

MEMORANDUM

January 10, 2018

TO: Lance Menster
Officer, Elementary Curriculum and Development

FROM: Carla Stevens
Assistant Superintendent, Research and Accountability

SUBJECT: **ACADEMIC ACHIEVEMENT OF HISD KINDERGARTEN STUDENTS
PREVIOUSLY ENROLLED IN HEAD START AND HISD PREKINDERGATEN
PROGRAMS, 2016–2017**

In compliance with the Texas Education Code § 29.153, the Houston Independent School District (HISD) has provided free prekindergarten classes for eligible Houston area four-year old students since the 1985–1986 school year. HISD offers full-day prekindergarten programs to all eligible students within its attendance boundaries.

HISD collaborates with four federally-funded Head Start agencies that serve Harris County children located within the HISD boundaries: AVANCE Houston, Inc. (AVANCE); Gulf Coast Community Services Association (GCCSA); Harris County Department of Education (HCDE); and Baker Ripley (formerly Neighborhood Centers, Inc. (NCI)). The purpose of this study was to measure the effectiveness of PreK and Head Start Programs in HISD using comparative analyses of the performance of HISD kindergarten students who were enrolled in an HISD prekindergarten, Head Start or HISD-Head Start affiliated program during the 2015–2016 school year.

Key findings include:

- Students who were dually enrolled during the 2015–2016 school year in a prekindergarten program and were later enrolled in HISD kindergarten in 2016–2017 had higher mean standard scores than their Head Start Standalone peers on the 2016 Iowa Assessments English language arts (ELA) (123.6 vs 122.3) and math (121.8 vs. 120.8) as well as on the Logramos language arts (LA) (167.8 vs. 165.7) and math (163.5 vs 161.8) subtests.
- The gap in performance between economically-disadvantaged and non-economically-disadvantaged students was either small or in favor of economically-disadvantaged ELA Head Start Standalone and dually enrolled and Head Start Standalone math students who took the Iowa Assessments subtests.
- The gap in performance between economically-disadvantaged and non-economically-disadvantaged students was either small or in favor of economically-disadvantaged dually enrolled, HISD-PreK, and non-HS/HISD-PreK who took the Logramos LA and math subtests and Head Start Standalone students who took the Logramos LA subtest.
- Dually-enrolled AVANCE (125.4), HCDE (122.1), and Baker Ripley (formerly NCI) (123.2) students had mean standard scores on the Iowa Assessments ELA subtest that were higher than those of their Head Start Standalone peers (121.4, 121.0, and 122.5, respectively).
- Economically-disadvantaged students who were enrolled in HCDE Head Start had a higher mean standard score compared to the non-economically disadvantaged peers on the 2016 Logramos LA and Math subtests.

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

 CJS

Attachment

cc: Grenita Lathan
Gabriella Coleman



RESEARCH

Educational Program Report

**ACADEMIC ACHIEVEMENT OF HISD
KINDERGARTEN STUDENTS ENROLLED
PREVIOUSLY IN HEAD START AND
HISD PREKINDERGARTEN PROGRAMS,
2016-2017**

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ACADEMIC ACHIEVEMENT OF HISD KINDERGARTEN STUDENTS ENROLLED PREVIOUSLY IN HEAD START AND HISD PREKINDERGARTEN PROGRAMS, 2016–2017

Executive Summary

In compliance with the Texas Education Code § 29.153, the Houston Independent School District (HISD) has provided free prekindergarten classes for eligible Houston area’s four-year old students since the 1985–1986 school year. Children are enrolled into one of four HISD prekindergarten program models: (1) an early childhood center (ECC), (2) a school-based program, (3) an HISD and Head Start program, and (4) a Montessori program. Except for HISD Montessori prekindergarten programs, the district uses Frog Street™ Pre-K (FSPK) curriculum. Frog Street Pre-K focuses on the physical, social, emotional, cognitive, and language development of preschool-age children (Schiller, 2015.). Presently, the HISD operates 155 elementary school-based prekindergarten programs and eight Early Childhood Centers (ECC) that cater to the youngest learners (Houston Independent School District [HISD], 2016a).

HISD offers full-day prekindergarten programs to all eligible students within its attendance boundaries. To be eligible for participation in a free prekindergarten program in HISD for the 2015–2016 school year, a child had to (1) have been four years old on or before September 1; (2) lived within the HISD attendance boundary; (3) have had an updated immunization record in accordance to state policy for students; and (4) met at least one of the following criteria:

- (a) Be homeless;
- (b) Be unable to speak or understand English;
- (c) Be economically disadvantaged;
- (d) Be the child of an active-duty member of the U.S. military or one who has been killed, injured, or missing in action while on duty;
- (e) Child is or ever has been in the conservatorship of the Department of Family and Protective Services following an adversary hearing held as provided by Section 262.201. Family code; or
- (f) All children who met any eligibility criteria for Head Start, not only those who met the low-income eligibility criteria for Head Start.

The Texas Legislature determined that children who met the above criteria were most at risk for school failure, would have needed more assistance to be ready for school by the time they enrolled in kindergarten, and therefore, were given priority for access to free state-mandated prekindergarten programs. In addition, HISD offered tuition-based prekindergarten access to children who did not meet the eligibility requirements. However, tuition-paying students could only be enrolled where space was available and after all eligible students had been enrolled in an HISD prekindergarten program. In these cases, a campus could have enrolled up to five three-year old children after all eligible four-year old children had been enrolled once space was available (HISD 2016a).

HISD collaborates with four federally-funded Head Start agencies that serve Harris County children located within the HISD boundaries: AVANCE Houston, Inc. (AVANCE); Gulf Coast Community Services Association (GCCSA); Harris County Department of Education (HCDE); and Baker Ripley (formerly Neighborhood Centers, Inc. (NCI)). The purpose of this study was to measure the effectiveness of PreK and Head Start Programs in HISD using comparative analyses of the performance of HISD kindergarten students who were enrolled in an HISD prekindergarten, Head Start or HISD-Head Start affiliated program during the 2015–2016 school year.

Highlights

- Students who were dually enrolled during the 2015–2016 school year in a prekindergarten program and were later enrolled in HISD kindergarten in 2016–2017 had higher mean standard scores than their Head Start Standalone peers on the 2016 Iowa Assessments English language arts (ELA) (123.6 vs 122.3) and math (121.8 vs. 120.8) as well as on the Logramos language arts (LA) (167.8 vs. 165.7) and math (163.5 vs 161.8) subtests.
- Students enrolled in HISD-PreK in 2015–2016 and who later enrolled in an HISD kindergarten in 2016–2017 had higher mean standard scores (124.3 and 123.1) than both dually-enrolled (123.6 and 121.8) and Head Start Standalone peers (122.3 and 120.8) on the 2016 Iowa Assessments ELA and math subtests, respectively.
- Kindergarten students who were not enrolled in an HISD or Head Start PreK program in 2015–2016 had the highest mean standard scores on the 2016 Iowa Assessments ELA (125.7) and math (123.9) subtests, but the lowest LA (161.4) and math (156.6) mean standard scores on the Logramos subtests.
- The gap in performance between economically-disadvantaged and non-economically-disadvantaged students was either small or in favor of economically-disadvantaged ELA Head Start Standalone and dually enrolled and Head Start Standalone math students who took the Iowa Assessments subtests.
- The gap in performance between economically-disadvantaged and non-economically-disadvantaged students was either small or in favor of economically-disadvantaged dually enrolled, HISD-PreK, and non-HS/HISD-PreK who took the Logramos LA and math subtests and Head Start Standalone students who took the Logramos LA subtest.
- Dually-enrolled AVANCE (125.4), HCDE (122.1), and Baker Ripley (formerly NCI) (123.2) students had mean standard scores on the Iowa Assessments ELA subtest that were higher than those of their Head Start Standalone peers (121.4, 121.0, and 122.5, respectively).
- Dually-enrolled 2015–2016 AVANCE, HCDE, and Baker Ripley students had 2016 Iowa Assessments math scores that were higher than those of their Head Start Standalone peers.
- Dually-enrolled GCCSA, HCDE, and Baker Ripley (NCI) students had higher mean standard scores on the 2016 Logramos LA subtest compared to their Head Start Standalone peers.
- Dually-enrolled GCCSA, HCDE, and Baker Ripley (NCI) students had higher mean standard scores compared to their Head Start Standalone peers on the 2016 Logramos math subtest.
- Economically-disadvantaged students who were enrolled in GCCSA and HCDE had higher mean standard scores than their non-economically-disadvantaged peers on the 2016 Iowa Assessments ELA and Math subtests.
- Economically-disadvantaged students who were enrolled in HCDE Head Start had a higher mean standard score compared to the non-economically-disadvantaged peers on the 2016 Logramos LA and Math subtests.

Recommendations

- Given the consistently higher mean standard scores for dually-enrolled students on the both the Iowa Assessments and the Logramos subtests compared to those of students in Head Start Standalone programs, the district should look with favor to expand the dual enrollment of PreK students, once the resources for doing so can be identified.
- Dually-enrolled programs should also be expanded because economically-disadvantaged students appear to consistently outperform their Head Start Standalone peers on both Iowa Assessments ELA and math and Logramos LA and math subtests.
- Future studies should include the effects of varying years of prekindergarten and Head Start program exposure on the performance of kindergarten students, and may need to focus as well on the quality of these Head Start and prekindergarten programs and the effect of that quality on students' performance.
- Future studies should attempt to identify indigent economically-disadvantaged students to determine where they access Head Start and prekindergarten programs and to analyze their performances to better target interventions that would assist in improving their kindergarten outcomes and further reduce the performance gaps between programs and agencies.

Introduction

HISD Prekindergarten Programs

Research has found that enrollment in high-quality early childhood education centers enhances school readiness (Fram, Kim & Sinha, 2012; Lipsey, Farran, & Hofer, 2015), students' cognitive development (Weiland & Yoshikawa, 2013), and reduces the risk associated with reading and writing difficulties students may experience as they progress through school (Currie, 2000; Lyytinen & Erskine, 2016). Head Start constituted one of the first formally-established centers for providing early childhood education that would intervene to facilitate school readiness.

Head Start

Head Start was created in 1965 to combat the poverty and inequities experienced by disadvantaged populations. Head Start has evolved into one of the most significant investments in school readiness for low-income young children in the United States (U.S. Dept. of Health and Human Services Administration for Children and Families, Office of Head Start [OHS], 2017a). Children who are school-ready possess the skills, knowledge, and attitudes necessary for success in school and for lifelong learning (U.S. Dept. of Health and Human Services Administration for Children and Families, Office of Head Start [OHS], 2017a). Head Start programs are designed to meet the mental, social, and emotional development needs of children, aged three to five years old. They provide medical, dental, nutritional, family engagement, parent education services, and psychological resources (National Head Start Association [NHSA], 2016). Overseen by the U.S. Department of Health and Human Services Administration for Children and Families, the Office of Head Start [OHS] has provided comprehensive services to over 34 million children and their families (U.S. Dept. of Health and Human Services Administration for Children and Families, Office of Head Start [OHS], 2017b). In 2016 alone, Head Start served nearly 1 million children and pregnant women and their families in the United States (U.S. Dept. of Health and Human Services Administration for Children and Families, Office of Head Start [OHS], 2017b).

Head Start and Prekindergarten Collaborative Programs

To meet the needs of eligible young children and parents, state and local Head Start agencies collaborate and coordinate with other entities, like public schools, to provide early childhood education (U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start [OHS], 2007; National Association for the Education of Young Children [NAEYC], 2009; Del Grosso, Akers, Esposito, & Paulsell, 2014). Presently, HISD collaborates with four federally-funded Head Start agencies that serve Harris County children located within the HISD boundaries: AVANCE Houston, Inc. (AVANCE); Gulf Coast Community Services Association (GCCSA); Harris County Department of Education (HCDE); and Baker Ripley (formerly Neighborhood Centers, Inc. (NCI)). **Tables 1-4** (pp. 24–35) provide the program description for each partnering agency for the 2015–2016 school year. The Houston Independent School District (HISD) and Head Start Prekindergarten Collaborative programs shares responsibilities for closing the achievement gap between economically-disadvantaged children and their more affluent peers. HISD and Head Start teacher stakeholders agreed to collaborate in the delivery of instruction and other services to dually-enrolled students in HISD prekindergarten classrooms during the 2015–2016 school year. These collaborative classrooms were located within an HISD early childhood center (ECC) or school-based prekindergarten program.

This collaborative, while adhering to Head Start performance standards, provided a program that was supported by the HISD district curriculum, Frog Street™ Pre-K (FSPK), that was aligned with standards

detailed in *Developmentally Appropriate Practice in Early Childhood Programs* (NAEYC, 2009), and the *Early Childhood Outcomes and Prekindergarten Guidelines* established by the Education Service Center (ESC) Region 13 and the Texas Education Agency (TEA) in 2015.

