

MEMORANDUM

November 16, 2022

TO: Margarita Gardea
Officer, Elementary Curriculum and Development

FROM: Allison Matney, Ed.D.
Executive Officer, Research & Accountability

SUBJECT: **Supporting School Readiness through the Home Instruction for Parents of
Preschool Youngsters (HIPPY) Program in the Houston Independent School
District, 2021–2022**

CONTACT: Allison Matney, 713-556-6700

Attached is a copy of the HIPPY program evaluation for the 2021–2022 academic year. The evaluation presented information on funding sources, student participation, and CIRCLE assessment results of prekindergarten students whose parents participated in HIPPY. CIRCLE was used as a measure of school readiness and reflected students' progress in literacy and mathematics in English and Spanish.

Key findings include:

- A total of 479 children from economically-disadvantaged families were either enrolled as HISD students or registered as HIPPY in the district's student information system.
- There were increases in the percentages of HIPPY and Non-HIPPY students who scored proficient on all CIRCLE Spanish language literacy and math subtests, from the beginning-of-year (BOY) to the end-of-year (EOY).
- HIPPY students outperformed and continued to outperform Non-HIPPY students at BOY and EOY on the English language Shape Naming, Counting Sets, Number Naming, and Rote Counting subtests. Similar performance was noted on the Spanish language Rapid Letter Naming, Shape Naming, Counting Sets, and Rote Counting subtests.
- McNemar's test of proportions noted statistically significant increases in the proportion of HIPPY students who scored proficient on the English version of CIRCLE Counting Sets, Number Naming, Shape Naming, and Syllabication subtests, from BOY to EOY. In addition, there were statistically significant increases in the proportion of Non-HIPPY students who scored proficient on the same tests in Spanish as well as on the Rote Counting subtests.
- This evaluation found evidence that providing learning experiences for disadvantaged children during their early years supports school readiness. Continued tracking may help to assess the HIPPY impact as these children advance through school.

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

A handwritten signature in blue ink that reads "Allison E. Matney". The signature is written in a cursive style with a large, looping 'y' at the end.

AEM

Attachment

cc: Millard L. House II
Shawn Bird, Ed.D.
Rahshene Davis, Ed.D.
Marisol Castruita
Maria Gabriella Hernandez



RESEARCH

Educational Program Report

SUPPORTING SCHOOL READINESS THROUGH THE HOME INSTRUCTION FOR PARENTS OF PRESCHOOL YOUNGSTERS (HIPPI) PROGRAM IN THE HOUSTON INDEPENDENT SCHOOL DISTRICT, 2021-2022

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Houston Independent School District
Hattie Mae White Educational Support Center
4400 West 18th Street Houston, Texas 77092-8501

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EVALUATION REPORT

BUREAU OF PROGRAM EVALUATION

Supporting School Readiness through the Home Instruction for Parents of Preschool Youngsters (HIPPY) Program in the Houston Independent School District, 2021–2022

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

Abstract

The Houston Independent School District (HISD) has implemented HIPPY for more than 25 years in surrounding school communities. During the current year, funding was provided through the Texas Home Visiting Grant (51%), federal Title I grants (46%), the University of Texas (UNT) AmeriCorps (2%), and the National Council of Jewish Women (1%). HIPPY promotes school readiness by exposing parents with children ages 3 to 5 years old with the tools, skills, and confidence to work with their children at home. HIPPY was also available to 2-year-old children at Title I schools. Parents learned how to build their children’s academic, social/emotional, and physical skills by practicing reading, counting, and learning colors during the regular school year and in the summer. A total of 479 children from economically-disadvantaged families were either enrolled as HISD students or registered as HIPPY in the district’s student information system. These students were zoned to 131 elementary campuses. The number of HIPPY children this year was down from the previous year by 122 students (20%). The CIRCLE assessment was used to measure school readiness. There were increases in the percentages of HIPPY and Non-HIPPY students who scored proficient on all CIRCLE Spanish language literacy and math subtests, from the beginning-of-year (BOY) to the end-of-year (EOY). HIPPY students consistently outperformed Non-HIPPY students at BOY and EOY on the majority of English and Spanish language subtests. McNemar’s test of proportions noted statistically significant increases in the proportion of HIPPY students who scored proficient on the English version of CIRCLE, including Counting Sets, Number Naming, Shape Naming, and Syllabication, from BOY to EOY. In addition, there were statistically significant increases in the proportion of Non-HIPPY students who scored proficient on the same tests in Spanish as well as Rote Counting. There was evidence that providing learning experiences for disadvantaged children during early years supports school readiness. Continued tracking may help to assess the HIPPY impact as these children advance through school.

Introduction

School readiness is often viewed as a multidimensional concept that involves children’s physical health, social and emotional well-being, language abilities, cognitive development, communication skills, and general knowledge about the world (Shore, 1998; Guhn et al., 2016; Miller & Kehl, 2019). A child’s attitude toward learning in the classroom (e.g., interest and engagement), academic skills, and behaviors (e.g., following instructions) may also be indicators of school readiness (Domitrovich et al., 2012).

Numerous studies have found school readiness to be an early predictor of children’s academic success (Williams & Lerner, 2019; Pan, Trang, Love, & Templin, 2019). This has led to an increasing demand to improve the academic achievement of school-aged children beyond the educational system into homes, where parents play the critical role as their child’s first teacher (Henderson, & Berla, 1994; Foster et al., 2005; Durisic



Figure 1: HIPPY father engaged in academic activities

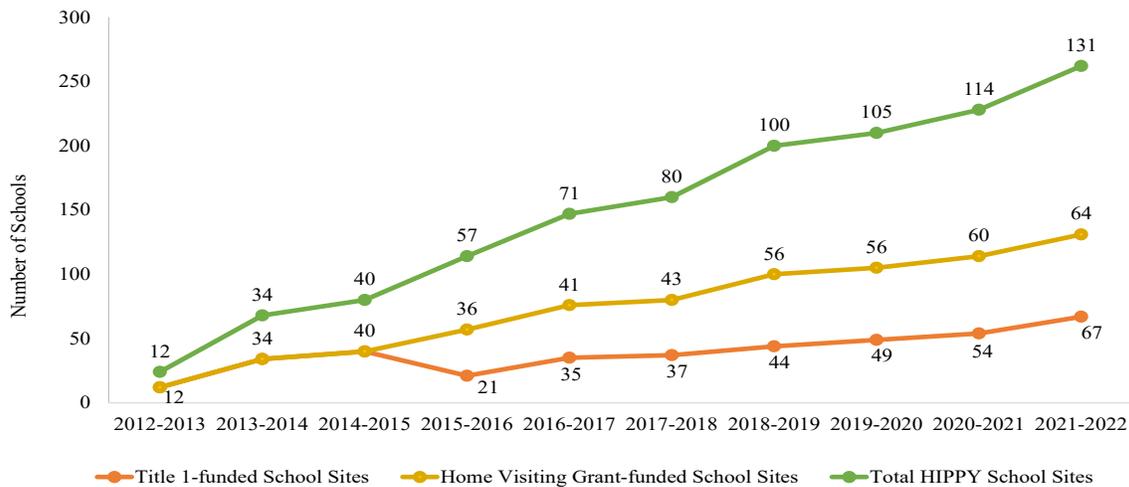


Figure 2: HISD Title I and Home Visiting Grant HIPPY School Sites, Past 10 Years (Note: The 2019–2020 data reflects duplicate results; two schools were served by both Title I and Home Visiting Grant staff.)

