MEMORANDUM September 17, 2018

TO: Lance Menster
Officer, Elementary Curriculum and Development

FROM: Carla Stevens
Assistant Superintendent, Research and Accountability

SUBJECT: **AN EVALUATION OF THE HOME INSTRUCTION FOR PARENTS OF PRESCHOOL YOUNGSTERS (HIPPY) AND TEXAS MATERNAL, INFANT AND EARLY CHILDHOOD HOME VISITING (MIECHV) PROGRAM IN HISD, 2017–2018**

Attached is a copy of the HIPPY program evaluation for the 2017–2018 academic year. The study measured the academic performance of HISD students whose parents participated in HIPPY using the kindergarten 2017 Logramos and Iowa reading and mathematics assessments. The prekindergarten CIRCLE assessment and the Bracken measured school readiness. Parents' perceptions of the program were also presented based on a parental involvement survey conducted by the University of North Texas.

Key findings include:

- HISD HIPPY kindergarten students attained higher mean normal curve equivalent (NCE) scores on the 2017 Logramos and Iowa reading and mathematics subtests compared to the district and national averages.
- CIRCLE literacy and mathematics results yielded an increase in the proportion of students who met benchmark, from BOY to EOY, on subtests that assessed their ability to rapidly name letters and words as well as to name and discriminate shapes and numbers compared to the district.
- Parents' perceptions of their preschool child's acquisition of basic academic skills, as measured by the Bracken, showed increases from pre-test to post-test. Effect size analyses of Bracken results indicated a positive, moderate to large effect of HIPPY on children's school readiness in all areas measured.
- The Parent Involvement survey noted that families were more likely to engage in activities that supported literacy from pre-test to post-test with their children.

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: Noelia Longoria
Mechiel Rozas

HOUSTON INDEPENDENT SCHOOL DISTRICT

RESEARCH

Educational Program Report

AN EVALUATION OF THE HOME INSTRUCTION FOR PARENTS OF PRESCHOOL YOUNGSTERS (HIPPY) AND TEXAS MATERNAL, INFANT AND EARLY CHILDHOOD HOME VISITING (MIECHV) PROGRAM IN HISD, 2017-2018

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EVALUATION REPORT

BUREAU OF PROGRAM EVALUATION

An Evaluation of the Home Instruction for Parents of Preschool Youngsters (HIPPY) and Texas Maternal, Infant and Early Childhood Home Visiting (MIECHV) Program in HISD, 2017–2018

Prepared by Venita R. Holmes, Dr.P.H.

Abstract

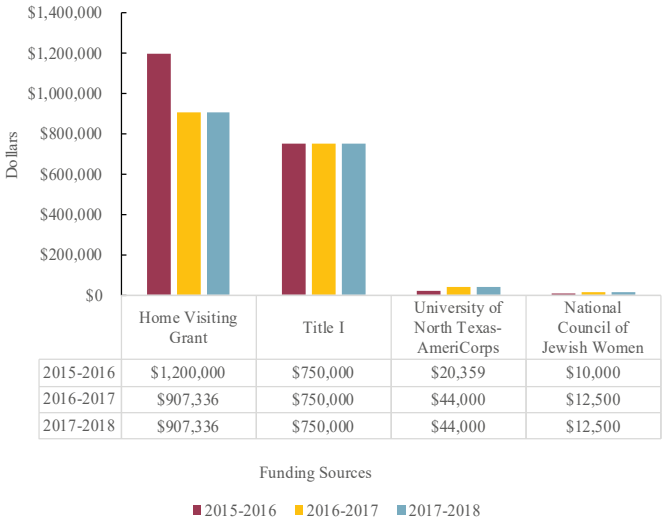
HIPPY was designed to assist parents from disadvantaged backgrounds with educational opportunities to prepare their children for school. HIPPY targeted children in 70 Houston Independent School District (HISD) elementary schools during the 2017–2018 academic year. This figure reflects an increase from 57 schools in 2015–2016, which was the first year of program expansion due to the Texas Home Visiting grant. Academic performance of HISD students whose parents participated in HIPPY was assessed using the kindergarten 2017 Logramos and Iowa reading and mathematics assessments, and the prekindergarten CIRCLE assessment that measured school readiness. HISD HIPPY kindergarten students attained higher mean normal curve equivalent (NCE) scores on the Logramos and Iowa reading and mathematics subtests compared to the district and national averages. CIRCLE literacy and mathematics results yielded an increase in the proportion of students who met benchmark, from BOY to EOY, on subtests that assessed their ability to rapidly name letters and words as well as to name and discriminate shapes and numbers compared to the district. Parents' perceptions of their preschool child's acquisition of basic academic skills, as measured by the Bracken, showed increases from pre-test to post-test. Effect size analyses of Bracken results indicated a positive, moderate to large effect of HIPPY on children's school readiness in all areas measured. The Parent Involvement survey noted that families were more likely to engage in activities that supported literacy from pre-test to post-test with their children. Considering the program model, HISD HIPPY facilitates academic achievement and school readiness among preschool children and children in early education programs. A longitudinal study of HIPPY may determine the impact of the program as children transition to formal school settings and as they progress through school.

Introduction

Children from disadvantaged backgrounds often experience higher rates of special education services, grade retention, and school drop out compared to non-disadvantaged children (Karoly, Kilburn, & Cannon, 2005). Early childhood interventions provide a protective barrier over the potential risk factors that comprise the health, intellectual, and emotional development of children prior to entering school (Duby, 2007; Shepard & Dickstein, 2009; Rotheram-Borus et al., 2018).

To diminish the risk associated with being disadvantaged, Home Instruction for Parents of Preschool Youngsters (HIPPY) was established more than 40 years ago in over 10 countries (Texas HIPPY Center, 2015). HIPPY is considered an effective educational practice that promotes school readiness and removes barriers for poverty-stricken children who are at risk for academic failure (Zuckerman & 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, **Figure 1**). Utilizing trained providers as the primary service strategy to support program effectiveness (Boller, Strong, & Daro,

Figure 1: HIPPY home instructor demonstrating how to develop gross motor skills with mom while child observes



	Home Visiting Grant	Title I	University of North Texas-AmeriCorps	National Council of Jewish Women
2015-2016	$1,200,000	$750,000	$20,359	$10,000
2016-2017	$907,336	$750,000	$44,000	$12,500
2017-2018	$907,336	$750,000	$44,000	$12,500

Figure 2: HIPPY funding, 2015-2016 through 2017-2018

Figure 4: HIPPY home instructor providing teaching tips to assist child with letter recognition

2010; Callahan et al., 2010; Paulsell, Avellar, Sama Martin, & Del Grosso, 2010; Sweet & Appelbaum, 2004), HIPPY has been acknowledged by the U.S. federal government as an evidence-based home visiting program (HRSA, n.d.). The HIPPY model of early education is aligned to the governor of Texas' priority for building a better education system for all children (The State of Texas, 2015).