According to the terms collaborative partners agreed upon, HISD teachers were required to work 7.75 hours each day, with a 30-minute duty-free lunch and a 45-minute planning period. HISD teachers were remunerated through state revenues based on average daily attendance (ADA) of eligible students and district Title 1 full-day funds. Head Start agencies provided classrooms with appropriate furniture, materials, supplies, and playground equipment to support their respective HISD partner schools, as required. The agencies provided additional resources including teachers or teacher aides for dual classrooms, coverage of indirect costs with in-kind funds, and comprehensive services to eligible children at the designated schools.

Preschoolers with disabilities were enrolled in accordance with HISD guidelines for special education and prekindergarten eligibility requirements. Home language surveys were sent to parents or guardians for completion and approval for child placement in a linguistically-appropriate HISD prekindergarten classroom (i.e., Transitional Bilingual, English as a Second Language, English, or Dual Language).

Literature Review

High-quality prekindergarten programs tend to have high prekindergarten outcomes. A latent profile analysis of prekindergarten program quality and outcomes involving 8,000 students in 1,255 classrooms in Texas confirmed this finding. The study found that 67.3% of the classrooms assessed were high-quality with high outcomes and 21.3% were low quality and low-outcomes prekindergarten classrooms (Williams, Landry, Anthony, Swank & Crawford, 2012). The analysis showed that low quality but high outcome programs (11.4%), often attended by middle-class children, did not use the state program model (Williams, et al, 2012).

When universal and targeted prekindergarten programs were compared, children’s achievement across programs in 701 classrooms in 140 prekindergarten sites across 11 states were not different. The study found that two aspects of structural quality (length of program in hours per day and teacher quality) were higher among universal programs while process quality (child interactions and feedback) was higher in targeted programs (Dotterer, Burchinal, Bryant, Early & Pianta, 2012).

Prekindergarten programs seem to benefit special needs students. Weiland (2016) found that when children with special needs in Boston were exposed to prekindergarten programs, the impacts were similar or surpassed those of their typically developing peers. The Boston program combined proven language, literacy, and mathematics curricula with coaching and studied their impacts on language, literacy, mathematics, executive function and emotional skills of 242 special needs young children (Weiland, 2016).

Publicly-administered prekindergarten programs appeared to be superior to privately administered prekindergarten programs in at least one rural area. Causal-comparative study of third-grade students’ participation in prekindergarten programs in rural South Georgia showed that students who participated in public prekindergarten outperformed those who either participated in private or did not participate at all in prekindergarten. Students who did not attend prekindergarten outperformed those who attended prekindergarten programs that were privately administered, thus, supporting investments in publicly-administered programs (Garmon, 2013).

Research on the critical elements of effective early care and education (ECE) partnership has been limited and lacked rigor (Del Grosso, Akers, Esposito, & Paulsell, 2014). A study reviewed 78 studies of partnerships in the ECE field included partnerships between Head Start and Early Head Start grantees and child care providers, school districts and child care providers and Head Start agencies, and partnerships with informal care givers and early intervention services. The review found that committed leadership, strong relationships and committed goals among partners, joint staff meetings, formal agreements and communication plans, staff assigned to oversee the partnership, and structured planning processes facilitated effective ECE partnerships (Del Grosso, Akers, Esposito, & Paulsell, 2014). It also found that poor quality collaborations, discrepancies in program standards across ECE settings, insufficient funding and discrepancies in teacher pay and issues with teacher turnover were among the common barriers to the establishment of effective ECE. As a result, the development and implementation of ECE partnerships require that partners establish agreements, draw on multiple funding streams, build relationships and maintain ongoing communication, support quality improvements and staff development, and provided comprehensive services (Del Grosso, et al, 2014)

A statewide evaluation of kindergarten outcomes and program quality of the North Carolina prekindergarten program was conducted during the 2013–2014 school year. The study found that children enrolled in the program made significant gains across all domains of learning (Peisner-Feinberg, Schaaf, Hildebrandt, Pan, & Warnaar, 2015). Spanish-speaking dual language learners' (DLL) growth was measured in English and Spanish. Results of the English assessment showed that students made significant gains in all domains of language and literacy skills, math skills, and general knowledge but not in expressive vocabulary skills. When those skills were measured in Spanish, children demonstrated significant growth in only one language and literacy skills: phonemic awareness, and in math skills, and general knowledge. The overall sample of 561 children consisted of 119 DLL students (Peisner-Feinberg, et al, 2015).

Increasing children's exposure to high quality prekindergarten programs does not necessarily increase their skills and readiness for school. There was no significant difference in the performance of children who had one versus two years participation in Head Start followed by state pre-K in Oklahoma (Jenkins, Farkas, Burchinal & Vandell, 2016). The study involved a representative sample of 540 children who were entering preK, age-4 Head Start, or public-school kindergarten during the 2006–2007 school year using a regression discontinuity design around the cut-off age for Head Start enrollment. The sample was grouped into two pathways – participants in pre-K age 4 who participated in the Head Start at age 3 and participants in Head Start at ages 4 and 3 (Jenkins, et al, 2016). The results showed that both age-4 programs improved children's early reading and writing skills but neither showed improvement in math skills (Jenkins, et al, 2016). One-year and two-year exposures to Head Start among 159 and 77 students, respectively, was used to determine performance on language and literacy skills including vocabulary, sound awareness, and phonemic awareness at the beginning and end of the Head Start Program (Hindma & Wasisk, 2017). Results indicate that two years' exposure in the Head Start programs was disassociated with better early-reading outcomes compared to the one-year prekindergarten alone (Hindma & Wasisk, 2017).

Method

Data Collection

This evaluation was designed to measure the effectiveness of PreK and Head Start programs in Houston using comparative analyses of the performance of HISD kindergarten students who were enrolled in an HISD, HISD-Head Start, or Head Start Standalone prekindergarten program during the 2015–2016 school year. All prekindergarten and kindergarten students who attended HISD during the 2015–2016 and 2016–2017 school years, respectively, were included in the study. Kindergarten students who were identified in

both the 2015–2016 and 2016–2017 Public Education Information Management System (PEIMS) were excluded from the study which focused on first-year kindergartners.

The study included students who attended the four Head start-agency affiliated prekindergarten programs during the 2015–2016 school year. The respective Head start agencies provided lists of students enrolled in their programs. Unique identifiers were developed for these students as well as HISD prekindergartners who were enrolled in 2015–2016. Students who attended Young Learners Academy, an HISD charter school were included in the study as a Head Start Standalone program. Unique Identifiers were also created for students in the PEIMS database who were enrolled in HISD in 2016–2017 and in either HISD prekindergarten or a Head Start program in 2015–2016.

The 2016–2017 first-time kindergartners PEIMS data was merged with the 2016 Riverside Iowa and Logramos data for kindergarten students, and the Head Start 2015–2016 lists using unique identifiers to match students who took the assessment. Students who had had either English or Spanish language arts total or math standard scores were included in the study.

Measures

The Iowa Assessments and Logramos 3rd Edition Norm Reference Tests (NRT) were used to measure the academic achievement of HISD kindergarten students. The Iowa Assessments are designed to provide a thorough assessment of students' progress in skills and standards that are essential for successful learning for English and Spanish students, respectively (Houston Independent School District, 2014a). Logramos 3 parallels the scope and sequence of the Iowa assessments and measures the achievement of Spanish-speaking students in reading, language, and mathematics. Kindergarten students in this study were administered the Iowa Assessments and Logramos 3 in December 2016. This study, as noted earlier, used the Iowa Assessments English language arts (ELA total) and mathematics standard scores and Logramos Language Arts (LA) total and mathematics scores. ELA total is a composite score of reading, written expression, capitalization, punctuation, and vocabulary. Logramos LA is a composite score of student achievement on the reading and language subtests. Standard score is a number, which describes a student's location on an achievement continuum with the scale based on the Iowa Assessments test subject's growth model (The University of Iowa, Iowa Testing Program, n.d.).

Statistical Analyses

This study is descriptive and uses counts, percentages, mean standard scores, and standard deviations to determine students' performance in English language arts, mathematics, and Spanish language arts. The study compared HISD kindergarten student performance by their 2015–2016 prekindergarten program enrollment status and their Head Start Agency affiliations. The analyses included students who did not attend any of these programs but who were enrolled in HISD kindergarten during the 2016–2017 school year. The demographic and program composition of students who constitute the study were included in the analyses. Student demographic and educational variables were derived from the 2016–2017 PEIMS kindergarten database. Student performance was disaggregated by demographic and educational variables. Analyses by students' ethnicity were restricted to Black, Hispanic and White students since they constituted about 94% of the study populations. The study analyzed students' performance by economic status since students' economic-disadvantaged status was a key criterion for enrollment in Head Start and HISD prekindergarten programs. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity.

Limitations

This report did not consider students' years of enrollment and attendance in HISD prekindergarten or any of the Head Start programs in this study prior to enrollment in the HISD kindergarten in 2016–2017. While Head Start Standalone programs can constitute students as young as three years resulting in multiple years exposure to the program, HISD dually-enrolled or prekindergarten students are typically four years old with one year's exposure to the program. Previous research (Hindma & Wasisk, 2017; Jenkins, et al 2016) indicated that increasing exposure to high quality programs does not necessarily increase prekindergarten students' performance, skills, and readiness for school. No data on years of enrollment were available for non-HISD prekindergarten or Head Start students who were enrolled in HISD kindergarten in 2016–2017.

The use of students in this study who were not enrolled in an affiliated Head Start or an HISD prekindergarten programs does not indicate that they were not enrolled in any early childhood program. They could have been enrolled in private programs or programs outside HISD and Harris County, Texas. The interpretation of analyses and results involving this group of students must be treated with caution.

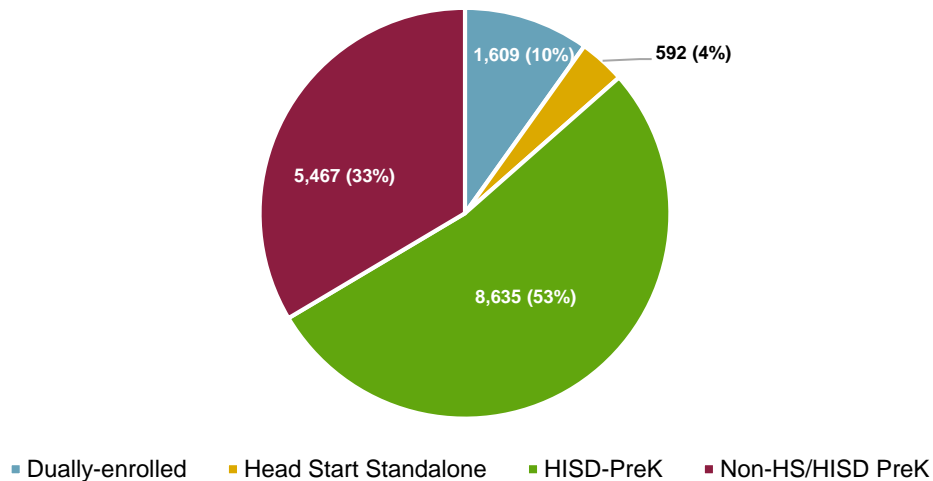
Causal analysis and claims could not be made since data on prior student achievement and a similar definitive group of students who were not exposed to the programs were unavailable. In addition, the variability of prekindergarten and Head Start programs could not be reasonably controlled. Further, PEIMS data are a snapshot and exclude students who were enrolled after the snapshot and those who left the district since the snapshot was taken. Moreover, wide variability in the sample sizes for program affiliates in this report limits the associations identified in this report. The use of students who had both language and math scores on the Iowa Assessments and Logramos in the analyses was designed to minimize the wide variability in sample sizes across programs, affiliates, and tests.

Results

What were the enrollment figures for 2016–2017 HISD kindergarten students based on their 2015–2016 program enrollment statuses and Head Start agency affiliation in 2015–2016?

Figure 1 and **Figure 2** show the 2016–2017 distribution of HISD kindergarten students by the number and percentages who were or were not enrolled in an HISD prekindergarten or Head Start affiliated program during the 2015–2016 school year.

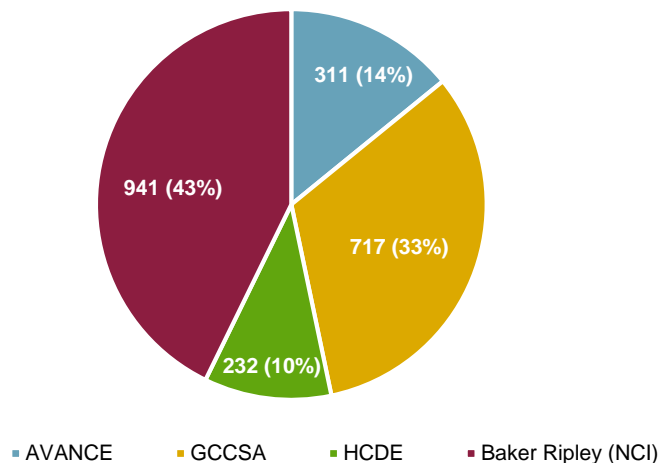
Figure 1. Enrollment of 2016–2017 HISD Kindergarten Students by Their 2015–2016 Prekindergarten Program Enrollment Status



Source: Head Start students lists, 2015–2016 and PEIMS 2016–2017 HISD student databases

- A total of 16,303 or 98.5 percent of students enrolled in HISD constituted the full sample for this report. Statistical power analysis indicated that a sample size of 640 kindergarten students with a 95% confidence level and a confidence interval of 5 would be adequate to make statistical inference about the kindergarten population in this study.
- Most students in the sample were either enrolled in an HISD prekindergarten program (53%) or were not enrolled in any HISD prekindergarten or Head Start affiliated program (33%).