& Bunijevac, 2017; Hilado, Kallemeyn, & Phillips, 2013). Yet, many children enter kindergarten with deficits in school readiness that could have been offset with early interventions that focus on the child’s needs and the needs of their families (Williams & Lerner, 2019).

Background

HIPPY was initiated in the Houston Independent School District (HISD) during the 1993–1994 school year. The program has consistently exposed children to shared learning experiences and evidence-based resources through child-centered and family engagement activities to facilitate the successful transition of children from the home environment to school. Targeted efforts were designed to reduce the learning gaps among economically-disadvantaged children and their more affluent peers. HIPPY parents strive to improve self-efficacy, their parenting style, the learning environment at home, networking skills, and social connectedness to boost their children’s interest in learning, cognitive ability, and social-emotional adjustment to school (Barnett, Roost, & McEachran, 2012). Over the years, HISD recruited parents with preschool children ages three to five years old, with focused recruitment on parents with three-year-old children. Beginning in the 2019–2020 school year, the program recruited parents with two-year-old children.

The number of targeted schools and communities that HIPPY provides services have substantially increased from 12 schools in 2012–2013 to 131 schools in 2021–2022 (Figure 2). The increase has been greatly influenced by the acquisition of the Texas Home Visiting Grant. Appendix A (p. 11) lists the 131 schools where HIPPY programs were implemented during the 2021–2022 academic year. The lists are presented by primary funding source, i.e., Title I or the Texas Home Visiting Grant. A geographical depiction of HIPPY school site locations is shown in Figure 3.

Funding Sources

As shown in Figure 4, during the 2021–2022 academic year, approximately 51% of funding was provided by the Texas Home Visiting Grant, 46% by Title I, 2% by UNT AmeriCorps, and 1% by the National Council of Jewish Women. HIPPY funding from all sources, except the UNT AmeriCorps, was maintained at the same level as the previous year. Specifically, funding from UNT

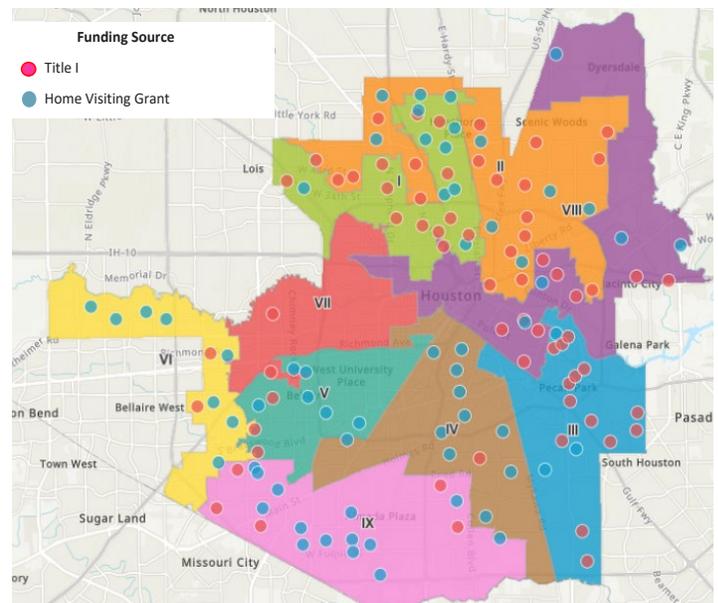


Figure 3: Map depicting HIPPY school sites, 2021-2022

increased from \$40,492.00 to \$48,328.00 over the past two years. The Texas Home Visiting Grant is supported by the Texas Health and Human Services Commission.

The HIPPY Theoretical Model

The U.S. Department of Health and Human Services (2017) identified five central components of HIPPY, including (1) developmentally-appropriate curriculum, (2) weekly home visits and regular group meetings, (3) professional coordinators with sensitivity to the needs of vulnerable families, (4) role play as the method of instruction, and (5) staff structure with peer home visitors from the community. Texas HIPPY adds that these components support the development of basic academic readiness concepts and skills, including values and attitudes, concentration, confidence, successful transition from the home to the school environment, empathy toward others, and positive relationships with parents (Texas HIPPY Center, 2015). A description of key HISD HIPPY program components are presented below to demonstrate their alignment with state and federal expectations for preschool programs.

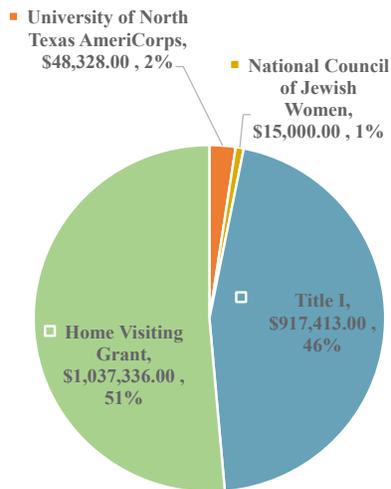


Figure 4: HIPPY funding sources, 2021-2022

The HIPPY Curriculum

The HIPPY curriculum was delivered to parents as designed by HIPPY USA. Specifically, staff exposed parents to standardized instructional materials, including story books, weekly activity packets, and manipulatives. The curriculum was delivered using a 30-week activity packet with approximately 10 activities for parents and children. These activity packets emphasized skills in the five HIPPY domains (literacy, math, motor, language, and science) while reinforcing the development of oral language, sensory skills, perceptual discrimination, and problem solving skills (Figure 5). The materials allowed parents with little or no formal schooling to successfully teach their children shapes and colors, tell stories, follow directions, and solve logical problems to support school readiness (Figure 6).