Background

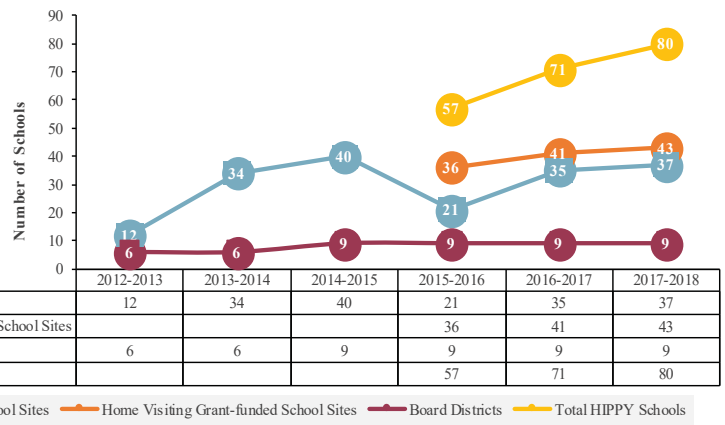
HIPPY was initiated in the Houston Independent School District (HISD) during the 1993–1994 school year to offer academic enrichment opportunities to parents and children from economically-disadvantaged backgrounds. HIPPY's home-based, family-focused approach helps parents prepare their children for academic success prior to enrolling in school (Texas HIPPY Center, 2015). Targeted parents had preschool children ages three to five years old. However, recruitment efforts mainly focused on parents with three-year-old children. (Refer to **Appendix A**, p. 13, for the 2017–2018 targeted schools.)

Funding for HIPPY was provided through multiple sources, including federal Title 1 and state grants, the University of Texas AmeriCorps, and the National Council of Jewish Women (**Figure 2**). The five-year, Texas Home Visiting Grant was awarded to HISD during the 2015–2016 academic year to broaden access to HIPPY in more schools throughout the geographical area (**Figure 3**, **Appendix B**, p. 14). Texas Home Visiting Grant funds were reallocated through the Texas Maternal, Infant and Early Childhood Home Visiting (MIECHV) program in 2016–2017. Both grants were awarded through the Texas Health and Human Services Commission. The Collaborative for Children, independently, supports HISD HIPPY families through the *Parents as Teachers* program to promote healthy development and school readiness in children.

The HIPPY Model

The HIPPY 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) (**Figures 4** and **5**). 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 the means to assume leadership in the community and take steps toward self-sufficiency and marketable skills (Texas HIPPY Center, 2015).



	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Title 1-funded School Sites	12	34	40	21	35	37
Home Visiting Grant-funded School Sites				36	41	43
Board Districts	6	6	9	9	9	9
Total HIPPY Schools				57	71	80

Figure 3: Number of HISD HIPPY School Sites and Board Districts, 2012–2013 to 2017–2018

Figure 5: HIPPY home instructor and parent engaging in "kitchen chemistry", turning a solid potato into mash potatoes

Figure 6: HIPPY children and parents on field trip at Houston's Children's Museum

The HIPPY program model applied 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 8 to 10 part-time home instructors.

HIPPY staff conducted monthly meetings with parents in the community to discuss issues, such as gang awareness and mental health. To support school readiness, children and their families were taken on field trips to experience learning opportunities offered at the Houston Children's Museum (**Figure 6**).

The HIPPY Curriculum

HIPPY instructional materials were standardized and included story books, weekly activity packets, and manipulatives for use throughout the school year. The 30 activity packets included approximately 10 activities for parents and children. These activity packets focused on language development, sensory and perception discrimination skills, and problem solving. The materials were designed to enable parents with little or no formal schooling to teach their children successfully. Parents were encouraged to help their children recognize shapes and colors, tell stories, follow directions, solve logical problems, and acquire other school readiness skills (**Figure 7**).

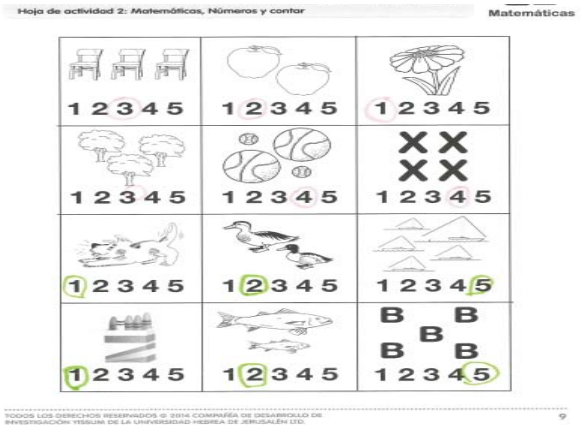


Figure 7: HIPPY child participated in activities to develop English and Spanish language and mathematics skills

Home Instructors and Program Coordinator

A typical home instructor provided services to up to 16 parents with children. The home instructor's main responsibility was to deliver the curriculum to his/her assigned parents. As such, home instructors were required to schedule their own appointments and meet with their assigned parents at the parent's home once a week. During a home visit, home instructors provided parents with a packet containing the week's activities. The home instructor engaged in role-play with the parents, often using his or her own child. However, the home instructor did not work directly with the child participant.

Home instructors were part-time employees of HISD, and worked 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 received weekly HIPPY training conducted by a full-time HIPPY coordinator. The program coordinator recruited and trained home instructors, organized group meetings, developed enrichment activities, and helped to recruit parents into the program. All home instructors were parents who had young children attending the school to which they were assigned. The HIPPY manager supported 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 role-playing lessons and activities as it was taught to parents. Home instructors learned from other home instructors and the coordinator about circumstances and situations that may arise while they are training parents. Group meetings provided networking opportunities for parents of HIPPY children to discuss information and ask questions. Available community services and local resources that may benefit the families were shared.

HIPPY held mandatory annual conferences and retreats including:

- Kickoff Agenda every year for all HIPPY personnel in Texas,
- 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 2017–2018 academic year, HISD HIPPY had a 22-member Advisory Board. The Advisory Board consisted of principals, HISD Board members, community members, and parents. 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 was fully implemented during the 2017–2018 school year. A+HIPPY goals are enhanced through role play and autism learning support methods; written learning support and transition materials; and training, resource materials, and support to 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.

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, 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 with families in their homes.

Research Questions:

1. What were the participation trends of HISD HIPPY children over the past eight years (2010–2011 through 2017–2018)?
2. What enrichment activities were offered to HISD HIPPY participants?
3. How did the 2017–2018 HISD HIPPY kindergarten student cohort perform on the winter 2017 administration of Logramos and Iowa assessments?
4. How did HISD prekindergarten students whose parents participated in HIPPY during the 2017–2018 academic year perform on the 2018 CIRCLE assessment?
5. What was the impact of HISD HIPPY on school readiness of children whose parents participated in the program?
6. To what extent did parents engage in activities to support their child's literacy during the 2017–2018 academic year?

Review of the 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). Further, evidence-based prevention programs that utilize family coaching models, with trained paraprofessionals and community members to develop skills in children, have been paramount in the literature (Kaminski et al. 2008; Shepard & Dickstein, 2009; Rotheram-Borus et al., 2018). 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, have higher 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). Key features have been found to produce effective early education intervention programs, including better trained professionals compared to paraprofessionals or lay professionals, a smaller child to staff ratio, and more intensive programs.

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).

A third-grade follow-up study of HIPPY 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, after controlling for age, gender, ethnicity, attrition, and family background.

".....Programs that develop young children's learning skills are important because children who start out as high performers tend to remain that way, while children who have a poor start tend to remain poor students....."
(Henderson and Mapp, 2002, p. 26).

Barton (2016) documents widespread attention related to economic benefits of evidence-based home visiting programs, such as HIPPY, and positive benefit-cost ratios due to implementation (Aos, Lieb, Mayfield, Miller, & Pennucci, 2004; Glazner, Bondy, Luckey, & Olds, 2004; Karoly et al., 2005; Olds et al., 2010).

Baker et al. (1998) point out that gains experienced by participation in HIPPY may increase or decline over the course of the child's education. A study on the longitudinal impact of HIPPY is needed to determine whether follow-up services are needed to facilitate these children in transitioning to a formal school environment.

Methods

Study Population

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 2017–2018 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 2017–2018 HISD HIPPY student cohort. Similar procedures were conducted to create student cohorts in previous years. Longitudinal demographic characteristics of HISD HIPPY student cohorts from 2010–2011 to 2017–2018 are presented in **Appendix C** (p. 15).