Figure 2. Enrollment of 2016–2017 HISD Kindergarten Students by Their 2015–2016 Head Start Agency Affiliation



Source: Head Start students lists, 2015–2016 and PEIMS 2016–2017 HISD student databases.

- As shown in Figure 2, a total of 2,201 students made up the study sample of students who were enrolled in the four Head-Start-affiliated programs.

- Most students were enrolled with the GCCSA (33%) or Baker Ripley (NCI) (43%) programs.

What were the demographic and educational characteristics of 2016–2017 HISD kindergarten students based on their 2015–2016 program enrollment status?

Table 5 in **Appendix A** (p. 36) shows the demographic and educational characteristics by prekindergarten program of the student sample in this report. According to Table 5:

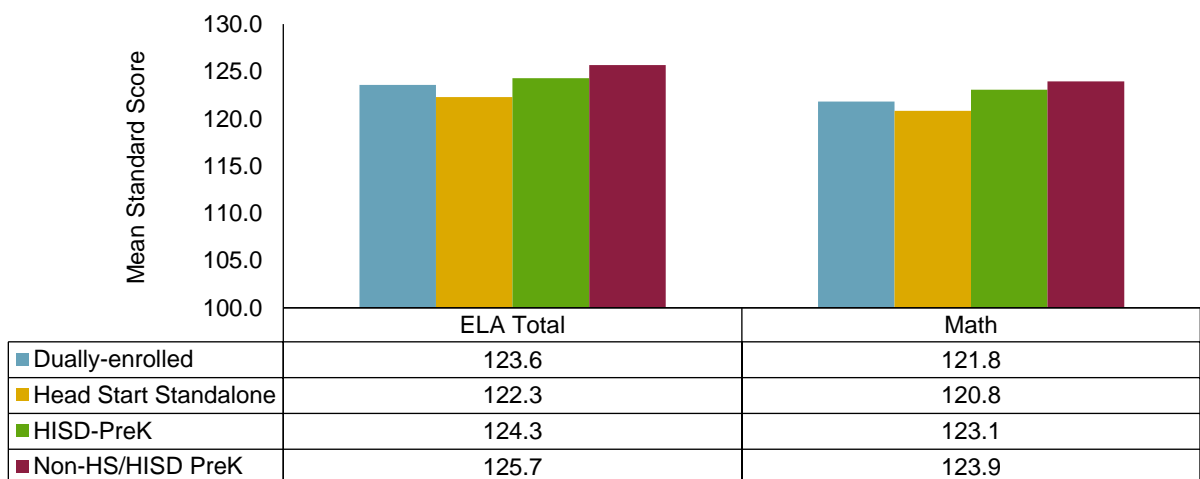
- Most students in the sample were Hispanic, ranging from 43.1 percent for non-HS/HISD-PreK to 69.9 percent for dually-enrolled and HISD PreK students, respectively.
- As expected, most students in the sample were economically-disadvantaged, ranging from 58.3 percent (non-HS/HISD-PreK) to 94.3 percent (dually-enrolled) and at risk for dropping out of school starting at 59.5 percent (non-HS/HISD-PreK) to 98.5 percent (HISD-PreK).
- Except for non-HS/HISD-PreK students (25.0%), most students in the sample had Spanish as their home language with a range of between 49.5 percent (HISD PreK) to 59.2 percent (dually enrolled). Most non-HS/HISD-PreK students came from English-speaking homes (66.7%).

What differences in academic achievement existed among the 2016–2017 HISD kindergarten students who were dually-enrolled and students who were enrolled in an HISD-PreK or Head Start Standalone prekindergarten program during the 2015–2016 school year?

Figure 3 and **Figure 4** show the performance of 2016–2017 HISD kindergarten students who were or were not enrolled in a Head Start or prekindergarten program during the 2015–2016 school year. **Table 6** to **Table 9** (pp. 37 - 40) provides details on the Iowa Assessments ELA and math and Logramos LA and math by Head Start and HISD prekindergarten programs and selected demographic and educational attributes.

Iowa Assessments ELA Total and Math

Figure 3. Mean Standard Scores on the Iowa ELA and Math Subtests for the 2016–2017 Kindergarten Students by Their 2015–2016 Prekindergarten Enrollment Status

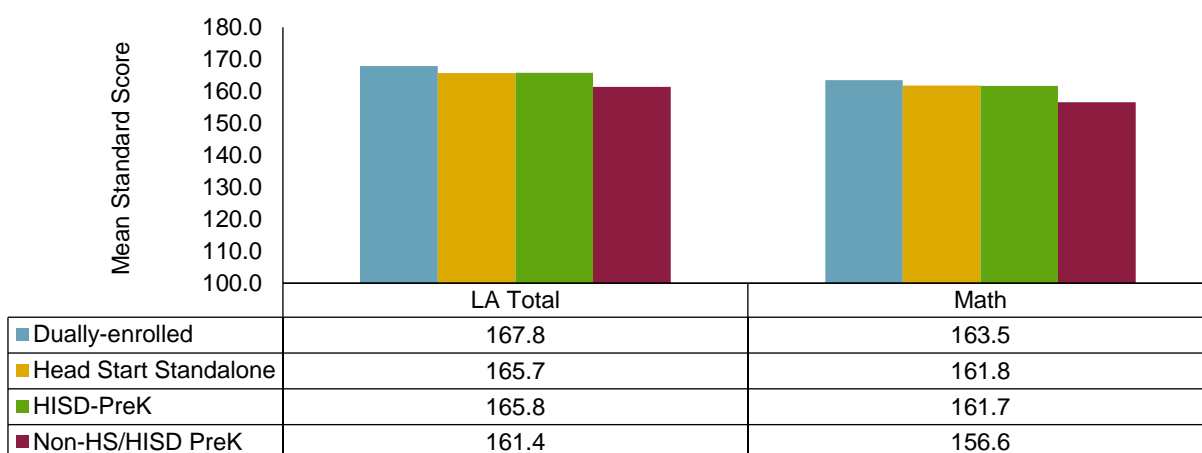


Source: Iowa Assessments, 2016–2017 HISD student databases; Head Start students lists, 2015–2011, PEIMS, 2016–2017 HISD student databases.

- HISD kindergarten students who were not enrolled in the Head Start or HISD prekindergarten program (non-HS/HISD PreK) in 2015–2016 had the highest ELA total (125.7) and math (123.9) mean standard scores on the 2016 Iowa Assessments subtests.
- HISD kindergarten students who were enrolled in a Head Start Standalone program in 2015–2016 had the lowest ELA total (122.3) and math (120.8) mean standard scores on 2016 Iowa Assessments subtests.
- Former dually-enrolled students had higher mean standard scores compared to Head Start Standalone students on the 2016 ELA (123.6 v. 122.3) and math (121.8 v. 120.8) Iowa Assessments subtests.

Logramos LA and Math

Figure 4. Mean Standard Scores on the Logramos LA and Math Subtests for 2016–2017 Kindergarten Students by Their 2015–2016 Prekindergarten Enrollment Status



Source: Logramos 3, 2016–2017 HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases

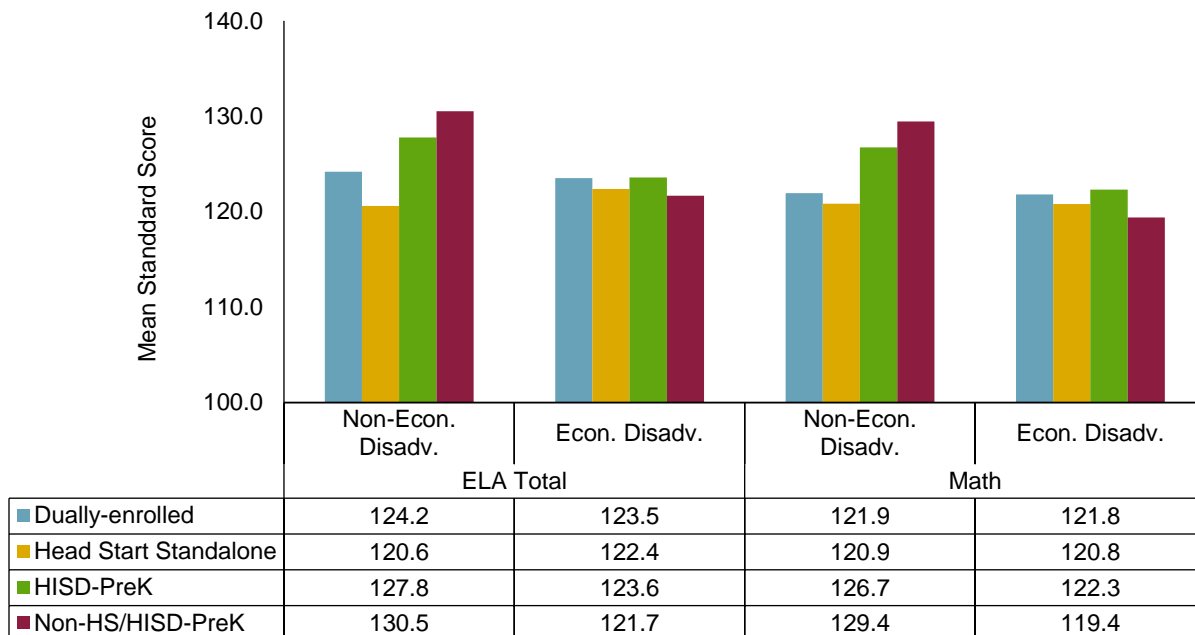
- Among the study groups, HISD kindergarten students who were dually enrolled during 2015–2016 school year attained the highest LA total (167.8) and math (163.5) mean standards scores on the 2016 Logramos subtests.
- Among the study groups, HISD kindergarten students who were not enrolled in a Head Start or HISD prekindergarten program in 2015–2016 had the lowest mean standard scores on the 2016 Logramos LA (161.4) and math (156.6) subtests.
- HISD kindergarten students who were dually enrolled in 2015–2016 had higher mean standard scores compared to Head Start Standalone, students on the 2016 LA (167.8 v. 165.7) and math (163.5 v. 161.8) Logramos subtests.

How did 2016–2017 HISD kindergarten students' academic achievement differ amongst the 2015–2016 prekindergarten program enrollees when economic status was considered?

Figure 5 and **Figure 6** display the performance of the 2016–2017 HISD kindergarten students by economic status and 2015–2016 prekindergarten programs based on the 2016 Iowa Assessments ELA Total and math and Logramos LA and math mean standard scores.

Iowa Assessments ELA Total and Math

Figure 5. Mean Standard Scores on the 2016 Iowa Assessments ELA and Math Subtests for HISD Kindergarten Students by Their 2015–2016 Prekindergarten Program Enrollment and Economic Status



Source: Iowa Assessments, 2016–2017 HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases.