Home Instructors and Program Coordinator

During the 2021–2022 academic year, HIPPY had a total of 18 Title 1 and 22 Home Visiting Grant home instructor positions. A typical home instructor provided services to approximately 17 parents. Home instructors scheduled appointments and met with their assigned parents at their home once a week or virtually (hybrid model) to deliver the curriculum. Parents were provided packets containing the week’s activities. The home instructors engaged in role-play with parents, often using their own children to model lessons.

Home instructors were part-time employees of HISD, and worked approximately 30 hours a week. They had children of appropriate age to engage in the HIPPY curriculum. 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.

Title I and the Home Visiting Grant funded two program managers, one for each funding source. These managers jointly supported the team by conducting home observations and telephone surveys to determine whether the program was meeting the families’ needs. HIPPY managers also provided professional development to home instructors to improve program implementation. Topics included resume writing, dress for success, and path to college.

Staff and Group Meetings

Home instructors practiced the week’s role-playing lessons



Figure 5: HIPPY parents engaging in math activities with their child

and activities during staff meetings. Information was shared about challenges that may arise during home visits. Group meetings provided additional networking opportunities for parents to discuss concerns and ask questions. Beneficial community resources were shared among families. HIPPY held mandatory annual conferences and retreats during the 2021–2022 academic year, including the

- Annual Kickoff Agenda for all Texas HIPPY personnel, November 15 and 16, 2021, which was virtual;
- Virtual Coordinators’ Retreat, August 16-17 2021, and the
- Virtual HIPPY National Conference, HIPPY USA November, 2021 (mandatory for administrators and coordinators at the national level).

HIPPY Advisory Board

During the 2021–2022 academic year, HISD HIPPY had a 14-member Advisory Board consisting of community partners from the City of Houston, Wraparound Department, Region IV, National Council of Jewish Women, and Houston Community College. The Advisory Board promoted HIPPY in the community; assisted in the procurement of funds; provided advice regarding planning, implementation, and problem solving; assisted with program special events, guest speakers, and special needs; and fostered cooperative working



Figure 6: HIPPY father engaged in academic activities with child

relationships with resource agencies, community and volunteer groups, and other early childhood/family support programs.

Little Learners 2 (LL2)

The 2021–2022 academic year was the fourth year of LL2 implementation, which commenced during the 2018–2019 school year. LL2 was available for children at Title I HIPPY school sites. Eligible parents had two-year old children who completed 30 lessons using the same model as older HIPPY children, including role-play and home-based techniques, with an academic focus. HIPPY USA provided a special curriculum for targeted children. The Title I Manager assisted with the revision of the Spanish curriculum.

Home Visiting Grant Framework

The Texas Maternal, Infant, and Early Childhood Home Visiting Grant utilized an existing local early childhood coalition, Early Matters. Early Matters has merged with Good Reason Houston. 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.

HISD networked with different communities to identify champions who were sensitive to the goals of the program and implement activities to coordinate cross-sector services that 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, and 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 to develop a user-friendly website, where all available resources on housing, domestic violence, and mental health, for example, could be stored. Home visitors shared these resources with families in their homes. (More details about the funding source can be found at Health Resources and Services Administration, n.d.).

Research Questions:

1. What were the participation trends of HISD HIPPY children over the past eight years (2013–2014 through 2021–2022)?
2. What resources were provided to HISD HIPPY parents to prepare their children for school?
3. How did HISD prekindergarten students whose parents participated in HIPPY during the 2021–2022 academic year perform on the 2021 CIRCLE assessment?
4. Was there a change in the proportion of HIPPY students who demonstrated school readiness skills from the beginning-of-year to end-of-year based on 2021–2022 CIRCLE assessment results?

Review of the Literature

The successful transition of children to school may be HISD Department of Research and Accountability

influenced by a myriad of factors, including their genetic abilities, the skills of their parents, relationships, resources, and opportunities that they experience at home, and prior exposure to early childhood settings before they enroll in school (Jose et al., 2022; Tayler, Cloney, & Niklas, 2015). Numerous research studies have shown that parental involvement has a positive impact on the child's learning (Cotton & Wikelund, 1989; Goodson & Hess, 1975; Henderson, 1987), and that academically-prepared preschool children were strongly influenced by learning opportunities at home (Barnett, Roost, & McEachran, 2012; Barton, 2016; Kagitcibasi, Sunar, & Bekman, 2001). Goodson and Hess (1975) reviewed 29 preschool programs and found that using parents as teachers was associated with gains in children's IQ scores, academic achievement, and improvements in parents' teaching behaviors. Henderson (1987) reviewed 49 studies focused on the child's learning at home, at school, and school supports, in general. The researcher observed that parent involvement has positive effects on student achievement at each level.

Studies have shown that children who are adequately prepared before preschool perform better in school (Engle et al., 2007; La Paro & Pianta, 2000). School success includes a vast array of competencies, including the development of literacy and numeracy skills; the ability to follow directions, work well with other children, and focused engagement in learning (Britto, 2012; Rouse, Brooks-Gunn, & McLanahan, 2005). Evidence-based family coaching models, with well-trained paraprofessionals and community members have been beneficial toward developing school readiness in children (Kaminski et al., 2008; Shepard & Dickstein, 2009; Rotheram-Borus et al., 2018). Effective interventions have been found to use a moderate number of sessions in a limited period, and were home-based (Bakermans-Kranenburg & van IJzendoorn, 1993; Henderson & Mapp, 2002). This finding is emphasized in brain development research conducted by Hilado, Kallemeyn, and Phillips (2013), which found that the earlier parents engage in their child's educational process, the more powerful the effects (Kagitcibasi, Sunar, & Bekman, 2001). To that end, this study explored school readiness skills among HISD students whose parents participated in HIPPY.

Methods

Study Population

Student enrollment, demographic characteristics, and academic performance data for the evaluation were obtained using an electronic database of three to five-year old children who participated in HISD HIPPY during the 2021–2022 academic year. The data were acquired from HIPPY administrators. In addition, a report was extracted by HISD Information Technology staff, which identified which students were registered by HIPPY staff and which students were officially enrolled in an HISD school. Demographic characteristics of students were found in the Public Education Information Management System (PEIMS) through the PowerSchool data system.

Data Collection and Analyses

School readiness measures for this study consisted of CIRCLE English and Spanish language assessments in literacy and mathematics. The assessment has demonstrated high reliability and validity in multiple research studies (Children's Learning Institute, 2016). Wave 1 (beginning-of-year, BOY) and Wave 3 (end-of-year) were used to measure students' progress over time.