Data Collection and Analyses

Academic achievement measures included the Logramos and Iowa assessments for kindergarten students whose parents participated in HIPPY during the 2017–2018 academic year. The study sample consisted of 47 students on the Logramos Language Arts (LA) Total and mathematics subtests as well as for 23 students on the Iowa English Language Arts (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 normal curve

equivalents (NCEs). Riverside Publishing (1999) indicates that the NCE is a continuous measure, with a mean of 50 and a range of 1-99. Like the scale score, NCEs permits direct comparisons of different groups, and can be used to track performance over time to measure growth.

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 2017–2018 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 2017–2018 Children's Learning Institute's CIRCLE Progress Monitoring PreK Community Benchmark Report. The percent of students who met the benchmark on each assessment was presented in the analyses. District-level results were obtained from the 2017–2018 CIRCLE Progress Monitoring PreK Community Benchmark report.

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 2017 and spring 2018 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.

The HIPPY Parental Involvement Survey, administered by the University of North Texas, was used to assess the extent that parents engaged in activities to support their child's literacy development. Survey responses relate directly to the HIPPY child. The pre-survey is, typically, administered between intake and week one and the post-survey is, typically, administered between exit and weeks 29-30. A matched-paired design yielded a sample of 170 parents with both pre- and post-survey results during the 2017–2018 school year.

Rosenthal (1991) recommended using effect sizes for paired data. Hedge's g is a standard deviation-based measure used to compute the effect size for groups with similar sample sizes. Hedge's g follows similar criteria to Cohen's d for determining the strength of an intervention with an effect size of 0.2 = small effect, 0.5 = moderate effect, and 0.8 = large effect. 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.

Study Limitations

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.

What were the participation trends of HISD HIPPY children over the past eight years (2010–2011 through 2017–2018)?

Figure 8 (p. 7) 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.

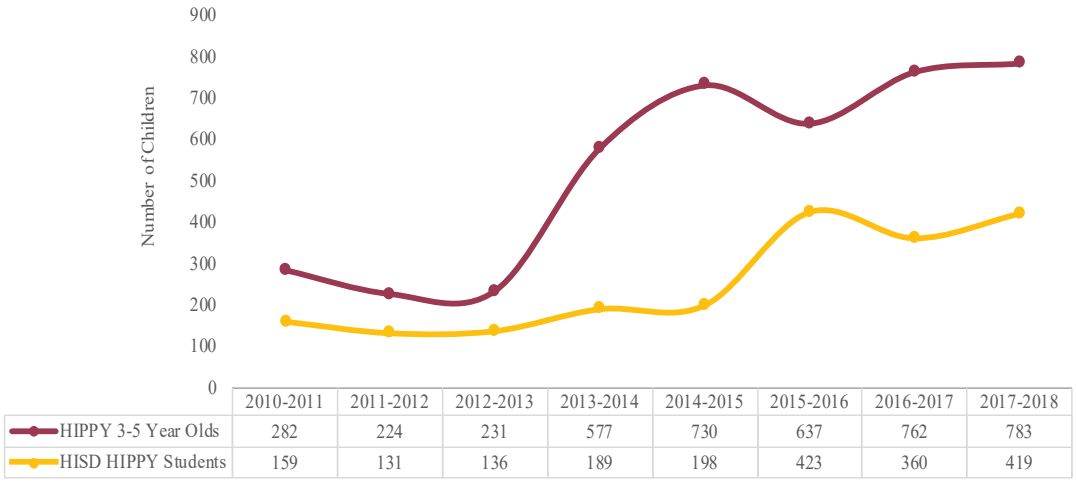
A total of 783 three to five-year old children, along with their parents, participated in HISD HIPPY during the 2017–2018 academic year. Among the 783 children, 419 of them were identified as HISD students. Consequently, the number of three to five-year olds increased by 2.7% and the number of students identified as HISD students increased by 14.1% over the past two years.

Appendix C (p. 14) shows that, in 2017–2018, there was a moderate increase in the proportion of males (47.2 percent vs. 50.1 percent) and Hispanic students (82.2 percent vs. 84.2 percent); and a slight increase in the proportion of Asian (0.0 percent vs. 0.5 percent), White (1.1 percent vs. 1.7 percent), and students of two or more races (0.0 percent vs. 0.7 percent) from the previous year. There was also an increase in the proportion of economically-disadvantaged students (93.1 percent vs. 94.0 percent) and at-risk students (88.3 percent vs. 90.5 percent) from the previous year. There has been a decline in participation of African American students (16.4 percent vs. 12.9 percent) from 2016–2017 to 2017–2018 (Appendix C, p. 14).

Grade enrollment trends revealed that prekindergarten and kindergarten students in the sample have consistently dominated HISD HIPPY participation, representing 93.3 percent of the total student group in 2016–2017 and 91.4 percent of the group in 2017–2018 (Appendix C, p. 14).

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



	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
HIPPY 3-5 Year Olds	282	224	231	577	730	637	762	783
HISD HIPPY Students	159	131	136	189	198	423	360	419

Figure 8: Number of children whose parents participated in HISD HIPPY, 2010-2011 through 2017–2018

academic year. The activities were designed to encourage parents to be more involved in their child's learning and to develop leadership skills. End-of-Year HIPPY Celebration participation has increased over the past three years. Specifically, during the 2015–2016 school year, approximately 1,841 parents and families attended the 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. During the 2017–2018 academic year, the HISD program increased the number of celebrations to accommodate lower numbers of families in more personable settings. Approximately 22 celebrations occurred, with over 1,500 attendees (**Appendic D**, p. 16). 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. Free baseball tickets were provided to 200 HIPPY families in May 2018. 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.

The "Back to School! Store" was initiated by the National Council of Jewish Women to assist HIPPY graduates. School supplies, new cloting, and books were distributed to approximately 400 HISD HIPPY children and their siblings. Among the 400 children served, 150 were HISD HIPPY children (**Figure 9**).

How did the 2017–2018 HISD HIPPY kindergarten student cohort perform on the winter 2017 administration of Logramos and Iowa assessments?

Figure 10 (p. 8) presents the 2017–2018 mean Normal Curve Equivalents (NCEs) on the Logramos reading (LA Total) and mathematics assessments for kindergarten students whose parents participated in HISD HIPPY during the 2017–2018 academic year compared to kindergarten students districtwide and at the national level. The sample size is limited to 47 students; therefore, the results should be viewed with caution. It is evident that students whose parents participated in HIPPY outperformed students districtwide and at the national level on the Logramos LA Total assessment (46.7 vs. 45.0, and 43.5 NCEs, respectively). Similar findings were observed on the Logramos Mathematics assessment for the respective groups (48.4, 43.0, and 44.2 NCEs, respectively).

Iowa ELA Total and Mathematics assessments results for students whose parents participated in HIPPY during the 2017–2018 academic year are depicted in **Figure 11** (p. 8). Results are presented for 23 HISD HIPPY students on the ELA Total assessment and for 24 students on the mathematics assessment. The results should be reviewed with caution due to the low sample sizes. HISD HIPPY students attained higher mean NCEs on the Iowa ELA Total assessment compared to districtwide and national results (49.1 vs. 43.0 and 43.2, respectively). The mean NCE for HISD HIPPY students was also higher than the districtwide and national means on the Iowa Mathematics assessment (49.7 vs. 42.0 and 42.9, respectively).