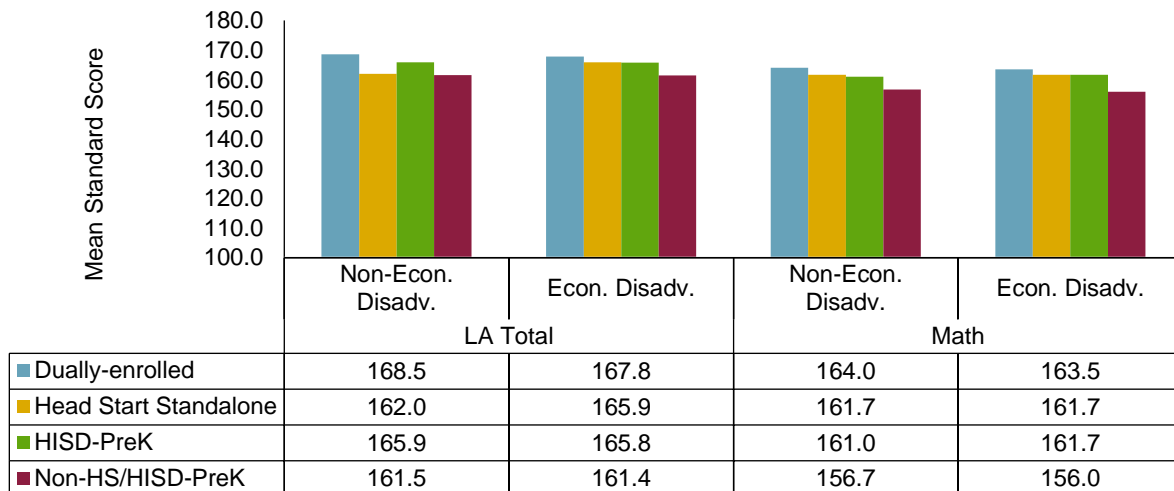
- Except for Head Start Standalone, non-economically-disadvantaged kindergarten students had higher mean standard scores on the ELA 2016 Iowa Assessments subtest when compared to their economically-disadvantaged peers. Non-economically-disadvantaged students had higher math standard scores for all study groups on the Iowa Assessments, although the gaps were minimal for dually-enrolled and Head Start Standalone students.
- Among the study groups, non-HS/HISD-PreK non-economically-disadvantaged kindergarten students had the highest ELA total (130.5) and math (129.4) mean standard scores and Non-HS/HISD PreK had the largest performance gap between non-economically disadvantaged and economically disadvantaged on both the 2016 Iowa Assessments ELA (130.5 v 121.7) and math (129.4 v 119.4) subtests.
- Dually-enrolled non-economically-disadvantaged and economically-disadvantaged students had mean standard scores on the 2016 Iowa Assessment ELA total (124.2 and 123.5, respectively) and math (121.9 and 121.8, respectively) subtests that were higher than those of their Head Start Standalone

non-economically-disadvantaged and economically-disadvantaged peers on the Iowa Assessments ELA Total (120.6 and 122.4, respectively) and math (120.9 and 120.8, respectively) subtests.

- Economically-disadvantaged kindergarten students who were enrolled in a non-HS/HISD-PreK program in 2015–2016 had the lowest mean standard scores on the 2016 Iowa Assessments ELA (121.7) and math (119.4) subtests.

Logramos LA Total and Math

Figure 6: Mean Standard scores on the Logramos LA and Math Subtests for 2016–2017 HISD Kindergarten Students by Their 2015–2016 Prekindergarten Program Enrollment and Economic Status.



Source: Logramos 3, 2016–2017 HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases

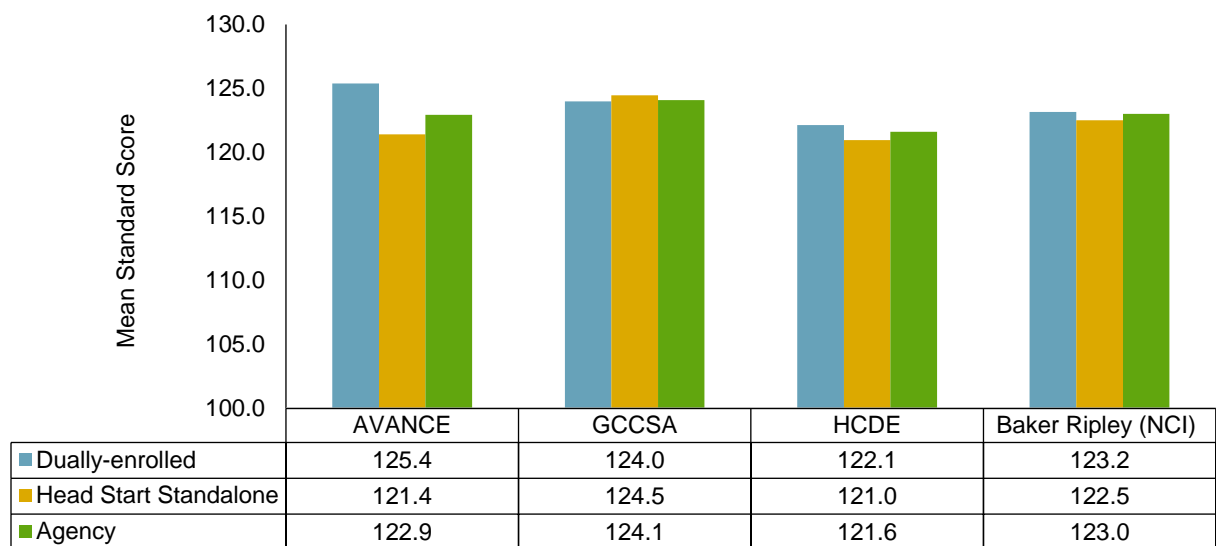
- Except Head Start Standalone non-economically-disadvantaged kindergarten students, among the study groups, had higher mean standard scores on the 2016 Logramos Assessment LA subtests when compared to their economically-disadvantaged peers.
- There was no difference or a negligible difference in the mean standard scores of non-economically-disadvantaged and economically-disadvantaged HISD-PreK students who took the Logramos LA (165.9 and 165.8, respectively) and math (161.0 and 161.7, respectively) subtests. The same was true for the Head Start Standalone math students (161.7).
- Among the study groups, dually-enrolled non-economically-disadvantaged and economically-disadvantaged kindergarten students had the highest mean standard scores on the Logramos LA (168.5 and 167.8, respectively) and math (164.0 and 163.5, respectively) subtests.
- Students who were previously enrolled in a non-HS/HISD-PreK program and who were economically-disadvantaged had the lowest mean standard score on the 2016 Logramos LA (161.4) and math (156.0) subtests.

How did the academic achievement differ between the HISD kindergarten students who were dually enrolled and students who were enrolled in a Head Start Standalone program during the 2015–2016 school year, with respect to agency affiliation?

Figure 7 to **Figure 10** show the performance on the 2016 Iowa Assessments ELA total and math and Logramos LA total and math subtests of 2016–2017 HISD kindergarten students by the Head Start agencies in which they were enrolled during the 2015–2016 school year. **Table 10** to **Table 13** (pp. 41–44) provide details of students' performance on the Iowa Assessments ELA and math and Logramos LA and math by prekindergarten program arrangement and Head Start affiliated agency.

Iowa Assessments ELA Total Result

Figure 7. Mean Standard Scores on the Iowa Assessments ELA Total Subtest for the 2016–2017 HISD Kindergarten Students by Their 2015–2016 Head Start Agency Affiliation

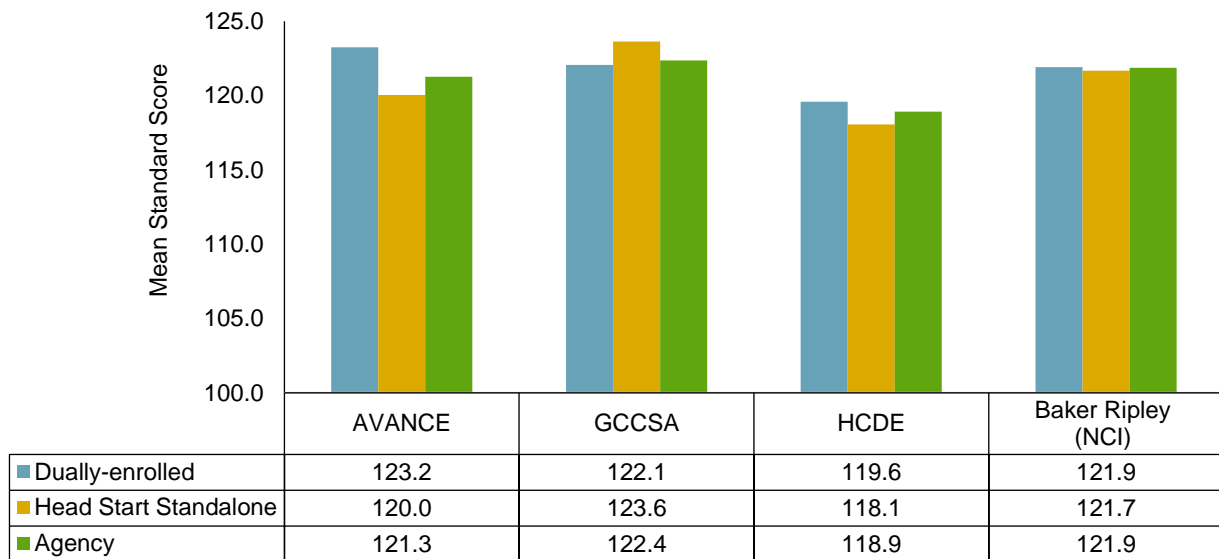


Source: Iowa Assessments, 2016–2017 HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Overall agency means are provided for comparison.

- Dually-enrolled AVANCE (125.4), HCDE (122.1) and Baker Ripley (NCI) (123.2) students had mean standard scores on the Iowa Assessments ELA subtest that were higher than those of their Head Start Standalone peers (121.4, 121.0, and 122.5, respectively).
- GCCSA Head Start Standalone students had a slightly higher mean standard score on the Iowa Assessments ELA subtest than their dually-enrolled students or students in the entire agency.
- The Iowa Assessments ELA total mean standard scores for dually-enrolled AVANCE, HCDE, and Baker Ripley (NCI) students were higher than the ELA total mean standard scores for their respective agencies.
- As an agency, HCDE had the lowest mean standard score (121.6) on the 2016 Iowa Assessments ELA subtest.

Iowa Assessments Math

Figure 8. Mean Standard Scores on the Iowa Assessments Math Subtest for the 2016–2017 HISD Kindergarten Students by Their 2015–2016 Head Start Agency Affiliation

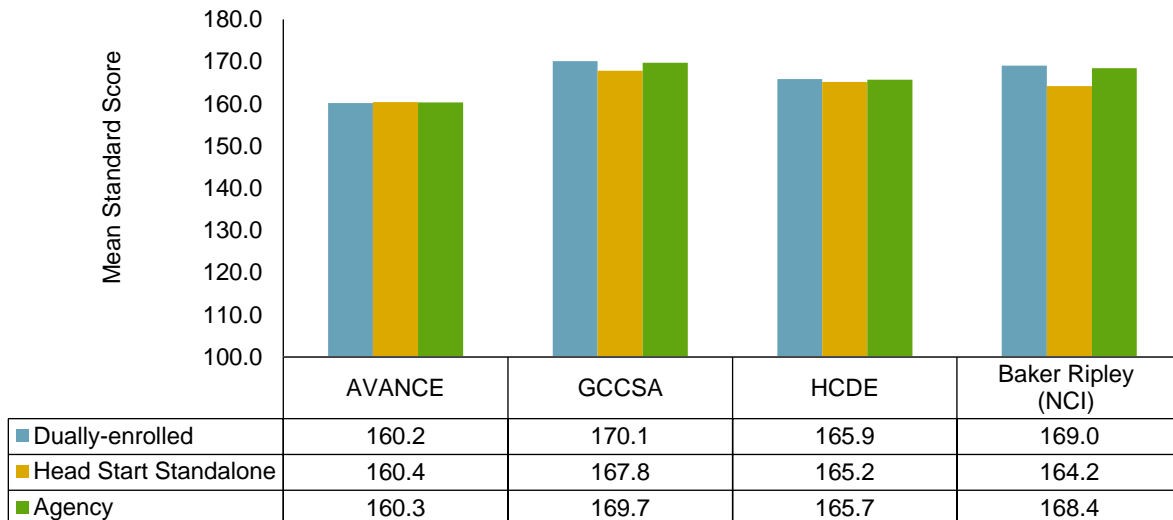


Source: Iowa Assessments, 2016–2017 HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Overall agency means are provided for comparison.

- Dually-enrolled 2015–2016 AVANCE, HCDE, and Baker Ripley (NCI) students had 2016 Iowa Assessments math standard scores that were higher than those of their Head Start Standalone peers or their respective agencies.
- GCCSA 2015–2016 Head Start Standalone students had a higher math mean standard score on the 2016 Iowa Assessments ELA (123.6) subtest compared to their dually-enrolled peers (122.1) and the respective agencies (122.4).
- Among the Head Start Standalone programs, 2015–2016 GCCSA had the highest math mean scale score (123.6) on the 2016 Iowa Assessments, while AVANCE had the highest math mean standard score (123.2) among the dually-enrolled.
- HCDE had the lowest Iowa Assessments math mean standard scores among the dually-enrolled (119.6) and Head Start Standalone (118.1) students and the respective agencies (118.9).