Figure 7: Number of children whose parents participated in HISD HIPPY, 2012–2013 through 2021–2022

Study Limitations

There were several limitations to this evaluation. Background and assessment data were only presented for students who were verified through the Public Education Information Management System (PEIMS). Parents of these students had also completed enrollment forms submitted through the University of North Texas (UNT) data system. Collaboration with HISD HIPPY staff and HISD Instructional Technology department staff were used to mitigate this limitation.

What were the participation trends of HISD HIPPY children over the past eight years (2013–2014 through 2021–2022)?

Figure 7 presents the total number of children whose parents participated in HISD HIPPY over the past nine years, including the number of children who were enrolled in HISD elementary schools. It is evident that HIPPY participation (enrolled or registered) increased from 518 children in 2018–2019 to 694 children in 2019–2020. There was a slight decline in participation from 2019–2020 to 2020–2021 by 93 children, the years of the coronavirus pandemic. The number of enrolled or registered HIPPY students continued to decrease from 2020–2021 to 2021–2022 (601 vs. 479).

The total number of HIPPY children identified as enrolled in HISD schools steadily increased from 2018–2019 to 2020–2021 (269 to 553 students). This may be, partly, due to the fact that HIPPY staff were routinely registering children in the HISD student information system. There was a decline in the number of enrolled students in 2021–2022 to 194 students from the previous year (**Table 1**). This decline may reflect inconsistencies in tracking HIPPY students in the student information system because the system changed in 2020–2021. This may also be explained by the decline in student enrollment districtwide after the coronavirus pandemic in 2020.

Appendix B (p. 12) presents the demographic characteristics of HIPPY students from 2013–2014 to 2020–2021. As evident in Appendix B, a higher percentage of males were identified as HIPPY students in 2020–2021 compared to 2019–2020 (52.0% vs. 47.0%). The percentage of limited English students remained fairly stable over the two years (69.8% vs. 70.0%), while the percentage of economically-disadvantaged students decreased moderately (97.9% vs. 93.0%). Substantially more students were kindergartners (47.4% vs. 25.7%), and a lower proportion

of students were prekindergartners (51.0% vs. 73.4%) in 2020–2021 compared to 2019–2020. Demographic characteristics for the 194 HISD HIPPY students in 2021–2022 revealed that the majority of students were EE (59.3%), followed by PK4 (27.3%). Approximately 30.4% of HIPPY students were Hispanic and 29.4% were identified as White.

What resources were provided to HISD HIPPY parents to prepare their children for school?

HIPPY exposed children to a curriculum that emphasized (1) phonological and phonemic awareness, (2) letter recognition, (3) book knowledge, and (4) early writing experiences. Activities were routinely reviewed and updated by HIPPY USA to ensure that the materials were relevant and reflected current research practices. Additional resources augmented the curriculum to build on children’s academic and social/emotional skills, and physical development.

Table 1: Profile of HISD HIPPY Students, 2021–2022

Total: N = 194	N	%
Grade Level		
Early Education (EE)	115	59.3
Kindergarten	6	3.1
PK3 (Prekindergarten 3)	20	10.3
PK4 (Prekindergarten 4)	53	27.3
Race/Ethnicity		
Asian	9	4.6
Black	10	5.2
Hispanic	59	30.4
White	57	29.4
Native American	6	
Gender		
Female	79	40.7
Male	85	43.8
Unknown	30	15.5
Eco. Disadv.*	194	85.0
At Risk	11	5.7
Special Ed	10	5.2
LEP	37	19.1

*Note: Economically-disadvantaged (eco.disadv.) status based on reports from HIPPY staff

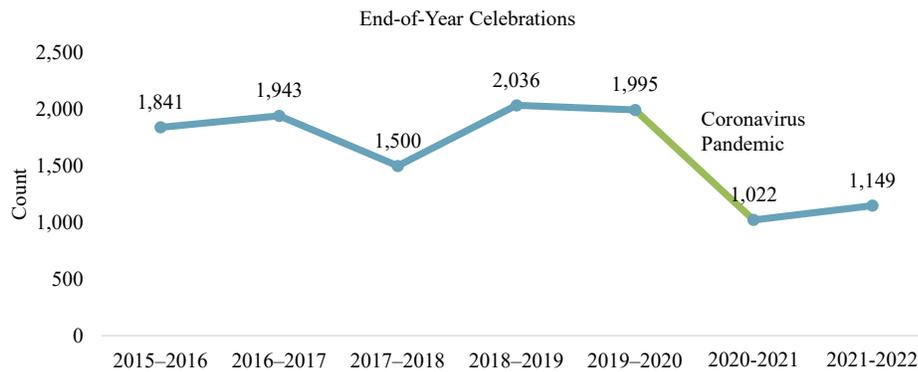


Figure 8: Number of adults and children who participated in the HISD HIPPY End-of-Year Celebrations, 2015–2016 through 2021–2022

HIPPY Summer Program

A summer program was initiated as an extension of HIPPY, beginning in 2021 using Title I funds, to enhance children’s academic success. The curriculum was created by the HISD HIPPY staff. The five-week Summer Program consisted of 40 lessons. HISD HIPPY integrated the Children’s Learning Institute’s activities into the HIPPY lessons. The curriculum addressed concepts presented during the regular school year. For the regular HIPPY program, parents used household materials to complete activities. During summer, HIPPY provided parents with materials, such as brown bags, buttons, mirrors, construction paper, yarn, plastic animals, play food, and containers to complete activities.

HIPPY parents were surveyed in early May 2022 to explore their interest in the 2022 HIPPY Summer Program. Subsequently, 200 children participated in the program, which was held from June 20 to July 28, 2022.

Dyslexia

Virtual parent meetings were held in English and Spanish on how to identify children with Dyslexia. Neuhaus Education Center presented the information. This project was supported by the Houston Astros, who offered Astros game tickets. A total of 33 parents attended the virtual Dyslexia meetings.

Rice University’s SLC (School Literacy & Culture) Program

HIPPY’s partnership with Rice University’s SLC Program provided five virtual sessions in English and Spanish throughout the school year that covered various topics, such as “Talking and Listening to Our Young Children” and “Reading Aloud and Bringing Your Children’s Book to Life”. Sessions were also held to help parents teach nursery rhymes, songs, lullabies, conversations with children, and the importance of learning to play. The families received incentives when reaching lessons number 10 and 20. The incentives consisted of books, story cards, and blocks. These items were used during sessions and group meetings.

Fatherhood Event

The Fatherhood event was held on Saturday, May 14, 2022, at Herrera Elementary School. A total of 248 individuals attended, including 70 families. Guest speakers focused on male figure involvement in their children’s education. Fathers and their children engaged in hands-on activities so they could have fun together and learn at the same time. Each child received incentives for participating in the event.