Figure 9: HISD HIPPY child receiving shoes at the National Council of Jewish Women's "Back to School! Store", 2017–2018

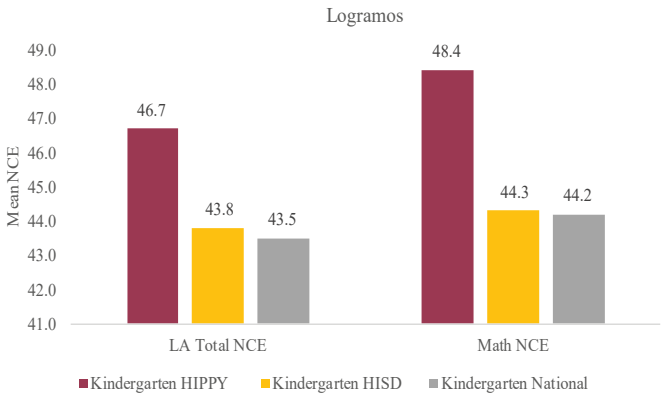


Figure 10: HISD HIPPY, District, and National Comparisons, Logramos LA Total and Math NCEs, 2017

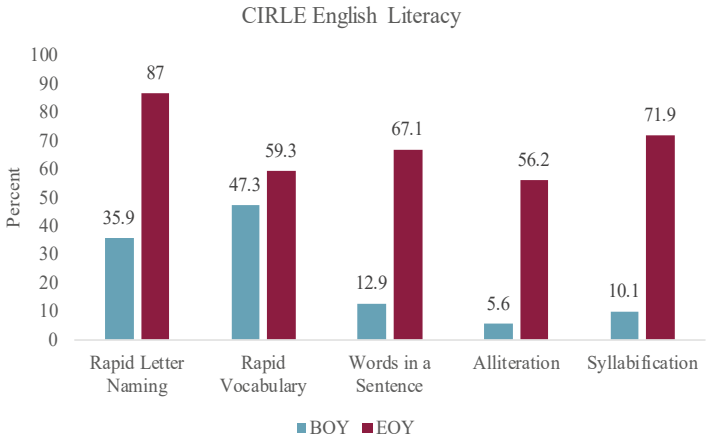


Figure 12: CIRCLE English Literacy assessment results of HISD HIPPY prekindergarten students 2017–2018

How did HISD prekindergarten students whose parents participated in HIPPY during the 2017–2018 academic year perform on the 2018 CIRCLE assessment?

CIRCLE results were used as a prekindergarten school readiness measure for HISD students whose parents participated in HIPPY during the 2017–2018 academic year. Wave 1 of CIRCLE was the pre-test measure and Wave 3 was 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 percent of students who met the benchmark on the assessments at BOY and EOY are depicted. More details regarding CIRCLE, i.e., the number of students tested as well as BOY, MOY, and EOY results can be found in **Appendix E** (p. 17).

Figure 12 shows the performance of the HISD HIPPY student group on 2017–2018 English Literacy CIRCLE assessments. There was an increase in the percentage of students who met benchmark, from BOY to EOY, on Rapid Letter Naming, Rapid Vocabulary, Words in a Sentence, Alliteration, and Syllabification subtests. At BOY, the highest percentage of students who met benchmark was on the Rapid Vocabulary subtest (47.3%) and the lowest percentage of students who met benchmark was on the Alliteration subtest (5.6%). By EOY, the highest percentage of students who met benchmark was on the Rapid Letter Naming subtest (87.0%), and the lowest percentage of students who met benchmark was on the Alliteration subtest (56.2%). The largest increase in the percentage of students who met benchmark, from BOY to EOY, was on the Syllabification subtest (61.8 percentage points), whereas, the smallest increase was on the Rapid Vocabulary subtest (12 percentage points).

Figure 13 shows the performance of the HISD HIPPY student group on 2017–2018 Spanish Literacy CIRCLE assessments. There was an increase in the percentage of students who met benchmark, from BOY to EOY, on Rapid Letter Naming, Rapid Vocabulary, Words in Sentences, Alliteration, and Syllabification subtests. At BOY, the highest percentage of students who met benchmark was on the Rapid Letter Naming and Rapid Vocabulary subtests (15.2%) and the lowest percentage of students who met benchmark was on the Words in a Sentence subtest (3.3%). By EOY, the highest percentage of students who met benchmark was on the Rapid Letter Naming and the Rapid Vocabulary subtest (91.1%), and the lowest percentage of students who met benchmark was on the Words in a Sentence subtest (76.3%). The largest increase in the percentage of students who met benchmark, from BOY to EOY, was on the Syllabification subtest (76.2 percentage points), whereas, the smallest increase was on the Alliteration subtest (70.9 percentage points).

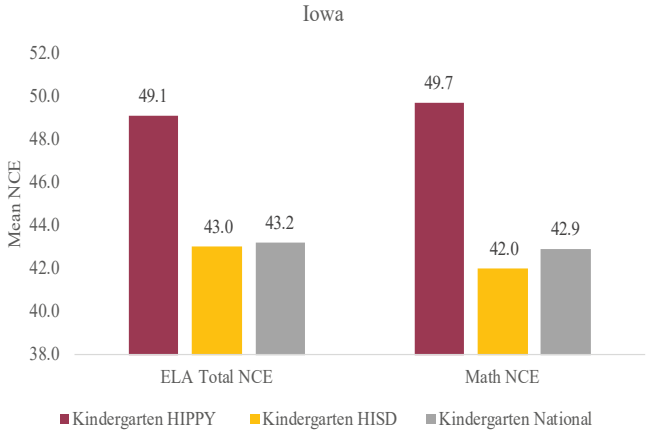


Figure 11: HISD HIPPY, District, and National Comparisons, Iowa ELA Total and Math NCEs, 2017

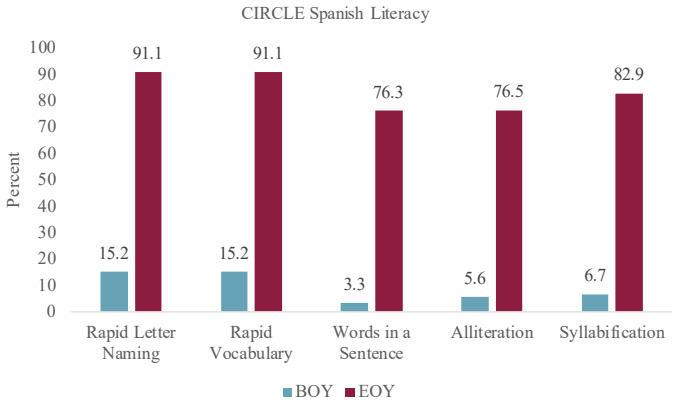


Figure 13: CIRCLE Spanish Literacy assessment results of HISD HIPPY prekindergarten students, 2017–2018

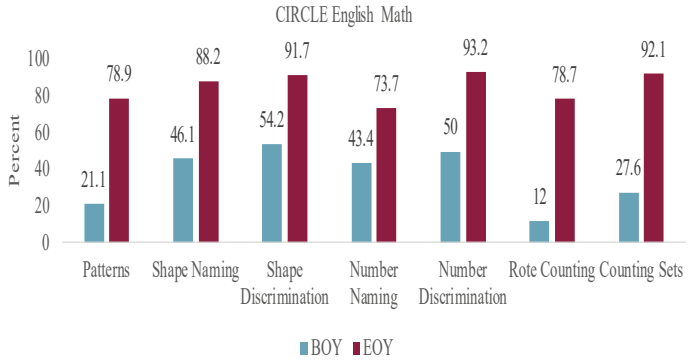


Figure 14: CIRCLE English Mathematics assessment results of HISD HIPPY prekindergarten students, 2017–2018

Figure 14 shows the performance of the HISD HIPPY student group on 2017–2018 English Mathematics CIRCLE assessments. There was an increase in the percentage of students who met benchmark, from BOY to EOY, on Patterns, Shape Naming, Shape Discrimination, Number Naming, Number Discrimination, Rote Counting, and Counting Sets subtests. At BOY, the highest percentage of students who met benchmark was on the Shape Discrimination subtest (54.2%) and the lowest percentage of students who met benchmark was on the Rote Counting subtest (12.0%). By EOY, the highest percentage of students who met benchmark was on the Number Discrimination subtest (93.2%), and the lowest percentage of students who met benchmark was on the Number Naming subtest (43.4%). The largest increase in the percentage of students who met benchmark, from BOY to EOY, was on the Rote Counting subtest (66.7 percentage points), whereas, the smallest increase was on the Number Naming subtest (30.3 percentage points).