Logramos LA Total Results

Figure 9. Mean Standard Scores on the Logramos LA Subtest for the 2016–2017 HISD Kindergarten Students by Their 2015–2016 Head Start Agency Affiliation

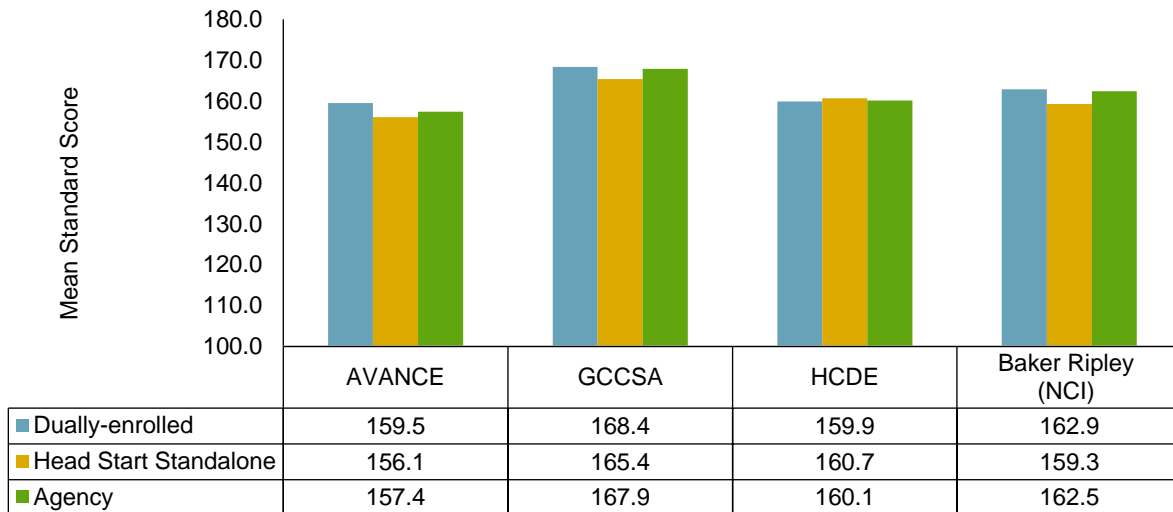


Source: Logramos 3, 2016–2017, HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Overall agency means are provided for comparison.

- Except for AVANCE, all dually-enrolled students had higher mean standard scores on the 2016 Logramos LA subtest compared to their Head Start Standalone peers and agencies.
- AVANCE Head Start Standalone students had a slightly higher mean standard score (160.4) on the 2016 Logramos LA subtest compared to their dually-enrolled peer and agency (160.2).
- GCCSA dually-enrolled students had the highest mean standard score (170.1) on the Logramos LA subtest among all prekindergarten programs. GCCSA had the highest LA total mean standard score (169.7) among Head Start agencies.

Logramos Math

Figure 10. Mean Standard Scores on the Logramos Math Subtest for the 2016–2017 HISD Kindergarten Students by Their 2015–2016 Head Start Agency Affiliation



Source: Logramos 3, 2016–2017, HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Overall agency means are provided for comparison.

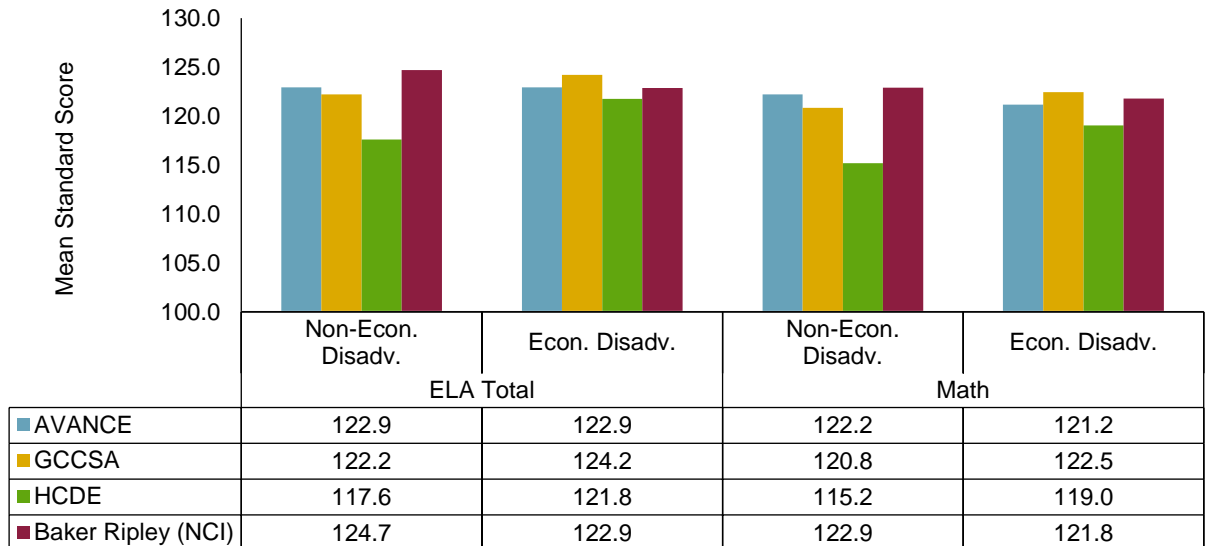
- Except HCDE, all dually-enrolled students by agencies had higher mean standard scores compared to their Head Start Standalone peers on the 2016 Logramos math subtest.
- GCCSA students had the highest Logramos math mean standard score (168.4) among all dually-enrolled agencies, and the highest math mean standard score (165.4) among all Head Start Standalone agencies.
- Among the agencies, GCCSA had the highest agency mean standard score (167.9) on the 2016 Logramos math subtest.

How did the 2016–2017 kindergarten students' academic achievement differ among 2015–2016 Head Start agencies when economic status was considered?

Figure 11 and **Figure 12** show the academic achievement of 2016–2017 kindergarten students on the Iowa Assessments ELA and math and Logramos LA and math subtests by their economic status and the 2015–2016 Head Start Agencies in which they were enrolled.

Iowa Assessments ELA Total and Math

Figure 11. Mean Standard Scores on the Iowa ELA Total and Math Subtests for 2016–2017 HISD Kindergarten Students by Their 2015–2016 Prekindergarten Center Enrollment and Economic Status

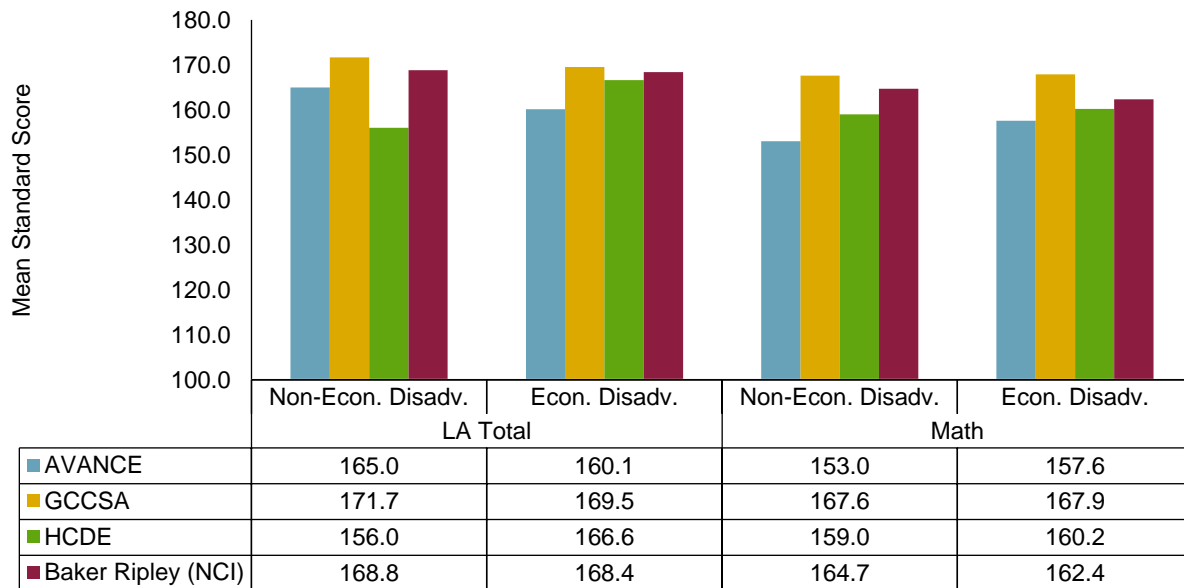


Source: Iowa Assessments, 2016–2017 HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases

- Economically-disadvantaged students who were enrolled in GCCSA and HCDE had higher mean standard scores (124.2 and 121.8, respectively) than their non-economically-disadvantaged peers (122.2 and 117.6) on the 2016 Iowa Assessments ELA and math subtests.
- Among the economically-disadvantaged, HCDE students had the lowest mean standard scores on the 2016 Iowa Assessments ELA (121.8) and math (119.0) subtests.

Logramos LA Total and Math Results

Figure 12. Mean Standard Scores on the Logramos LA Total and Math Subtests for 2016–2017 HISD Kindergarten Students by Their 2015–2016 Prekindergarten Program Enrollment and Economic Status.



Source: Logramos 3, 2016–2017 HISD student databases; Head Start students' lists, 2015–2016; PEIMS, 2015–2017 HISD student databases

- Economically-disadvantaged students who were enrolled in HCDE Head Start had a higher mean standard score compared to the non-economically-disadvantaged peers on the 2016 Logramos LA and Math subtests.
- Economically-disadvantaged AVANCE (157.6) and GCCSA (167.9) students outperformed their non-economically-disadvantaged peers on the Logramos math (153.0 and 167.6, respectively) subtest.
- Among all Head Start agencies, GCCSA students, irrespective of economic status, had the highest mean standard scores on the 2016 Logramos LA and Math subtests, while AVANCE had the lowest at 153.0 on the Logramos math subtest.

Discussion

Head Start and other prekindergarten programs were established to combat poverty and inequity experienced by disadvantaged populations through significant investments in early education. It is based on the premise that these programs would enhance school readiness, facilitate lifelong learning, and provide the skills, knowledge, and attitudes necessary for children's success in schools. HISD has been involved in the combat through various program arrangements. HISD-related Head Start and prekindergarten programs are configured as standalone or dual enrollments (instructional collaborations between affiliated agencies and HISD) and are offered in several affiliated centers namely, AVANCE, GCCSA, HCDE, and Baker Ripley. Priority for access is given to low-income and disadvantaged children. The purpose of this report was to determine the performance of the 2016–2017 HISD kindergarten students

who were exposed to these Head Start and prekindergarten programs, during the 2015–2016 school year. Kindergarten students who were not enrolled in one of these Head Start or prekindergarten programs were also include in the study for comparative purposes. There appeared to be differences in the mean standard scores of students by program types on all four subtests used in this study.

The results of this study indicate that dually-enrolled students had higher mean standard scores on both the Iowa Assessments ELA and math and Logramos LA and math subtests compared to their Standalone peers (Figures 3 and 4). Previous kindergarten-prekindergarten/Head Start evaluations conducted in the district confirm this trend (HISD, 2014b; 2016c). Although HISD-prekindergarten and non-HS/HISD PreK students outperformed both groups, it appears that the collaboration may have had some impact over and above the standalone arrangements. The possible impact is even greater for students who took Logramos LA and math. Their mean standard scores for both Logramos subtests were the highest among the four program groups (Figure 4). In additions, all groups outperformed non-HS/HISD-PreK students on the Logramos LA and math subtests, indicating that there may be merit in enrolling Spanish-speaking students in some form of Head Start or prekindergarten program (Figure 4). This is not to suggest that non-HS/HISD-PreK students did not attend a program outside the HISD configurations.

From an economic status perspective, dually-enrolled economically-disadvantaged students had higher mean standard scores than their standalone peers (Figure 5) on both Iowa Assessments subtests. However, except for economically-disadvantaged students who took Iowa Assessments ELA, the mean standard scores for the non-economically disadvantaged students in all the program groups were higher than those of their economically-disadvantaged peers. Non-HS/HISD-PreK economically-disadvantaged students had the lowest mean standard scores on the Iowa Assessments ELA and math subtests. If non-HS/HISD-PreK students did not attend a public Head Start or Prek program, their non-economically disadvantaged peers had the highest mean standard score on the Iowa Assessments for all the program groups in the study. Similarly, dually-enrolled economically-disadvantaged students who took the Logramos had higher mean standard scores than their standalone peers on the LA and math subtests. In addition, economically-disadvantaged students had higher mean standard scores than their non-HS/HISD-PreK counterparts on both Logramos LA and math subtests.

The absence of a group of students who were not enrolled in any prekindergarten or Head Start program make it improbable to arrive at any conclusion on the effects of Head Start or prekindergarten on economically-disadvantaged kindergarten student performance in HISD. Yet that information would be important since Head Start and prekindergarten programs primarily target low-income children and children from disadvantaged backgrounds. Notwithstanding, non-economically-disadvantaged students generally had higher mean standard scores than their economically disadvantaged peers on the Iowa Assessments and Logramos subtest used in this study (Figures 5 and 6).

When Head Start and prekindergarten programs were disaggregated by their Head Start Agencies (Figure 7), dually-enrolled kindergarten students associated with AVANCE, HCDE, and Baker Ripley (NCI), had higher mean standard scores than their standalone peers on the Iowa Assessments ELA subtest. A similar trend was observed for the math subtest. No attempt was made, however, to determine program similarity. This result should, therefore, be interpreted with caution. On both subtests, GCCSA standalone students outperformed their dually-enrolled peers (Figures 7 and 8). It may be necessary to identify the GCCSA factors that buck this trend since it is the expectation that the dual approach would result in higher scores. Dually-enrolled students who were associated with GCCSA, HCDE and Baker Ripley (NCI) had higher mean standard scores than their standalone peers on the Logramos LA subtests (Figure 9). AVANCE, GCCSA, and Baker Ripley (NCI) dually-enrolled students outperformed their standalone peers on the Logramos math subtest (Figure 10).