End-of-Year HIPPY Celebrations

During the End-of-Year HIPPY Celebrations, parents were presented educational materials to support their children’s school readiness. **Figure 8** shows that the number of attendees increased from 2017–2018 to 2018–2019 (1,500 to 2,036). In 2019–2020, the first year of the pandemic, 1,995 HIPPY parents received the materials at the end of the year in lieu of the event. The Celebrations were continued in 2020–2021 with 1,022 attendees. During the 2021–2022 academic year, the Celebrations occurred on May 14, 2022 (244 attendees), June 1, 2022 (298 attendees), June 8, 2022 (216 attendees), and June 10, 2022 (391 attendees).

Other Events

HISD HIPPY hosted 11 drive-thru events, due to the pandemic, during the 2020–2021 academic year. One drive-thru event was a *Back to School Store* sponsored by the National Council of Jewish Women (NCJW). The NCJW also provided a \$75.00 gift card from Walmart for school supplies, one certificate from Canes restaurant, an educational STEAM game, and a colorful bagel in a clear box to the 176 graduating families who completed the program. In 2021–2022, the Council of Jewish Women gave a total of 77 backpacks, with school supplies and a cookie, to HIPPY Grads (5 year olds) (**Figure 9**).

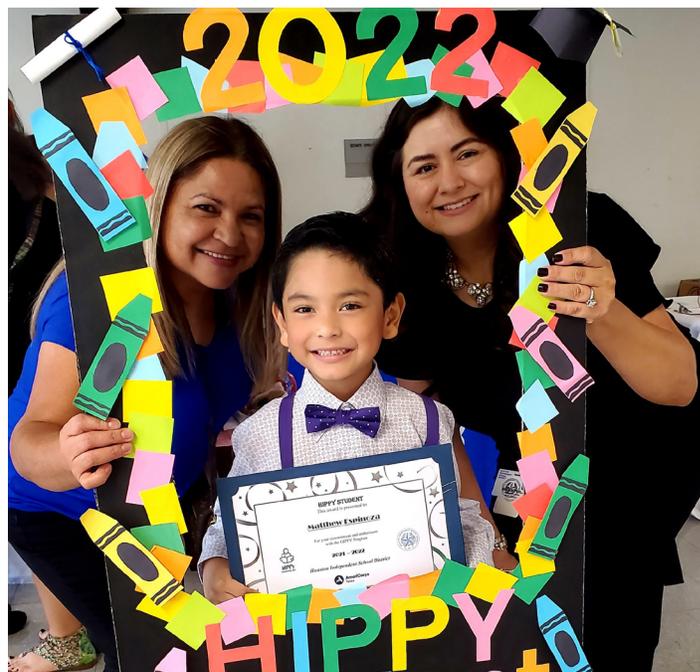


Figure 9: HIPPY student at program graduation ceremony

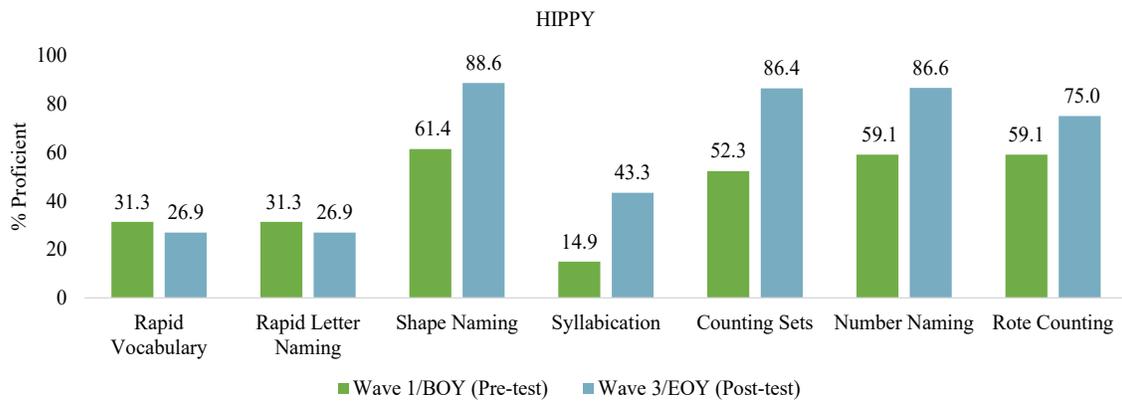


Figure 10a: CIRCLE English literacy and math assessment results for HISD students whose parents participated in HIPPY, fall 2021 and spring 2022

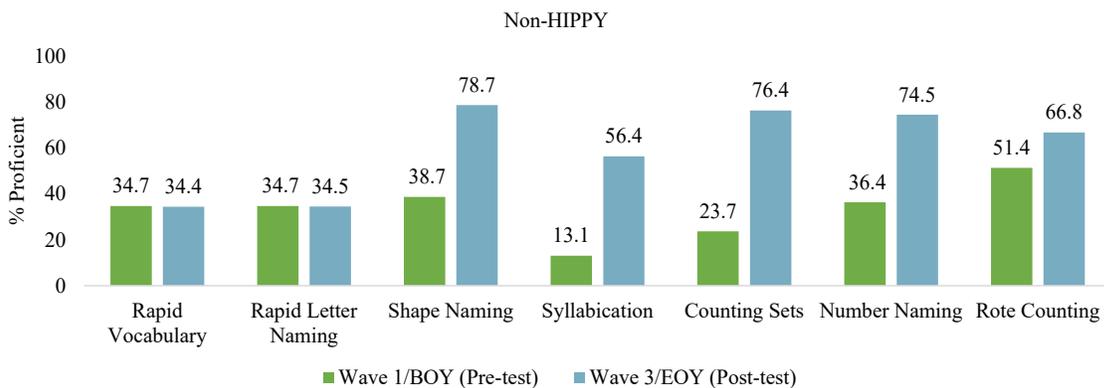


Figure 10b: CIRCLE English literacy and math assessment results for Non-HIPPY students, fall 2021 and spring 2022

How did HISD prekindergarten students whose parents participated in HIPPY during the 2021–2022 academic year perform on the CIRCLE assessment?

CIRCLE results were used as a prekindergarten school readiness measure for HISD students whose parents participated in HIPPY during the 2021–2022 academic year. Wave 1 of CIRCLE was the pre-test or the beginning-of-year (BOY) measure and Wave 3 was the post-test or end-of-year (EOY) measure. The BOY and EOY results on the English language version of the assessment can be found in **Figure 10a** for HIPPY students and **Figure 10b** for Non-HIPPY students, while the Spanish language results are shown in **Figure 11a** (p. 8) for HIPPY students and **Figure 11b** (p. 8) for Non-HIPPY students. Rapid Vocabulary, Rapid Letter Naming, and Syllabication assessed students’ literacy skills, while Shape Naming, Counting Sets, Number Naming, and Rote Counting assessed their math skills.