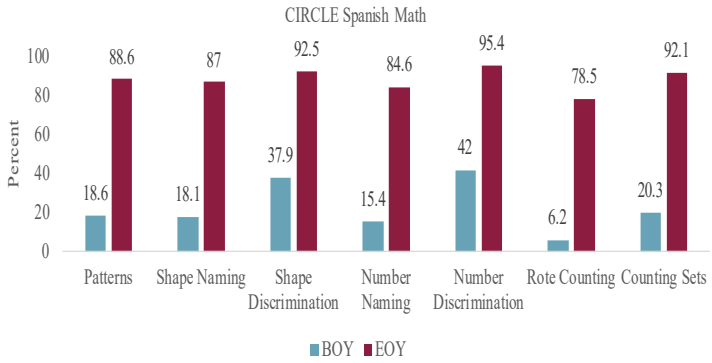


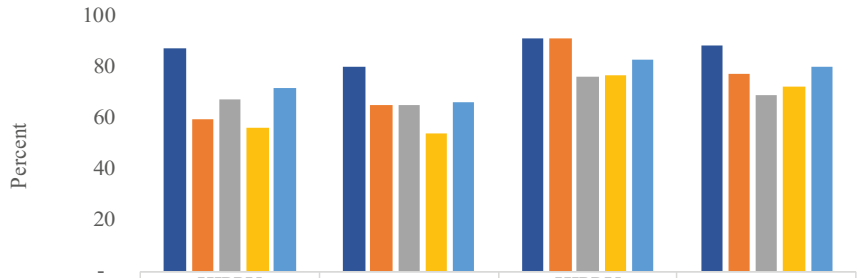
Figure 15: CIRCLE Spanish Literacy assessment results of HISD HIPPY prekindergarten students, 2017–2018

Figure 15 shows the performance of the HISD HIPPY student group on 2017–2018 Spanish Mathematics CIRCLE assessments. There was an increase in the percentage of students who met benchmark, from BOY to EOY, on Patterns, Shape Naming, Shape Discrimination, Number Naming, Number Discrimination, Rote Counting, and Counting Sets subtests. At BOY, the highest percentage of students who met benchmark was on the Shape Discrimination subtest (42.0%) and the lowest percentage of students who met benchmark was on the Rote Counting subtest (6.2%). By EOY, the highest percentage of students who met benchmark was on the Number Discrimination subtest (95.4%), and the lowest percentage of students who met benchmark was on the Rote Counting subtest (78.5%). The largest increase in the percentage of students who met benchmark, from BOY to EOY, was on the Rote Counting subtest (72.3 percentage points), whereas, the smallest increase was on the Number Discrimination subtest (53.4 percentage points).

A comparison of EOY English and Spanish language and literacy CIRCLE performance of the 2017–2018 HISD HIPPY prekindergarten cohort with districtwide results is reflected in **Figure 16**. Comparisons were limited to subtest data available on the Children's Learning Institute's CIRCLE 2017–2018 Progress Monitoring PreK Community Benchmark Report.

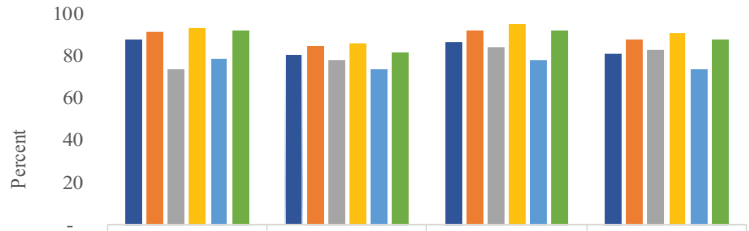
A higher percentage of the HIPPY student group met the benchmark on the English amd Spanish language Rapid Letter Naming, Words in a Sentence, Alliteration, and Syllabification subtests compared to the district. In addition, a higher percentage of the HIPPY student group met the benchmark on the Spanish language Rapid Vocabulary subtests compared to the district.

A comparison of EOY English and Spanish language mathematics CIRCLE performance of the 2017–2018 HISD HIPPY prekindergarten cohort with districtwide results is reflected in **Figure 17** (p. 10). Comparisons were limited to subtest data available on the Children's Learning Institute's CIRCLE 2017–2018 Progress Monitoring PreK Community Benchmark Report. A higher percentage of the HISD HIPPY student group met the



	HIPPY (English)	HISD (English)	HIPPY (Spanish)	HISD (Spanish)
Rapid Letter Naming	87	80	91	88
Rapid Vocabulary	59	65	91	77
Words in a Sentence	67	65	76	69
Alliteration	56	54	77	72
Syllabification	72	66	83	80

Figure 16: CIRCLE Literacy assessment results, 2017–2018



	HIPPY (English)	HISD (English)	HIPPY (Spanish)	HISD (Spanish)
Shape Naming	88	81	87	81
Shape Discrimination	92	85	93	88
Number Naming	74	78	85	83
Number Discrimination	93	86	95	91
Rote Counting	79	74	79	74
Counting Sets	92	82	92	88

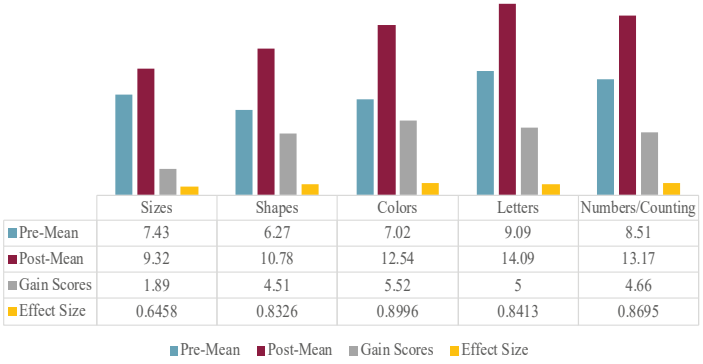
Figure 17: CIRCLE mathematics assessment, 2017–2018

benchmark on the English language and Spanish language Shape Naming, Shape Discrimination, Number Discrimination, Rote Counting, and Counting Sets subtests compared to the district. In addition, a higher percentage of the HISD HIPPY student group met the benchmark on the Spanish language Number Naming subtest compared to the district.

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 that kindergarten teachers traditionally teach to prepare children for formal education. The five basic skills measured on the Bracken are sizes, shapes, colors, letters, and numbers/counting. Bracken data are based on parents' perceptions of their child's abilities in the targeted areas. Findings, including the mean and standard deviations, are presented in **Appendix F** (p. 18) for 499 preschool children whose parents participated in HIPPY during the 2017–2018 academic year.