Economically-disadvantaged HISD kindergarten students who were associated with GCCSA and HCDE had higher mean standard scores than their non-economically-disadvantaged peers on the Iowa Assessments ELA subject (Figure 11). Based on economic status, a similar trend was observed for GCCSA- and HCDE-associated kindergarten students who took the Iowa Assessments math subtest (Figure 11). With respect to Logramos, only HCDE-associated economically-disadvantaged students had a higher mean standard score than their non-economically-disadvantaged peers on the LA subtest. However, economically-disadvantaged students who were associated with AVANCE, GCCSA and HCDE had higher mean standard scores on the Logramos math subtest when compared to their non-economically-disadvantaged peers (Figure 12).

Overall, dually-enrolled students appeared to outperform their standalone peers with few exceptions. Multiple year data, as mentioned earlier, confirm this trend. Dually-enrolled, economically disadvantaged students appeared to also outperform their standalone peers, though not their non-economically-disadvantaged peers. When disaggregated by Head Start affiliated programs, dually-enrolled students had higher mean standard scores on the 2016 ELA and math Iowa Assessments and the LA and math Logramos subtests.

Recommendations

- Given the consistently higher mean standard scores for dually-enrolled students on the both the Iowa Assessments and the Logramos subtests compared to those of students in Head Start Standalone programs, the district should look with favor to expand the dual enrollment of preK students, once the resources for doing so can be identified.
- Dually-enrolled programs should also be expanded because economically-disadvantaged students appear to consistently outperform their Head Start Standalone peers on both Iowa Assessments ELA and math and Logramos LA and math subtests.
- Future studies should include the effects of varying years of prekindergarten and Head Start program exposure on the performance of kindergarten students, and may need to focus as well on the quality of these Head Start and prekindergarten programs and the effect of that quality on students' performance.
- Future studies should attempt to identify indigent economically-disadvantaged students to determine where they access Head Start and prekindergarten programs and to analyze their performances to better target interventions that would assist in improving their kindergarten outcomes and further reduce the performance gaps between programs and agencies.

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Appendix

Table 1. Program Description for Harris County Department of Education (HCDE) Head Start Agency, 2015–2016

	Description	
Service region	HCDE serves Head Start Area I with Head Start services in the eastern half of Harris County. The service area includes the communities in between Highway 59, Interstate 10, and Interstate 45 South. Area I includes the cities of Baytown, Crosby, Deer Park, Humble, Houston, and La Porte. The region covers 788 square miles of land area, which represents 35% of the county's land (U.S. Census Bureau, 2010). ¹	
Average Annual Enrollment	1,230	
Total number of teachers	Number of lead teachers	67
	Number of assistant teachers	79
	Number of collaborating teachers	17
Teacher's average education level	Lead teachers	Associate's Degree
	Assistant teachers	Child Development Associate (CDA) Credential
	Collaborating teachers	Bachelor's Certified
Total number of centers	16	
Service Eligibility	Must be 3 years old by September 1 Live in the HCDE Head Start service delivery area Meet income guidelines	
Services Provided	Head Start is a national program that promotes school readiness by enhancing the social and cognitive development of children through the provision of educational, health, nutritional, social and other services to enrolled children and families.	

Table 1. Program Description for Harris County Department of Education (HCDE) Head Start Agency, 2015–2016 (continued)	
Program benefit to kids/parents/community	The Head Start Program is a program that provides comprehensive early childhood education, health, nutrition, and parent involvement services to low-income children and their families. The program's services and resources are designed to foster stable family relationships, enhance children's physical and emotional well-being, and establish an environment to develop strong cognitive skills.
Challenges	One third of our parents struggle with lack of employment opportunities. 43% of the parents in families served have less than a high school education. This contributes to the barriers of finding a job. Access to public transportation is also a challenge for many families are without vehicles. Families who are unable to obtain services without access to public transportation face an added burden. This is particularly a critical issue in unincorporated areas of our expansive Harris County where city public transportation is nonexistent.
Funding Source	HCDE Head Start is federally funded.
Curriculum	Frog Street Pre-K is a comprehensive, bilingual program that integrates instruction across developmental domains and early learning disciplines. Although the curriculum supports bilingual instructions, HCDE does not have dual language or bilingual classes. HCDE Head Start works to maximize the development and potential of dual language learners and their families by encouraging and supporting the student's first language, as it will assist and augment student's English development and knowledge. Teachers receive ESL and dual language professional development.
Assessment	<ul style="list-style-type: none"> • Frog Street Pre-K Assessment • Observations • Portfolio Collection

Source: Adapted from *Prekindergarten Education Program: Academic performance comparison of Head Start programs, 2015–2016* (HISD, 2015b); <http://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices>.

Table 2. Program Description for Gulf Coast Community Services Association (GCCSA) Head Start Agency, 2015–2016		
	Description	
Overview	<p>For more than five decades, Gulf Coast Community Services Association, Inc. (GCCSA) has been on the front lines of the battlefield to reduce poverty and build economic independence in Harris County.</p> <p>GCCSA administers diverse services and programs designed to eliminate the restraints of poverty and empower individuals and families on their road to economic independence. GCCSA's programs and services: assist families in earning a living wage, individuals in the advancement of their education, and communities in gaining economic security.</p> <p>During its rich 50-year history, GCCSA has administered hundreds of millions of dollars in public funding, serving over half a million under-served individuals in Harris County. As a result, GCCSA has established itself as one of the most experienced community service providers in the gulf coast region and the largest Community Action Agency in the state of Texas.</p> <p>Mission Statement: The Gulf Coast Community Services Association, Inc. engages partners and forges strategic alliances to educate, equip and empower individuals and families in their pursuit of economic independence.</p>	
Service region	GCCSA currently serves over 2,000 children and families in the Southeast Sector of Harris County including the cities of Houston and Pasadena. We operate a total of 1 Early Head Start Center and 20 Head Start Centers, serving as either stand-alone centers or sites that operate in collaboration with local educational partnerships including the Houston Independent School District.	
Average Annual Enrollment	1864 Head Start children & 72 Early Head Start children	
Total number of teachers	Number of lead teachers	100 HS Teachers and 18 EHS Teachers: 78 HS Teachers in HISD/YL Partnerships
	Number of assistant teachers	69 HS TAs: 52 HS TAs in HISD/YL Partnerships
	Number of collaborating teachers	47.5 Collaborating HISD/YL Teachers
Teacher's average education level	Lead teachers	18% Associates, 77% Bachelors, 5% Masters
	Assistant teachers	68% CDA, 19% Associates
	Collaborating teachers	100% Bachelors
Total number of centers	20 HS Centers and 1 EHS Center 15 HS Centers Collaborating with HISD/YL	

Table 2. Program Description for Gulf Coast Community Services Association (GCCSA) Head Start Agency, 2015–2016 (continued)	
Service Eligibility	GCCSA's Head Start Program supports a foundation for healthy development and family well-being, as well as full day learning for preschool-aged children ages 3-5 years old from low-income families. Our Early Head Start Program welcomes pregnant women and children from birth to age 3, from economically-challenged families. We serve children and families, who are at risk and reside in the HS/EHS service areas including children who are economically disadvantaged, receive public assistance (e.g. TANF, SSI), are in foster care, and/or are homeless.
Services Provided	<p>The GCCSA Head Start/ Early Head Start Program (HS/EHS) is a comprehensive, early childhood development program.</p> <p>We endeavor to provide high quality early education to all our enrolled children. We work with partner schools to ensure that our early learners are school-ready. Our HS/EHS Program equips all our children with services such as quality early education, family involvement, health services (i.e. medical, dental and vision exams), family literacy, fatherhood initiatives, mental health and disability, and nutrition. Head Start program options include full day of learning, five (5) days a week following the Houston Independent School District calendar.</p>
Program benefit to kids/parents/community	<p>GCCSA program participants benefit from a wide range of program services provided by the agency. In Head Start and Early Head Start, we believe that parents are the first and most important educators of their children. Head Start provides a variety of Parent Involvement activities and services to enhance parenting skills and education. Parents are also involved in parent committees and elect their peers to serve on the Policy Council to participate in shared decision-making about the HS/EHS program. Fathers benefit from their participation in the Fatherhood Program.</p> <p>The community benefits from the following programs offered by GCCSA Community Services:</p> <ul style="list-style-type: none"> • Adult Literacy and Education – General Equivalency Diploma (GED) and Adult Basic Education (ABE) courses, Vocational & Technology Development tracks, continuing education and vocational training scholarships. • Case Management – Needs Assessment, Financial Coaching & Budgeting, Financial Assistance towards rent and electricity. • Food Pantry
Challenges	<p>Education and/or Job Training: Parents reported that 1) finding quality and affordable education for their children from birth through 5 years of age and 2) finding educational programs to help them learn a trade or profession, to create resume and learn interview skills were their greatest education needs. This information was strongly demonstrated through the 2013-2014 parent survey and community assessment update.</p>

Table 2. Program Description for Gulf Coast Community Services Association (GCCSA) Head Start Agency, 2015–2016 (continued)	
Funding Source	Administration for Children and Families / HHS
Curriculum	<p>GCCSA Head Start teachers and assistant teachers implement Frog Street Pre-K curriculum including the use of Conscious Discipline strategies in partnership with Collaborating HISD and YL teachers. Frog Street Pre-K. GCCSA Head Start teachers and assistant teachers also work in partnership with Collaborating HISD and YL teachers to provide bilingual, dual language and ESL instruction for English Language Learners.</p> <p>At House of Tiny Treasures Partnership with YL and SEARCH, GCCSA Head Start teachers and assistant teachers implement the Regio Emilia curriculum approach including the use of Conscious Discipline strategies.</p>
Assessment	LAP-3 (Learning Accomplishment Profile – 3 rd Revision)

Source: Adapted from *Prekindergarten Education Program: Academic performance comparison of Head Start programs, 2015–2016* (HISD, 2015b); <http://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices>.

Table 3. Program Description of AVANCE Head Start, 2015–2016		
	Description	
Service region	AVANCE-Houston, Inc. provides Early Head Start and Head Start services in Area II of Harris County. This area includes the northwest region bordered by Interstate 10 West, Highway 290, and West of Highway 59 North. The northwest Area II region extends as far north as Cypress, Tomball, and Spring, Texas.	
Average Annual Enrollment	AVANCE's total funded enrollment for Head Start is 1,873 of which 540 are served by its delegate agency. Over 90 percent of families served by AVANCE's Head Start program fall below the federal poverty guidelines. Additionally, the families served are primarily Hispanic and African American.	
Total number of teachers (Head Start only)	Number of lead teachers	72
	Number of assistant teachers	50
	Number of collaborating teachers	60
Teacher's average education level (Head Start only)	Lead teachers	Bachelor's degree
	Assistant teachers	High School with Child Development Associate (CDA)
	Collaborating teachers	Bachelor's degree
Total number of centers	AVANCE-Houston, Inc. operates 13 Head Start centers in Northwest Harris County, Texas. Nine of the thirteen Head Start centers are located within the Houston ISD boundaries. The operation models include stand-alone centers and 2 collaborative school based sites (Browning Elementary and Ketelsen Elementary).	
Service Eligibility	All children must reside within the Area II Head Start boundaries. Children who will be 3-years of age on or before September 1 st and who meet income eligibility as set by the federal poverty guidelines may apply for Head Start. Children with disabilities identified by a local school district may be eligible for Head Start even if they turn three years old after September 1 st . Families are pre-screened and then required to provide documented proof of eligibility.	

Table 3. Program Description of AVANCE Head Start, 2015–2016 (continued)	
Services Provided	<p>AVANCE Houston, Inc. offers a variety of services to the community which includes Head Start/ Early Head Start programs, Parent and Child (Parenting), Healthy Marriage classes, and Adult Education (GED & ESL) classes.</p> <p>Head Start is a national federal program that promotes school readiness by enhancing the social and cognitive development of children through the provision of educational, health, nutritional, social and other services to enrolled children and families. Early Head Start is also a national federal program designed to support pregnant women and the development of infant and toddlers.</p>
Program benefit to kids/parents/community	<p>AVANCE-Houston, Inc. is a non-profit organization that provides child and family education using a holistic approach. Families have the opportunity to engage in programs designed to promote school readiness and help them achieve and maintain self-sufficiency. All of the services provided by AVANCE are free of charge to families and open to its surrounding communities.</p> <p>Families who participate in AVANCE programs gain awareness about the importance of education and self-sufficiency. They participate in classes designed to support the entire family. The Head Start program is instrumental in supporting families because it offers comprehensive services; however, the primary focus of the program is school readiness. Students develop early reading and math skills, as well as social and physical development skills, that they need to be successful in school. Parents engage in their child's development and learning and make progress towards their own personal goals.</p> <p>Head Start recognizes that parent and guardians are the first and most important teachers of their children. Head Start actively encourages participation by family members in all aspects of the program from volunteering in the classrooms to serving as officers on the governing board. In addition, AVANCE further supports Head Start families by giving them priority in accessing its other services. AVANCE's Head Start program has established strong partnerships within the community with health organizations, school districts, libraries, businesses, colleges and universities, financial institutions, and other non-profit community organizations. Partners volunteer their time, services and resources.</p>

Source: Adapted from *Prekindergarten Education Program: Academic performance comparison of Head Start programs, 2015–2016* (HISD, 2015b); <http://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices>.