Figures 10a and 10b revealed increases in the percentages of HIPPY and Non-HIPPY students who scored proficient on all CIRCLE English language math subtests, from BOY to EOY. The highest increases for HIPPY students (52.3% vs. 86.4%) and Non-HIPPY students (23.7% vs. 76.4%) were on Counting Sets. Comparatively, the difference in performance from BOY to EOY was higher for Non-HIPPY students than HIPPY students (52.7 vs. 34.1 percentage points).

Relative to English literacy subtests, the highest increase in the percentage of students scoring proficient was on Syllabication for HIPPY (14.9% vs. 43.3%) and Non-HIPPY (13.1% vs. 56.4%)

students. Again, the difference in performance, from BOY to EOY, was higher for Non-HIPPY students compared to HIPPY students (43.3 vs. 28.4 percentage points).

Figures 11a and 11b show increases in the percentages of HIPPY and Non-HIPPY students who scored proficient on all CIRCLE Spanish language math subtests, from BOY to EOY. The highest increase for HIPPY students was on Number Naming (22.2% vs. 89.5%, or by 67.3 percentage points) closely followed by Counting Sets (23.7% vs. 90.8%, or by 67.1 percentage points). For Non-HIPPY students, the highest increase was on Shape Naming (16.9% vs. 81.3%, or by 64.4 percentage points).

Relative to the Spanish literacy subtests, the highest increase in the percentage of students scoring proficient was on Syllabication for HIPPY students (10.8% vs. 87.8%). Comparatively, the highest percentage of Non-HIPPY students who scored proficient was on Rapid Letter Naming (20.4% vs. 63.3%), closely followed by Syllabication (13.1% vs. 73.2%).

The evaluation found that HIPPY students outperformed and continued to outperform Non-HIPPY students at BOY and EOY on the English language Shape Naming, Counting Sets, Number Naming, and Rote Counting subtests. Similar performance for HIPPY compared to Non-HIPPY students was noted on the Spanish language Rapid Letter Naming, Shape Naming, Counting Sets, and Rote Counting subtests.

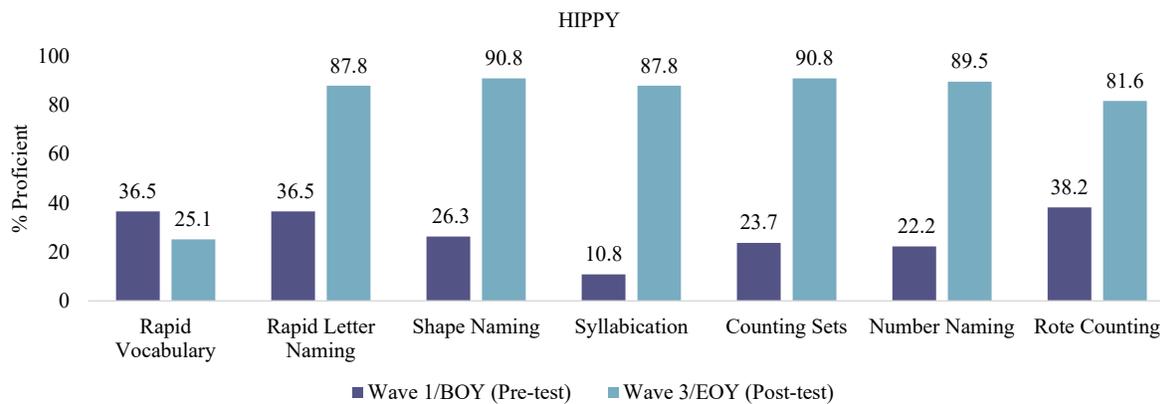


Figure 11a: CIRCLE Spanish literacy and math assessment results for HISD students whose parents participated in HIPPY, fall 2021 and spring 2022

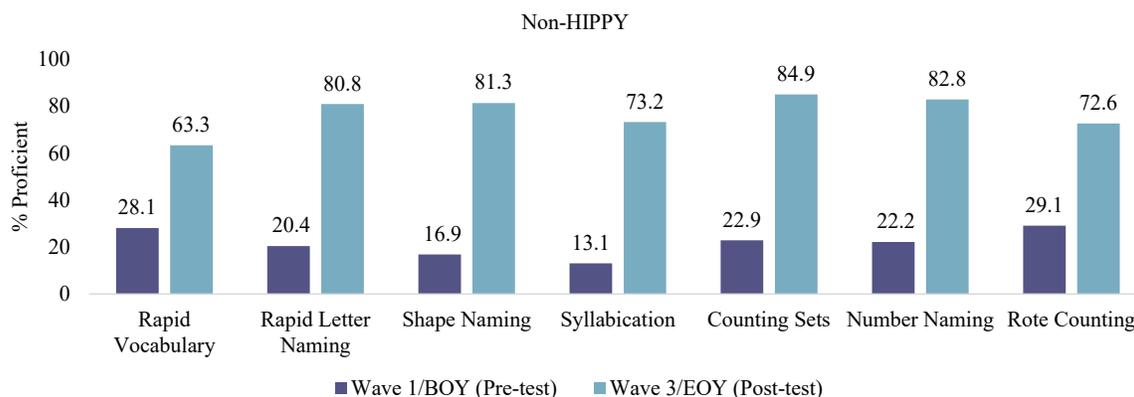


Figure 11b: CIRCLE Spanish literacy and math assessment results for Non-HIPPY students, fall 2021 and spring 2022

Was there a change in the proportion of HIPPY students who demonstrated school readiness skills from the beginning-of-year to end-of-year based on 2021–2022 CIRCLE assessment results?

This evaluation explored whether there was a statistically significant difference in the performance of HIPPY and Non-HIPPY students who demonstrated school readiness skills based on their scores on CIRCLE literacy and math subtests. The analyses were conducted using McNemar’s non-parametric test of proportions (two-tailed test). The level of statistical significance was $p < .05$. The results are presented in **Appendix C** (p. 13, English language version) and **Appendix D** (p. 14, Spanish language version). Results for HIPPY students should be viewed with caution due to the small sample sizes.