Figure 18 shows that there was an increase in the mean number of items correct on all Bracken subscales from pre-test to post-test. The most gain on the Bracken (5.52 points) was on the subscale that measured children's knowledge of colors (7.02 mean items correct at pre-test vs. 12.54 mean items correct at post-test). Children made the least gain (1.89 points) on the subscale that measured their knowledge of sizes (7.43 mean items correct at pre-test vs. 9.32 items corrrect at post-test).



	Sizes	Shapes	Colors	Letters	Numbers/Counting
Pre-Mean	7.43	6.27	7.02	9.09	8.51
Post-Mean	9.32	10.78	12.54	14.09	13.17
Gain Scores	1.89	4.51	5.52	5	4.66
Effect Size	0.6458	0.8326	0.8996	0.8413	0.8695

Figure 18: Bracken assessment results of HISD HIPPY children, 2017–2018

Rosenthal (1991) recommended conducting effect size analyses using paired data. Hedge's g effect sizes using Bracken results are presented in Figure 18. The effect sizes ranged from .6458 to .8996 on the sizes, shapes, letters, numbers/counting, and colors subscales. Thus, the effect of HIPPY on school readiness was positive in all areas. The magnitude of the effect ranged from moderate to large.

To what extent did parents engage in activities to support their child's literacy during the 2017–2018 academic year?

The HIPPY Parental Involvement Survey, administered by the University of North Texas, was used to assess the extent that parents engaged in activities to support their child's literacy development. Survey responses relate directly to the HIPPY child. The pre-survey is, typically, administered between intake and week one and the post-survey is, typically, administered between exit and weeks 29-30. Only new families for the school year complete the survey. A matched-paired design yielded a sample of 170 parents with both pre- and post-survey results for the 2017–2018 school year. All of the survey results are presented in **Appendix G** (p. 19–20). The survey items are presented in tables based on the frequency that the activity occurred and response choices.

Notable findings, where gains were found, are discussed. Specifically, **Table 1a** shows pre- and posttest results relative to the extent that anyone in the family usually, sometimes, or never engaged in specific literacy activities. Don't know responses were also noted. There was an increase in the percentage of respondents who indicated they "usually" ask their child to read with them (32.9% vs. 38.8%).

Table 1b addressed activities that the family engaged in a "typical week" with the child. The response choices were not at all, once or twice, 3 to 6 times, everyday, or don't know. There were increases, from pre- to post-test, in the percentage of families that read books to the child (18.2% vs. 19.5%) and told stories to the child (13.5% vs. 14.7%) "everyday." However, the overall percentages seemed low for these activities.

Table 1c presents activities that families engaged in during the "past month" with the child. The response choices were not at all, once or twice, 3 to 6 times, everyday, or don't know. There were

increases in the percentage of families that taught the child letters (20.6% vs. 21.9%), words (23.5% vs. 26.5%), numbers (30.6% vs. 31.5%), helped the child learn shapes (11.2% vs. 14.1%), patterns (10.6% vs. 14.1%), and played games that involved arranging objects by size, height, or color with the child (12.9% vs. 13.5%) "everyday." Again, the overall percentages seemed low for most of these activities.

Table 1d presents activities that families engaged in during the "past three months" with the child. The response choices were not at all, once or twice, 3 to 6 times, everyday, or don't know. There were increases in the percentages of families that visited the library (0.0% vs. 2.4%), visited a bookstore (0.0% vs. 2.4%), or went to a play, concert, or other live show (.6% vs. 2.9%) "everyday." The frequency of these activities may be expected, considering the types of activities measured.

Discussion

HIPPY was designed to assist parents from disadvantaged backgrounds with educational opportunities to prepare their preschool children for school. During the 2017–2018 academic year, HIPPY targeted parents who resided in the geographical area surrounding 70 HISD elementary schools. This number reflected an increase in the targeted elementary schools from 57 during the 2015–2016 academic year, which was when the five-year, $5,880,967 Texas Home Visiting Grant expanded the program. Over the past eight years, the vast majority of students whose parents participated in HISD HIPPY was Hispanic, with moderate percentages of parents of African American students, and low percentages of parents of White and Asian students participating in the program.

Academic performance of HISD kindergarten students whose parents participated in HIPPY during the 2017–2018 academic school was assessed using the December 2017 Logramos and Iowa reading and mathematics assessments and the CIRCLE assessment. The CIRCLE assessment was designed to measure school readiness. Notable findings were HISD HIPPY kindergarten students attained higher mean normal curve equivalent (NCE) scores on the Logramos and Iowa reading and mathematics subtests compared to the district and national overall averages. CIRCLE assessment results identified an increase in the percentages of students who met benchmark on the Spanish and English reading and mathematics subtests measured in this evaluation. Results on these assessments should be viewed with caution due to small sample sizes.

The Bracken used parents' reports to measure school readiness of HIPPY preschool children. These reports revealed an increase in the acquisition of basic skills from pre-test to post-test. Effect size analyses of Bracken results indicated a positive effect of HIPPY on children's school readiness in all areas measured, with the magnitude of the effect ranging from moderate to large. The Parent Involvement survey noted that families were more likely to engage in activities that supported their child's development of literacy skills from pre-test to post-test. However, the frequency of occurrence of activities measured on the survey remained fairly low over time.

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 academic achievement and school readiness among preschool children and children in early education programs. A longitudinal study of HIPPY may determine the impact of the program on these children as they transition to formal school environments and progress through school.

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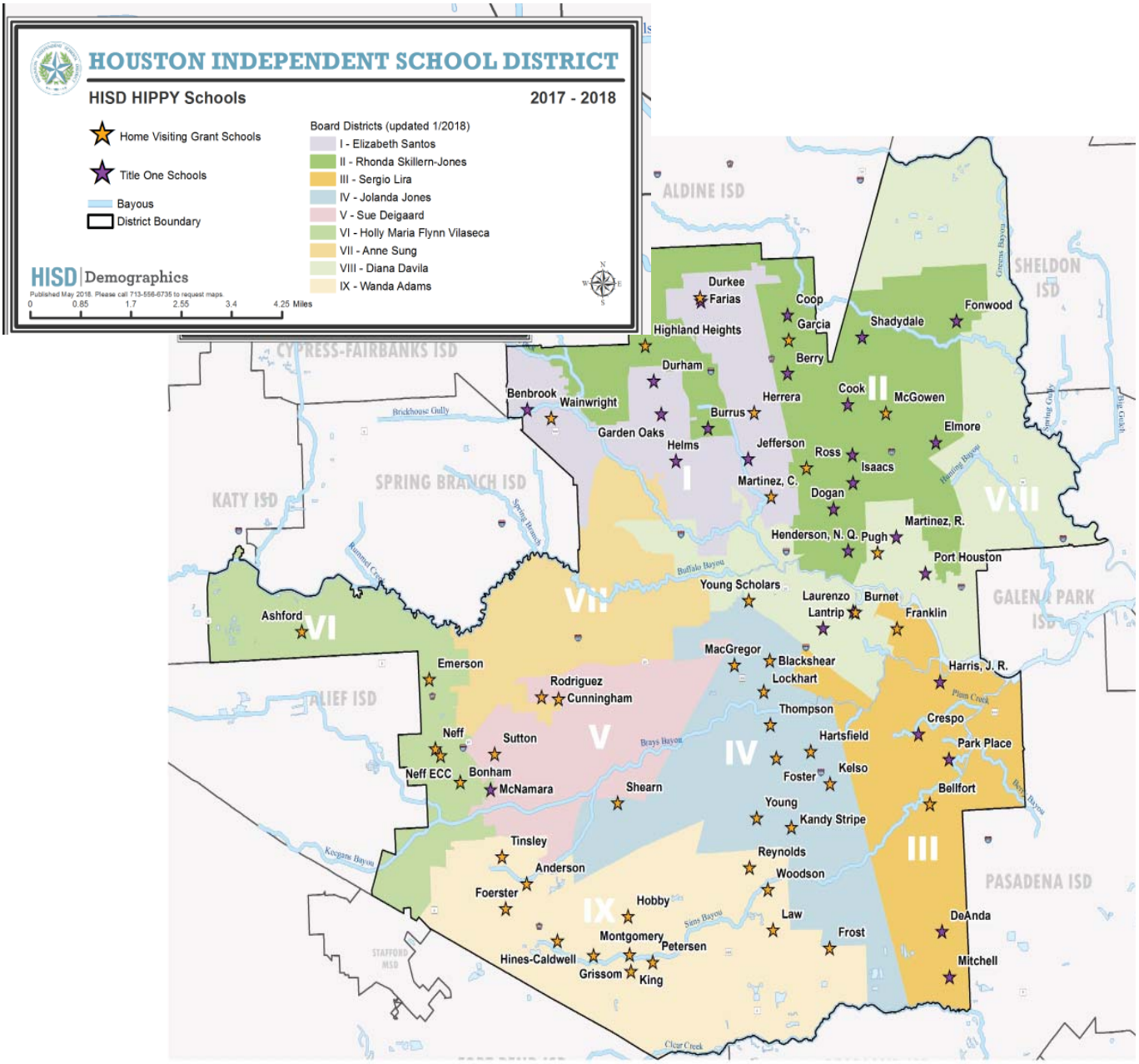
Appendix A