Table 3. Program Description of AVANCE Head Start, 2015–2016 (continued)	
Challenges	<p>Over the past decade, the population in AVANCE’s service area has grown rapidly, accounting for 75% of the overall growth of Harris County. This growth, though positive, has created a new class of suburban poor in Area II due to the influx of low income minority groups who could not previously afford to live in this once rural, affluent area.</p> <p>Evidence suggests that people living in poverty are very likely to have lower levels of educational and employment attainment, have high stress levels, low access to health and dental care, lack quality housing, and limited transportation. Although various support systems have been created in AVANCE’s service area to address the needs of the families, the accessibility to assistance continues to be limited for several reasons: resources are in short supply, waiting lists are too long, program applications are too complex and lengthy, ineligibility for services, and knowledge about available services is non-existent or limited.</p> <p>AVANCE’s services are designed to support parents’ attainment of education and employment. Twenty Nine (29%) of Head Start parents have less than high school education. At least 64% of parents in Head Start are employed on a part or full-time basis. Many families voice the lack of quality childcare as an obstacle preventing regular employment. AVANCE’s own Head Start program cannot meet the demand for services in Area II; therefore, it consistently maintains an enrollment waitlist.</p>
Funding Source	AVANCE-Houston, Inc. Head Start is federally funded. AVANCE’s other programs are supported through a combination of federal and State funding, and private donations.
Curriculum	Frog Street Pre-K is a comprehensive, bilingual program that integrates instruction across developmental domains and early learning disciplines. The program focuses on both academic development as well as social-emotional development, using differentiated and varying approaches to instruction to meet the needs of all Head Start learners. AVANCE-Houston, Inc. also utilizes the Creative Curriculum Study Starters and Conscious Discipline programs as supplements.
Assessment	AVANCE utilizes the Teaching Strategies Gold Assessment System to measure its children’s progress in mastering developmental skills and achieving school readiness goals. Parents and teachers communicate regularly about the status of children and their individualized goals. AVANCE’s assessment process is aligned to the Head Start Child Development and Early Learning Framework, Texas State Pre-K Guidelines, and local school district’s expectations for students transitioning into kindergarten.

Table 3. Program Description of AVANCE Head Start, 2015–2016 (continued)																																																	
Service Region	<p>Neighborhood Centers Head Start/Early Head Start centers (NCI) are located throughout southwest Harris County.</p> <p>The Head Start and Early Head Start service area contains the neighborhoods bordered by Highway 290 to the Northwest (i.e. Cypress-Fairbanks), Interstate 10 to the West (i.e. Katy), and Highway 288 and the Harris County Line to the South and Southwest. It includes the cities of both Bellaire and Houston and covers 495 square miles of land area (U.S. Census Bureau, Density, 2000).</p> <p>The Head Start/Early Head Start service areas contains the following zip codes:</p> <table border="0"> <tr> <td>77002</td> <td>77053</td> <td>77085</td> </tr> <tr> <td>77005</td> <td>77054</td> <td>77094</td> </tr> <tr> <td>77006</td> <td>77055</td> <td>77095</td> </tr> <tr> <td>77019</td> <td>77056</td> <td>77096</td> </tr> <tr> <td>77024</td> <td>77057</td> <td>77098</td> </tr> <tr> <td>77025</td> <td>77063</td> <td>77099</td> </tr> <tr> <td>77027</td> <td>77071</td> <td>77401</td> </tr> <tr> <td>77030</td> <td>77072</td> <td>77433</td> </tr> <tr> <td>77031</td> <td>77074</td> <td>77449</td> </tr> <tr> <td>77035</td> <td>77077</td> <td>77450</td> </tr> <tr> <td>77036</td> <td>77079</td> <td>77492</td> </tr> <tr> <td>77041</td> <td>77080</td> <td>77493</td> </tr> <tr> <td>77042</td> <td>77081</td> <td>77494</td> </tr> <tr> <td>77043</td> <td>77082</td> <td>77007</td> </tr> <tr> <td>77045</td> <td>77083</td> <td>77004</td> </tr> <tr> <td>77046</td> <td>77084</td> <td></td> </tr> </table>	77002	77053	77085	77005	77054	77094	77006	77055	77095	77019	77056	77096	77024	77057	77098	77025	77063	77099	77027	77071	77401	77030	77072	77433	77031	77074	77449	77035	77077	77450	77036	77079	77492	77041	77080	77493	77042	77081	77494	77043	77082	77007	77045	77083	77004	77046	77084	
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Average Annual Enrollment	<p>Over 90 percent of families served by Neighborhood Centers Head Start/Early Head Start fall below the federal poverty guidelines. Additionally, the families we serve are largely of minority ethnicity. Primarily our minority population is African-American and Hispanic. Annually, our program serves 878 children.</p>																																																

Source: Adapted from *Prekindergarten Education Program: Academic performance comparison of Head Start programs, 2015–2016* (HISD, 2015b); <http://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices>.

Table 4. Program Description of Baker Ripley (Neighborhood Centers, Inc. (NCI)) Head Start, 2015–2016		
	Description	
Total number of teachers	Number of lead teachers	50 (HISD)
	Number of assistant teachers	N/A
	Number of collaborating teachers	50 (Head Start)
Teacher's average education level	Lead teachers	Bachelor & Highly Qualified Certified
	Assistant teachers	N/A
	Collaborating teachers	Bachelor
Total number of centers	11	
Service Eligibility	<p>All children must reside within the Neighborhood Center Head Start/Early Head Start boundaries, as described above. For Head Start, children who will be 3-years of age on or before September 1st and who meet income eligibility guidelines as set by the Federal Government may apply for Head Start. Children with disabilities, identified by a local school district, may be eligible for Head Start even if they turn three years old after September 1st. Families are required to provide supporting documentation of eligibility when they apply for the program.</p>	
Services Provided	<p>Head Start/Early Head Start is a national program that promotes school readiness by enhancing the social and cognitive development of children through the provision of educational, health, nutritional, social and other services to enrolled children and families.</p> <p>In addition, Neighborhood Centers Head Start offers Head Start Intensive Summer Transition and ELA Readiness (HISTARR). This is an intensive four-week summer program that is designed to provide students with additional, intensive academic support to strengthen literacy and mathematical skills necessary for kindergarten readiness.</p>	
Program benefit to kids/parents/community	<p>Neighborhood Centers Head Start/Early Head Start is a school readiness program. Students develop early ELA and math skills, as well as social skills, that they need to be successful in school. Parents engage in their child's development and learning and make progress towards their own betterment.</p> <p>Early Head Start/Head Start recognizes that parent and guardians are the first and most important teachers of their children. Early Head Start/Head Start actively encourages participation by family members in all aspects of the program from volunteering in the classrooms to serving as officers on the governing board. In addition, Early Head Start/Head Start provides many direct services for families. The community supports and nurtures Early Head Start/Head Start in many ways. Partners are libraries, businesses, colleges, fire stations, community agencies and organizations. Partners volunteer their time, services and resources.</p>	

Table 4. Program Description of Baker Ripley (Neighborhood Centers, Inc. (NCI)) Head Start, 2015–2016 (continued)	
Challenges	<p>Most of our parents struggle with lack of employment opportunities. The families we serve often discuss immigration status or a lack of education which creates barriers to getting a respectable job.</p> <p>Access to affordable healthcare is an issue for many of our families in southwest Harris County.</p> <p>Over the past several years, Neighborhood Centers has experienced a rise in the number of immigrant and refugee families seeking services. Only 32% of Neighborhood Centers' Head Start families reported English as their primary language, while more than 60% reported Spanish. Acquiring English language skills, while maintaining home language and culture, poses a special challenge for many of the area's families. To address this need, our Family Development Workers work closely with each family to better identify services that will assist them in reaching their goals.</p>
Funding Source	<p>Neighborhood Centers Head Start/Early Head Start is federally funded. State funds are leveraged to staff highly-qualified, certified teachers in all stand-alone centers.</p>
Curriculum	<p>Frog Street Pre-K is a comprehensive, bilingual program that integrates instruction across developmental domains and early learning disciplines. The program focuses on both academic development as well as social-emotional development, using differentiated and varying approaches to instruction to meet the needs of all Head Start learners. There are nine themes totaling 180 days of instruction and family engagement to support the whole learner. Each lesson provides English and Spanish instruction for ease of teaching in bilingual classrooms. The curriculum was developed by well-known researchers and publishers across the education field, basically a "dream team of early childhood professionals."</p>

Table 4. Program Description of Baker Ripley (Neighborhood Centers, Inc. (NCI)) Head Start, 2015–2016 (continued)

Assessment	<p>Neighborhood Centers Head Start/Early Head Start works with parents, teachers and district partners to establish an ongoing assessment process. The process is aligned to the Head Start Child Development and Early Learning Framework, state early learning guidelines and local school district's expectations for students transitioning into kindergarten. Student's progress is measured based on curriculum expectations, typical development and school readiness goals. NCI utilizes the Teaching Strategies Gold Assessment System to measure its children's progress in mastering developmental skills and achieving school readiness goals.</p> <p>To ensure quality at Neighborhood Centers Head Start/Early Head Start, all programmatic and management areas are regularly reviewed through ongoing monitoring measures. These measures include targeted site visits, report reviews, and an annual self-assessment.</p> <p>The annual self- assessment, modeled after the federal review, allows for continuous improvement. It is an important part of our ongoing monitoring plan for the program. The tool used for our self-assessment and federal review includes over 250 compliance questions in eleven sections of compliance include the following: health services; nutrition services; safe environments; disabilities services; mental health services; family and community partnerships; education and early childhood development; fiscal management; program design and management; and eligibility, recruitment, selection, enrollment, and attendance. Teams are created and over a period of a week, the team review, observe, and analyze data to assess compliance with all regulations and requirements. After the self-assessment an action plan is created to address areas of weakness or findings. The plan is shared with the Policy Council, the Board of Directors, Early Head Start and Head Start staff.</p>
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Source: Adapted from *Prekindergarten Education Program: Academic performance comparison of Head Start programs, 2015–2016* (HISD, 2015b); <http://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices>.

Table 5. Educational and Demographic Attributes of 2016–2017 HISD Kindergarten Students by Their 2015–2016 Prekindergarten Program									
Attribute	Overall Sample	Dually Enrolled		Head Start Standalone		HISD-PreK		Non-HS/HISD Pre-K	
		n	%	n	%	n	%	n	%
			1,609	10.0	592	4.0	8,635	53.0	5,467
Gender	Female	780	48.5	298	50.4	4,306	49.9	2,582	47.2
	Male	829	51.5	294	49.6	4,329	50.1	2,885	52.8
Race and Ethnicity	Black	353	21.9	171	28.9	1,932	22.3	1,329	24.3
	Hispanic	1,260	69.9	406	68.7	6,034	69.9	2,353	43.1
	White	16	1.0	7	1.2	324	3.8	1,126	20.6
At-Risk	No	39	2.4	63	10.6	126	1.5	2,216	40.5
	Yes	1,570	97.6	529	89.3	8,509	98.5	3,251	59.5
Home Language	English	586	36.4	261	44.2	3,970	46.0	3,648	66.7
	Spanish	964	59.9	315	53.3	4,288	49.7	1,372	25.1
	Other	59	3.7	16	4.3	377	4.4	447	8.2
Economically-Disadvantaged	No	91	5.7	42	6.9	1,179	13.7	2,277	41.7
	Yes	1,1518	94.3	550	93.0	7,456	86.4	3,190	58.3
Special Education	No	1,548	96.2	553	93.6	8,297	96.0	5,355	98.0
	Yes	61	3.8	39	6.4	338	3.9	112	2.0

Source: Head Start students lists, 2015–2016, PEIMS, 2015–2017 HISD student databases. Percentages may not total 100 due to rounding.

