.7351	1.2709	1.0509	20.831	173	.000
Patterns (EOY)	1.764							
Shape Naming (BOY)	2.368	2.1897	2.5852	2.4269	1.9525	18.220	173	.000
Shape Naming (EOY)	4.557							
Shape Discrimination (BOY)	1.485	2.3865	1.4416	2.6095	2.1635	21.136	162	.000
Shape Discrimination (EOY)	3.871							

Appendix G
Bracken School Readiness Assessment (BSRA®) Results, 2016–2017

n = 545	Mean	Paired Differences				t	df	Sig. (2-tailed)	Cohen's d Effect Size
		Mean Diff.	Std. Deviation	95% Confidence Interval of the Difference					
				Lower	Upper				
Pre Numbers	6.48	2.448	3.626	2.143	2.753	15.759	544	.000	.89726
Post Numbers	8.92								
Pre Sizes	5.44	4.290	5.124	3.859	4.721	19.544	544	.000	.78318
Post Sizes	9.73								
Pre Shapes	5.63	5.587	5.898	5.091	6.083	22.114	544	.000	.87875
Post Shapes	11.22								
Pre Colors	7.82	5.295	6.118	4.781	5.810	20.207	544	.000	.8655
Post Colors	13.12								
Pre Letters	7.68	4.404	5.223	3.964	4.843	19.682	544	.000	.81115
Post Letters	12.09								
Pre School Readiness Composite	33.05	22.023	18.523	23.582	20.465	27.758	544	.000	.98927
Post School Readiness Composite	55.07								

- Numbers: # of items correct on numbers subscale (out of 18 items)
- Sizes Comp: # of items correct on sizes/comparisons subscale (out of 22 items)
- Shapes: # of items correct on shapes subscale (out of 20 items)
- Colors: # of items correct on colors subscale (out of 10 items)
- Letters: # of items correct on letters subscale (out of 15 items)
- SRC: School Readiness Composite, which is total number of items correct, the sum of all subscale scores (out of 85 items)
- Standard Score: the child's standardized score compared with the publisher's normative database. A standard score of 85 or above is considered "ready for school" for that age.

Relative Size of Cohen's d
negligible effect (>= -0.15 and <.15)
small effect (>=.15 and <.40)
medium effect (>=.40 and <.75)
large effect (>=.75 and <1.10)
very large effect (>=1.10 and <1.45)
huge effect >1.45