2017-2018 HISD HIPPY Title I Schools (N=27)		2017-2018 HISD HIPPY Maternal, Infant and Early Childhood Home Visiting Grant Schools (N = 43)	
Benbrook ES	Jefferson ES	Anderson ES	Thompson ES
Berry ES	Kashmere Gardens	Ashford ES	Tinsley ES
Burrus ES	Lantrip ES	Bellfort EC	Wainwright ES
Cook ES	Martinez, R. ES	Blackshear ES	Woodson ES
Coop ES	McNamara ES	Bonham ES	Young ES
Crespo ES	Mitchell ES	Burnet ES	Young Scholars ES
De Anda ES	Ninfa Laurenzo EC	Cunningham ES	Martinez, C. ES
Dogan ES	Park Place ES	Durkee ES	McGowen ES
Durham ES	Port Houston ES	Emerson ES	Montgomery ES
Elmore ES	Shadydale ES	Foerster ES	Neff ES
Farias EC		Foster ES	Petersen ES
Fonwood EC		Franklin ES	Pugh ES
Garden Oaks ES		Frost ES	Reynolds ES
Harris, J.R. ES		Garcia ES	Rodriguez ES
Helms ES		Grissom ES	
Henderson, N.Q. ES		Hartsfield ES	
Isaacs ES		Herrera ES	
		Highland Heights ES	
		Hines Caldwell ES	
		Hobby ES	
		Kandy Stripe ES	
		Kelso ES	
		King, M.L. EC	
		Law ES	
		Lockhart ES	
		MacGregor ES	
		Ross ES	
		Shearn ES	
		Sutton ES	

Appendix B


HOUSTON INDEPENDENT SCHOOL DISTRICT
HISD HIPPY Schools
2017 - 2018
Home Visiting Grant Schools
Title One Schools
Bayous
District Boundary
Board Districts (updated 1/2018)
I - Elizabeth Santos
II - Rhonda Skillern-Jones
III - Sergio Lira
IV - Jolanda Jones
V - Sue Deigaard
VI - Holly Maria Flynn Vilaseca
VII - Anne Sung
VIII - Diana Davila
IX - Wanda Adams
HISD Demographics
Published May 2018. Please call 713-556-6735 to request maps.
0 0.85 1.7 2.55 3.4 4.25 Miles
ALDINE ISD
SHELDON ISD
CYPRESS-FAIRBANKS ISD
SPRING BRANCH ISD
KATY ISD
GALENA PARK ISD
PASADENA ISD
STAFFORD MSD
Durkee
Farias
Coop
Garcia
Fonwood
Shadydale
Highland Heights
Berry
Durham
Cook
McGowen
Herrera
Benbrook
Wainwright
Burrus
Elmore
Garden Oaks
Helms
Jefferson
Ross
Isaacs
Martinez, C.
Dogan
Martinez, R.
Henderson, N. Q.
Pugh
Port Houston
Young Scholars
Laurenzo
Burnet
Lantrip
Franklin
Ashford
MacGregor
Blackshear
Lockhart
Harris, J. R.
Emerson
Rodriguez
Cunningham
Thompson
Crespo
Hartsfield
Park Place
Neff
Sutton
Foster
Kelso
Neff ECC
Bonham
McNamara
Shearn
Bellfort
Young
Kandy Stripe
Tinsley
Reynolds
Anderson
Woodson
Foerster
Hobby
Law
DeAnda
Montgomery
Petersen
Frost
Hines-Caldwell
Grissom
King
Mitchell
Brickhouse Gully
Spring Branch
Buffalo Bayou
Brays Bayou
Plum Creek
Keegans Bayou
Sims Bayou
Clear Creek

Appendix C

Demographic Characteristics of HISD Students Whose Parents Participated in HIPPY During Cohort Years, 2010-2011 through 2017-2018																
Academic Year	**2010–2011**		**2011–2012**		**2012–2013**		**2013–2014**		**2014–2015**		**2015–2016**		**2016–2017**		**2017–2018**	
	n	%	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	419	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	210	50.1
Female	68	51.9	66	48.5	89	56.0	68	51.9	66	48.5	206	51.2	190	52.8	209	49.9
Ethnicity																
Asian	2	1.5	0	-	1	0.6	2	1.5	0	-	3	0.7	0	-	2	0.5
African Amer.	12	9.2	11	8.1	5	3.1	12	9.2	11	8.1	87	21.6	59	16.4	54	12.9
Hispanic	117	89.3	124	91.2	150	94.3	117	89.3	124	91.2	300	74.6	296	82.2	353	84.2
White	0	-	0	-	2	1.3	0	-	0	-	11	2.7	4	1.1	7	1.7
Two or More Races	0	-	1	0.7	1	0.6	0	-	1	0.7	1	0.2	0	-	3	0.7
Grade																
EE	2	1.5	0	-	0	-	2	1.5	0	-	6	1.5	7	1.9	5	1.2
PK	90	68.7	82	63.2	134	84.3	90	68.7	82	63.2	312	77.6	256	71.1	281	67.1
K	39	29.8	49	36.0	25	15.7	39	29.8	49	36.0	72	17.9	80	22.2	102	24.3
First	0	-	1	0.7	0	-	0	-	1	0.7	5	1.2	12	3.3	17	4.1
Second	0	-	0	-	0	-	0	-	0	-	4	1.0	2	.6	9	2.1
Third	0	-	0	-	0	-	0	-	0	-	1	0.2	2	.6	3	0.7
Fourth	0	-	0	-	0	-	0	-	0	-	1	0.2	1	.3	1	0.2
Limited English Proficient	104	79.4	107	78.7	126	79.3	104	79.4	107	78.7	255	63.4	250	69.4	277	66.1
Economically Disadvantaged	125	95.4	135	99.3	152	95.6	125	95.4	135	99.3	382	95.0	335	93.1	395	94.0
At-Risk	120	91.6	129	94.9	140	88.0	120	91.6	129	94.9	373	92.8	318	88.3	379	90.5