As shown in Appendix C (p. 13), there was a statistically significant increase in the proportion of HIPPY students who scored proficient on English versions of the CIRCLE subtests, including Counting Sets ($n = 44$, $z = 3.441$, $p < .001$), Number Naming ($n = 44$, $z = 3.606$, $p < .001$), Shape Naming ($n = 44$, $z = 3.207$, $p < .001$), and Syllabication ($n = 67$, $z = 4.146$, $p < .001$), from BOY to EOY. In addition, there was a statistically significant increase in the proportion of Non-HIPPY students who scored proficient on the same tests, which were Counting Sets ($n = 6072$, $z = 48.407$, $p = .000$), Number Naming ($n = 6072$, $z = 45.889$, $p = .000$), Rote Counting ($n = 6072$, $z = 21.697$, $p = .000$),

Shape Naming ($n = 6072$, $z = 46.985$, $p = .000$), and Syllabication ($n = 6955$, $z = 52.990$, $p = .000$).

Appendix D provides McNemar’s results on the Spanish version of CIRCLE subtests. There was a statistically significant increase in the proportion of HIPPY students who scored proficient on all Spanish language subtests, including Counting Sets ($n = 76$, $z = 7.141$, $p < .001$), Number Naming ($n = 76$, $z = 7.141$, $p < .001$), Rapid Vocabulary ($n = 74$, $z = 5.292$, $p < .001$), Rapid Letter Naming ($n = 74$, $z = 6.164$, $p < .001$), Rote Counting ($n = 76$, $z = 5.745$, $p < .001$), Shape Naming ($n = 76$, $z = 7.000$, $p < .001$), and Syllabication ($n = 74$, $z = 7.550$, $p < .001$), from BOY to EOY. In addition, there was a statistically significant increase in the proportion of Non-HIPPY students who scored proficient on the same tests, which were Counting Sets ($n = 4496$, $z = 52.023$, $p = .001$), Number Naming ($n = 4496$, $z = 51.509$, $p = .001$), Rapid Vocabulary ($n = 4375$, $z = 36.145$, $p = .001$), Rapid Letter Naming ($n = 4375$, $z = 50.456$, $p = .001$), Rote Counting ($n = 4495$, $z = 41.728$, $p = .001$), Shape Naming ($n = 4496$, $z = 53.301$, $p = .001$), and Syllabication ($n = 4375$, $z = 50.033$, $p = .001$), from BOY to EOY.

Discussion

HIPPY has been implemented for more than 25 years in HISD and surrounding communities. The program targets parents with children ages 3 to 5 years old. A modified version of the program is available for parents with 2-year children at Title I schools. Over

the past five years, HIPPY was mostly funded through the Texas Home Visiting Grant and federal Title I grants, with supplemental funds from the University of Texas (UNT) AmeriCorps and the National Council of Jewish Women.

HIPPY home instructors modeled activities to help parents learn how to build their child's academic, social/emotional, and physical skills. Children practiced reading, counting, and learning colors to support school readiness. Additional educational resources were provided to parents, including identifying dyslexia. HIPPY developed a partnership with RICE University's School Literacy & Culture project to further enhance parents' skills to teach their children. During the 2021–2022 academic year, 479 children were either enrolled as HISD students or registered in the district's student information system for future tracking. The number of HIPPY children this year was down from the previous year by 122 students (20%). HIPPY students were represented among 131 elementary campuses.

CIRCLE assessment results showed evidence of school readiness among HIPPY as well as Non-HIPPY program participants. Specifically, there were increases in the percentages of HIPPY and Non-HIPPY students who scored proficient on all CIRCLE Spanish language literacy and math subtests, from the beginning-of-year (BOY) to the end-of-year (EOY). Moreover, HIPPY students consistently outperformed Non-HIPPY students at BOY and EOY on the majority of English and Spanish language subtests. McNemar's test of proportions noted statistically significant gains in the proportion of HIPPY students who scored proficient on the English version of CIRCLE, including Counting Sets, Number Naming, Shape Naming, and Syllabication, from BOY to EOY. In addition, there were statistically significant gains among Non-HIPPY students who scored proficient on tests along with Rote Counting. Thus, this evaluation found evidence that providing learning experiences for disadvantaged children during preschool supports school readiness. Based on these findings, HIPPY program administrators should continue to recruit families who are economically disadvantaged to provide them with the tools and resources to build their skills to help their children succeed in school through support in the home. Future evaluations should consider tracking the academic progress of HIPPY students to assess the program's impact as these children advance through school.

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Appendix A

2021–2022 HISD HIPPY Title I Schools (N= 67)		2021–2022 HISD HIPPY Maternal, Infant and Early Childhood Home Visiting Grant (MIECHV) Schools (N = 64)	
Bastian ES	Henderson JP ES	Alameda ES	Lockhart ES
Benavidez ES	Henderson NQ ES	Anderson ES	Longfellow ES
Benbrook ES	Hilliard ES	Ashford ES	Lyons ES
Berry ES	Isaacs ES	Askew ES	MacGregor ES
Bonner ES	Janowski ES	Atherton ES	Mading ES
Browning ES	Jefferson ES	Barrick ES	Marshall ES
Briargrove ES	Kashmere Gardens ES	Bellfort ECC	Martinez C ES
Briscoe ES	Kennedy ES	Bonham ES	McGowen ES
Bruce ES	Lantrip ES	Blackshear ES	Montgomery ES
Burrus ES	Law ES	Burbank ES	Moreno ES
Cook ES	Looscan ES	Burnet ES	Neff ES
Coop ES	Martinez R ES	Codwell ES	Northline ES
Cornelius ES	McNamara ES	Condit ES	Oates ES
Crespo ES	Milne ES	Cunningham ES	Osborne ES
Davila ES	Mistral ECC	Daily ES	Petersen ES
DeAnda ES	Mitchell ES	Durkee ES	Piney Point ES
DeZavala ES	Laurenzo ECC	Elmore ES	Pugh ES
De Chaumes ES	Oak Forest ES	Foerster ES	Robinson ES
Dogan ES	Paige ES	Foster ES	Rodriguez ES
Durham ES	Park Place ES	Franklin ES	Roosevelt ES
Eliot ES	Patterson ES	Frost ES	Ross ES
Elrod ES	Pleasantville ES	Garcia ES	Shearn ES
Emerson ES	Port Houston ES	Garden Villas ES	Sutton ES
Farias ECC	Reynolds ES	Grissom ES	Thompson ES
Field ES	Rucker ES	Halpin ECC	Tinsley ES
Fondren ES	Shadydale ES	Herrera ES	Valley West ES
Fonwood ECC	Smith ES	Highland Heights ES	Wainwright ES
Gallegos ES	Southmayd ES	Hines-Caldwell ES	Walnut Bend ES
Garden Oaks	Stevens ES	Hobby ES	Whidby ES
Gross ES	Tijerina ES	Horn ES	Windsor Village ES
Harris JR ES	Travis ES	Kelso ES	Woodson
Harris RP ES	Wesley ES	MLK ECC	Young ES
Helms ES	White E ES		
	Whittier ES		

Appendix B

Demographic Characteristics of HISD Students Whose Parents Participated in HIPPY During Cohort Years, 2013–2014 through 2020–2021 (Note: For 2021–2022 data, see p. 5 of this report.)