Note: Enrollment data based on PEIMS

Appendix D

HISD HIPPY End-of-Year Celebrations, 2017-2018			
Location	**Number of Adults Invited**	**Number of Children Invited**	**Number of Attendees Present**
Berry ES	32	23	53
Coop Elementary	50	58	53
HIPPY Main Office Rm 153	32	25	31
Crespo ES	51	52	55
Tinsley Elementary	45	41	92
HIPPY Main Office Rm 153	89	96	140
McNamara ES	26	34	38
Vinson Library	36	34	27
HIPPY Main Office Rm 153	64	62	53
Blackshear ES	73	70	109
Vinson Library	69	68	113
HIPPY Main Office Rm 153	40	47	37
Grissom Elementary	28	34	45
HIPPY Main Office Rm 153	21	34	33
HIPPY Main Office Rm 153	54	70	74
HIPPY Main Office Rm 153	51	68	76
HIPPY Main Office Rm 153	45	58	80
Cunningham ES	51	43	65
HIPPY Main Office Rm 153	35	36	38
HIPPY Main Office Rm 153	38	63	92
HIPPY Main Office Rm 153	54	68	95
Vinson Library	65	74	104
Total	**1049**	**1158**	**1503**

Appendix E

CIRCLE Assessment Literacy Subtests Results, 2018										
English	**N**	**BOY**	**MOY**	**EOY**		**Spanish**	**N**	**BOY**	**MOY**	**EOY**
Rapid Letter Naming	92	35.9	66.3	87		Rapid Letter Naming	158	15.2	71.5	91.1
Rapid Vocabulary	91	47.3	60.4	59.3		Rapid Vocabulary	158	15.2	71.5	91.1
Words in a Sentence	85	12.9	45.9	67.1		Words in a Sentence	152	3.3	39.5	76.3
Alliteration	89	5.6	29.6	56.2		Alliteration	162	5.6	46.9	76.5
Syllabification	89	10.1	44.9	71.9		Syllabification	164	6.7	59.8	82.9

CIRCLE Assessment Mathematics Subtests Results, 2018										
English	**N**	**BOY**	**MOY**	**EOY**		**Spanish**	**N**	**BOY**	**MOY**	**EOY**
Patterns	71	21.1	64.8	78.9		Patterns	167	18.6	61.7	88.6
Shape Naming	76	46.1	68.4	88.2		Shape Naming	177	18.1	68.9	87
Shape Discrimination	72	54.2	83.3	91.7		Shape Discrimination	174	37.9	80.5	92.5
Number Naming	76	43.4	56.6	73.7		Number Naming	169	15.4	66.3	84.6
Number Discrimination	74	50	78.4	93.2		Number Discrimination	174	42	86.8	95.4
Rote Counting	75	12	53.3	78.7		Rote Counting	177	6.2	44.6	78.5
Counting Sets	76	27.6	73.7	92.1		Counting Sets	177	20.3	75.1	92.1

Appendix F

Bracken Pre-and Post Survey Results, 2017-2018						
(n = 499)	Pre Mean	Std. Devia.	Post Mean	Std. Devia.	Gain Scores	Effect Size
Sizes	7.43	3.428	9.32	1.830	1.89	.6458
Shapes	6.27	5.688	10.78	5.122	4.51	.8326
Colors	7.02	6.526	12.54	5.710	5.52	.8996
Letters	9.09	6.005	14.09	5.872	5.0	.8413
Numbers/Counting	8.51	5.572	13.17	5.129	4.66	.8695

Appendix G

Table 1a: Parent Involvement Pre-and Post Survey Results, 2018

In a typical week, has anyone in your family done the following things with (CHILD)?:

		Pre				Post			
(n = 170)		Usually	Sometimes	Never	Don't Know	Usually	Sometimes	Never	Don't Know
Stop reading and ask your child to tell you what is in a picture?	n	66	83	19	2	64	94	11	1
	%	38.8	48.8	11.2	1.2	37.6	55.3	6.5	.6
Stop reading and point out letters?	n	59	83	27	1	55	96	18	1
	%	34.7	48.8	15.9	.6	32.4	56.5	10.6	.6
Ask your child to read with you?	n	56	67	44	3	66	69	32	3
	%	32.9	39.4	25.9	1.8	38.8	40.6	18.8	1.8
Talk about the story when the book is done?	n	78	69	22	1	69	86	12	1
	%	45.9	40.6	12.9	.6	41.1	51.2	7.1	.6

Table 1b: Parent Involvement Pre-and Post Survey Results, 2018

In a typical week, has anyone in your family done the following things with (CHILD)?:

		Pre					Post				
(n = 170)		Not at All	Once or Twice	3 to 6 Times	Everyday	Don't know	Not at All	Once or Twice	3 to 6 Times	Everyday	Don't know
Read books to your child?	n	13	60	61	31	5	4	55	74	33	3
	%	7.6	35.3	35.9	18.2	2.9	2.4	32.5	43.8	19.5	1.8
Sing songs with your child?	n	7	53	52	57	1	3	52	58	57	0
	%	4.1	31.2	30.6	33.5	.6	1.8	30.6	34.1	33.5	0.0
Tell stories to your child?	n	17	71	56	23	3	13	69	62	25	1
	%	10.0	41.8	32.9	13.5	1.8	7.6	40.6	36.5	14.7	.6

Table 1c: Parent Involvement Pre-and Post Survey Results, 2018

In the past month:, has anyone in your family done the following things with (CHILD)?:

		Pre					Post				
(n = 170)		Not at All	Once or Twice	3 to 6 Times	Everyday	Don't know	Not at All	Once or Twice	3 to 6 Times	Everyday	Don't know
Teach your child letters?	n	14	53	67	35	1	7	53	72	37	0
	%	8.2	31.2	39.4	20.6	.6	4.1	31.4	42.6	21.9	0.0
Teach your child words?	n	19	50	60	40	1	8	49	68	45	0
	%	11.2	29.4	35.3	23.5	.6	4.7	28.8	40.0	26.5	0.0
Teach your child numbers?	n	8	43	65	52	2	2	41	71	53	1
	%	4.7	25.3	38.2	30.6	1.2	1.2	24.4	42.3	31.5	.6
Do activities to help your child learn shapes?	n	33	64	51	19	2	20	60	65	24	1
	%	19.5	37.9	30.2	11.2	1.2	11.8	35.3	38.2	14.1	.6
Do activities with your child that involve making patterns?	n	46	63	41	18	2	27	65	54	24	0
	%	27.1	37.1	24.1	10.6	1.2	15.9	38.2	31.8	14.1	0.0
Play games with your child that involves arranging objects by size, height, or color?	n	42	54	51	22	1	25	55	67	23	0
	%	24.7	31.8	30.0	12.9	.6	14.7	32.4	39.4	13.5	0.0
Do counting activities with your child??	n	19	53	63	34	1	12	50	76	32	0
	%	11.2	31.2	37.1	20.0	.6	7.1	29.4	44.7	18.8	0.0

Table 1d: Parent Involvement Pre-and Post Survey Results, 2018

In the past 3 month: has anyone in your family done the following things with (CHILD)?:

(n = 170)		Not at All	Once or Twice	3 to 6 Times	Everyday	Don't know	Not at All	Once or Twice	3 to 6 Times	Everyday	Don't know
Visited a library?	n	102	54	13	0	1	66	75	25	4	0
	%	60.0	31.8	7.6	0.0	.6	38.8	44.1	14.7	2.4	0.0
Visited a bookstore?	n	112	50	6	0	1	71	75	20	4	0
	%	66.3	29.6	3.6	0	.6	41.8	44.1	11.8	2.4	0.0
Gone to a play, concert, or other live show?	n	112	47	9	1	1	96	56	13	5	0.0
	%	65.9	27.6	5.3	.6	.6	56.5	32.9	7.6	2.9	0.0