Demographic Characteristics of HISD Students Whose Parents Participated in HIPPY During Cohort Years, 2013–2014 through 2020–2021 (Note: For 2021–2022 data, see p. 5 of this report.)																
Academic Year	2013–2014		2014–2015		2015–2016		2016–2017		2017–2018		2018–2019*		2019–2020*		2020–2021*	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Total Enrolled in HISD	131	100.0	136	100.0	402	100.0	360	100.0	419	100.0	269	100.0	338	100.0	481	100
Gender																
Male	63	48.1	70	51.5	196	48.8	170	47.2	210	50.1	127	47.2	159	47.0	251	52.0
Female	68	51.9	66	48.5	206	51.2	190	52.8	209	49.9	142	52.8	179	53.0	230	48.0
Ethnicity																
Asian	2	1.5	0	-	3	0.7	0	-	2	0.5	2	0.7	4	1.2	0	0.0
African Amer.	12	9.2	11	8.1	87	21.6	59	16.4	54	12.9	32	11.9	42	12.4	62	13.0
Hispanic	117	89.3	124	91.2	300	74.6	296	82.2	353	84.2	232	86.2	288	85.2	384	80.0
White	0	-	0	-	11	2.7	4	1.1	7	1.7	1	0.4	3	0.9	17	4.0
Two or More Races	0	-	1	0.7	1	0.2	0	-	3	0.7	2	0.7	1	0.3	2	0.4
Grade																
EE	2	1.5	0	-	6	1.5	7	1.9	5	1.2	5	1.9	2	0.6	10	2.0
PK	90	68.7	82	63.2	312	77.6	256	71.1	281	67.1	191	71.0	248	73.4	243	51.0
K	39	29.8	49	36.0	72	17.9	80	22.2	102	24.3	70	26.0	87	25.7	228	47.4
First	0	-	1	0.7	5	1.2	12	3.3	17	4.1	1	0.4	1	0.3	0	-
Second	0	-	0	-	4	1.0	2	.6	9	2.1	-	-	-	-	0	-
Third	0	-	0	-	1	0.2	2	.6	3	0.7	-	-	-	-	0	-
Fourth	0	-	0	-	1	0.2	1	.3	1	0.2	-	-	-	-	0	-
Limited English Proficient	104	79.4	107	78.7	255	63.4	250	69.4	277	66.1	174	64.7	236	69.8	335	70.0
Economically Disadvantaged	125	95.4	135	99.3	382	95.0	335	93.1	395	94.0	258	95.9	331	97.9	447	93.0
At-Risk	120	91.6	129	94.9	373	92.8	318	88.3	379	90.5	253	94.1	330	97.6	414	86.0
**Total Enrolled or Registered in HISD											518	100.0	694	100.0	553	100.0

Note: Enrollment data based on PEIMS.

*Academic years when HIPPY staff registered children in the HISD student information system. Some children were not HISD students.

Demographic data are depicted only for HIPPY children who were captured in the Public Education Information Management System (PEIMS).

**Total HIPPY children represent all children of parents who participated in the program. This data point was captured during the 2018–2019, 2019–2020, and the 2020–2021 academic years only when these data were documented in the HISD student information system.

Appendix C

McNemar's Paired Test Results, CIRCLE English Language Assessment, Fall 2020 (BOY) vs. Spring 2021 (EOY)						
English Language Subtests		n	Difference in Proportions	Asymptotic Standard Error	Z	Significance (p-value, two-tailed)
Counting Sets (Math)	Non-HIPPY	6072	0.428	0.007	48.407	.000
	HIPPY	44	0.445	0.085	3.441	<.001
Number Naming (Math)	Non-HIPPY	6072	0.381	0.007	45.889	.000
	HIPPY	44	0.295	0.069	3.606	<.001
Rapid Vocabulary (Literacy)	Non-HIPPY	6956	-0.001	0.006	-0.216	0.829
	HIPPY	67	-0.045	0.065	-0.216	0.829
Rapid Letter Naming (Literacy)	Non-HIPPY	6956	-0.001	0.006	-0.216	0.829
	HIPPY	67	-0.45	0.065	-0.688	0.491
Rote Counting (Math)	Non-HIPPY	6072	0.154	0.007	21.697	.000
	HIPPY	44	0.159	0.085	1.807	0.071
Shape Naming (Math)	Non-HIPPY	6072	0.4	0.007	46.985	.000
	HIPPY	44	0.273	0.074	3.207	<.001
Syllabication (Literacy)	Non-HIPPY	6955	0.432	0.006	52.990	.000
	HIPPY	67	0.284	0.059	4.146	<.001

Appendix D

McNemar's Paired Test Results, CIRCLE Spanish Language Assessment, Fall 2020 (BOY) vs. Spring 2021 (EOY)						
Spanish Language Subtests		n	Difference in Proportions	Asymptotic Standard Error	Z	Significance (p, value, two-tailed)
Counting Sets (Math)	Non-HIPPY	4496	0.62	0.008	52.023	.000
	HIPPY	76	0.671	0.054	7.141	<.001
Number Naming (Math)	Non-HIPPY	4496	0.606	0.008	51.509	.000
	HIPPY	76	0.671	0.054	7.141	<.000
Rapid Vocabulary (Literacy)	Non-HIPPY	4375	0.352	0.008	36.145	.000
	HIPPY	74	0.378	0.058	5.292	<.001
Rapid Letter Naming (Literacy)	Non-HIPPY	4375	0.604	0.008	50.456	.000
	HIPPY	74	0.514	0.058	6.164	<.001
Rote Counting (Math)	Non-HIPPY	4495	0.435	0.008	41.728	.000
	HIPPY	76	0.434	0.057	5.745	<.000
Shape Naming (Math)	Non-HIPPY	4496	0.664	0.007	53.301	.000
	HIPPY	76	0.645	0.055	7.000	<.001
Syllabication (Literacy)	Non-HIPPY	4375	0.601	0.008	50.033	.000
	HIPPY	74	0.77	0.049	7.550	<.001