Table 6. HISD Kindergarten Mean Standard ELA Scores on the 2016 Iowa Assessments by Their 2015–2016 Prekindergarten Program Enrollment Status													
Attributes	Overall Sample	Dually Enrolled			Head Start Standalone			HISD-PreK			Non-HS/HIS Pre-K		
		n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
		697	123.6	8.4	310	122.3	7.7	4,645	124.3	8.2	3,470	125.7	9.9
Gender	Female	344	124.7	8.1	172	123.0	7.2	2,303	124.9	8.3	1,651	126.2	10
	Male	353	122.4	8.5	128	121.4	8.3	2,342	123.7	8.0	1,819	125.2	9.8
Race and Ethnicity	Black	336	124.4	8.8	161	123.6	8.6	1,706	126.4	8.1	1,112	123.1	8.4
	Hispanic	324	123.0	7.9	140	120.8	9.6	2,452	123.1	7.7	1,092	122.9	8.8
	White	10	122.0	6.5	*	*	*	260	129.0	9.4	836	131.7	9.9
At-Risk	No	31	126.3	6.9	52	127.9	7.6	83	124.8	8.1	1,579	130.9	9.5
	Yes	666	123.5	8.4	258	121.1	7.7	4,562	124.3	8.2	1,891	121.3	7.9
Home Language	Spanish	537	124.3	8.3	228	122.9	7.9	3,505	125.0	8.0	2,865	126.5	9.8
	English	107	121.6	8.2	69	119.6	6.4	833	121.0	7.8	255	120.9	8.9
	Other	53	120.9	8.0	13	125.5	8.4	307	124.7	8.8	350	122.4	9.9
Economically-Disadvantaged	No	46	124.2	7.6	20	120.6	8.0	786	127.8	9.5	1,565	130.5	9.6
	Yes	651	123.5	8.4	290	122.4	7.7	3,859	123.6	7.7	1,905	121.7	8.2
Special Education	No	671	123.8	8.3	290	122.5	7.8	4,506	124.5	8.1	3,423	125.7	9.9
	Yes	26	117.5	6.5	20	119.3	6.7	139	119.1	7.7	47	122.5	9.9

Source: Iowa Assessments and Logramos 3, 2016–2017 HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Students had both ELA and Math scores.

Table 7. HISD Kindergarten Mean Standard Math Scores on the 2016 Iowa Assessments by Their 2015–2016 Prekindergarten Program Enrollment Status													
Attributes	Overall Sample	Dually Enrolled			Head Start Standalone			HISD-PreK			Non-HS/HISD Pre-K		
		n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
		697	121.8	9.6	310	120.8	10.7	4,645	123.1	9.5	3,470	123.9	11.6
Gender	Female	344	122.7	9.6	172	120.7	10.8	2,303	123.4	9.5	1,651	124.0	11.5
	Male	353	121.0	9.6	138	120.9	11.1	2,342	122.7	9.6	1,819	123.8	11.6
Race and Ethnicity	Black	336	122.2	10.1	161	122.4	11.6	1,706	122.6	9.4	1,112	120.4	10.0
	Hispanic	324	121.9	9.3	140	119.2	9.5	2,452	122.4	9.1	1,092	121.1	10.4
	White	10	119.4	7.1	*	*	*	260	128.0	10.5	836	130.3	11.3
At-Risk	No	31	126.3	8.3	52	128.31	12.5	83	124.61	8.8	1,579	129.2	10.9
	Yes	666	121.7	9.7	258	119.30	9.7	4,562	123.02	9.6	1,891	119.5	10.1
Home Language	Spanish	537	122.3	9.8	228	121.3	10.6	3,505	123.4	9.4	2,865	124.4	11.4
	English	107	121.1	9.6	69	118.0	9.8	833	121.0	9.2	255	119.9	10.7
	Other	53	118.8	7.6	13	126.9	14.4	307	125.1	10.9	350	123.1	13.1
Economically-Disadvantaged	No	46	121.9	9.0	20	120.9	9.6	786	126.7	10.5	1,565	129.4	10.9
	Yes	697	121.8	9.7	290	120.8	10.8	3,859	122.3	9.2	195	119.4	10.0
Special Education	No	671	122.0	9.6	290	121.2	10.7	4,506	123.2	9.5	3,423	124.0	11.6
	Yes	26	116.5	8.1	20	115.1	8.9	139	117.0	9.2	47	119.8	10.9

Source: Iowa Assessments and Logramos 3, 2016–2017, HISD student databases; Head Start students lists, 2015–2016, PEIMS, 2015–2017 HISD student databases. Students had both ELA and Math scores.

Table 8. HISD Kindergarten Mean Standard LA Scores on the 2016 Logramos by Their 2015–2016 Prekindergarten Program Enrollment Status													
Attribute	Overall Sample	Dually Enrolled			Head Start Standalone			HISD-PreK			Non-HS/HISD Pre-K		
		n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
			882	167.8	15.7	133	165.7	14.7	3291	165.8	15.1	980	161.4
Gender	Female	423	169.3	15.0	62	166.6	14.4	1676	167.3	14.8	468	163.0	14.1
	Male	459	166.5	16.1	71	164.8	15.1	1615	164.3	15.3	512	160.0	14.3
Race and Ethnicity	Black	*	*	*	*	*	*	*	*	*	*	*	*
	Hispanic	875	167.9	15.7	133	165.6	14.7		165.9	15.1	972	161.5	14.3
	White	5	164.6	13.0	*	*	*	*	160.7	11.4	6	152.8	7.4
At-Risk	No	*	*	*	*	*	*	*	*	*	36	169.5	18.4
	Yes	882	167.8	15.7	130	165.7	14.8	3291	165.8	15.1	944	161.1	14.1
Home Language	English	4	180.3	30.2				34	159.0	15.4	9	162.0	22.1
	Spanish	877	167.8	15.6	133	165.6	14.7	3256	165.9	15.1	969	161.4	14.2
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	38	168.5	16.4	7	162.0	11.8	209	165.9	16.2	101	161.5	14.4
	Yes	844	167.8	15.6	126	165.9	14.9	3082	165.8	15.1	879	161.4	14.3
Special Education	No	863	168.2	15.6	127	166.1	14.6	3206	166.1	15.0	970	161.5	14.3
	Yes	19	153.5	12.7	6	156.2	14.6	85	155.7	14.9	10	150.8	4.3

Source: Iowa Assessments and Logramos 3, 2016–2017 HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Students had both ELA and Math scores.

Table 9. HISD Kindergarten Mean Standard Math Scores on the 2016 Logramos by Their 2015–2016 Prekindergarten Program Enrollment Status													
Attribute	Overall Sample	Dually Enrolled			Head Start Standalone			HISD-PreK			Non-HS/HISD Pre-K		
		n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
		882	163.5	16.3	133	161.8	16.5	3291	161.7	15.1	980	156.6	16
Gender	Female	423	164.3	16.3	62	162.8	16.5	1676	162.7	14.5	468	157.0	15.5
	Male	459	162.8	16.3	71	160.8	16.5	1615	160.7	15.6	512	156.2	16.6
Race and Ethnicity	Black	*	*	*	*	*	*	*	*	*	*	*	*
	Hispanic	875	163.5	16.3	133	161.8	16.5		161.7	15.1	972	156.6	16.0
	White	5	168.0	10.0	*	*	*	*	160.8	12.9	6	146.8	18.5
At-Risk	No	*	*	*	*	*	*	*	*	*	36	164.4	18.5
	Yes	882	163.5	16.3	130	161.8	16.6	3291	161.7	15.1	944	156.3	15.9
Home Language	English	4	*	*				34	154.6	15.7	9	159.1	13.7
	Spanish	877	163.5	16.3	133	161.8	16.5	3256	161.8	15.1	969	156.5	16.1
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	38	164.0	19.7	7	161.7	16.3	209	161.0	16.5	101	156.7	16.6
	Yes	844	163.5	16.2	126	161.7	16.5	3082	161.7	15.0	879	156.0	16.0
Special Education	No	863	163.7	16.2	127	162.3	16.1	3206	161.9	15.0	970	156.7	16.0
	Yes	19	157.3	20.0	6	150.5	21.5	85	154.4	14.9	10	144.6	10.9

Source: Iowa Assessments and Logramos 3, 2016–2017, HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Students had both ELA and Math scores.

Table 10. HISD Kindergarten Mean Standard ELA Scores on the 2016 Iowa Assessments by Their 2015–2016 Head Start Agency Affiliation													
Attributes		AVANCE			GCCSA			HCDE			Baker Ripley (NCI)		
		n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
	Overall Sample	163	122.9	8.0	347	124.1	8.1	147	121.6	7.2	350	123.0	9.3
Gender	Female	101	124.2	7.8	188	124.9	8.0	65	123.2	7.5	161	123.7	7.8
	Male	62	120.8	8.0	159	123.1	8.1	82	120.4	8.5	188	122.4	8.7
Race and Ethnicity	Black	50	121.5	9.4	192	125.3	8.7	103	122.9	8.6	152	124.4	8.4
	Hispanic	112	123.6	7.4	152	122.5	6.9	42	118.8	6.2	158	122.2	8.3
	White	*	*	*	*	*	*	*	*	*	12	122.7	6.6
At-Risk	No	9	125.3	8.0	39	127.8	7.6	12	129.1	8.1	23	126.4	6.5
	Yes	154	122.8	8.0	308	123.6	8.0	135	121.0	7.8	327	122.8	8.4
Home Language	Spanish	132	123.5	8.3	296	124.4	8.1	127	122.4	8.3	210	124.1	8.1
	English	31	120.6	6.5	49	121.7	7.0	19	116.6	4.7	77	121.4	8.6
	Other	*	*	*	*	*	*	*	*	*	63	121.4	8.0
Economically-Disadvantaged	No	14	122.9	7.1	18	122.2	5.7	5	117.6	8.4	29	124.7	8.9
	Yes	149	122.9	8.1	329	124.2	8.2	142	121.8	8.1	321	122.9	8.2
Special Education	No	156	123.3	7.9	328	124.4	8.0	138	121.9	8.2	339	123.1	8.4
	Yes	7	115.3	7.7	19	119.1	7.3	9	117.1	5.6	11	119.6	5.2

Source: Iowa Assessments and Logramos 3, 2016–2017, HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Students had both ELA and Math scores.

Table 11. HISD Kindergarten Mean Standard Math Scores on the 2016 Iowa Assessments by Their 2015–2016 Head Start Agency Affiliation													
Attributes	Overall Sample	AVANCE			GCCSA			HCDE			Baker Ripley (NCI)		
		n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
		163	121.3	9.5	347	122.4	10.4	147	118.9	10.7	350	121.9	9.3
Gender	Female	101	121.3	9.1	188	123.1	10.5	65	120.4	10.9	162	121.9	9.2
	Male	62	121.2	10.3	159	121.5	10.2	82	117.7	10.4	188	121.8	9.5
Race and Ethnicity	Black	50	120.8	10.3	92	122.8	11.2	103	120.0	11.1	152	123.6	9.3
	Hispanic	112	121.5	9.2	112	121.9	9.4	42	116.4	9.3	158	121.1	9.4
	White	*	*	*	*	*	*	*	*	*	*	*	*
At-Risk	No	90	127.0	7.3	39	127.1	12.7	12	126.8	12.7	23	125.8	9.5
	Yes	154	120.9	9.6	308	121.8	9.9	135	118.2	10.2	327	121.6	9.3
Home Language	Spanish	132	121.9	8.9	296	122.5	10.5	127	119.6	10.9	210	122.7	9.3
	English	31	118.4	11.5	49	121.0	8.8	19	113.9	7.9	77	121.2	9.6
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	14	122.2	8.6	18	120.8	8.6	5	115.2	11.8	20	122.9	9.2
	Yes	149	121.2	9.6	329	122.5	10.5	142	119.0	10.7	321	121.8	9.4
Special Education	No	156	121.5	9.4	328	122.7	10.4	138	119.2	10.7	339	122.0	9.4
	Yes	7	115.3	11.0	19	116.4	8.1	9	113.8	8.8	11	117.1	7.6

Source: Iowa Assessments and Logramos 3, 2016–2017, HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Students had both ELA and Math scores.

Table 12. HISD Kindergarten Mean Standard LA Scores on the 2016 Logramos by Their 2015–2016 Head Start Agency Affiliation													
Attributes	Overall Sample	AVANCE			GCCSA			HCDE			Baker Ripley (NCI)		
		n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
			129	160.3	12.1	298	169.7	17.1	80	165.7	13.9	508	168.4
Gender	Female	63	162.5	12.2	143	171.7	15.6	39	166.3	14.1	240	169.5	14.8
	Male	66	158.2	11.8	155	167.9	18.2	41	165.1	13.9	268	167.5	15.3
Race and Ethnicity	Black	*	*	*	*	*	*	*	*	*	*	*	*
	Hispanic	127	160.2	12.2	297	169.7	17.1	79	166.0	13.8	505	168.4	15.1
	White	*	*	*	*	*	*	*	*	*	*	*	*
At-Risk	No	*	*	*	*	*	*	*	*	*	*	*	*
	Yes	129	160.3	12.1	296	169.8	17.1	80	165.7	13.9	507	168.4	15.1
Home Language	English	*	*	*	*	*	*	*	*	*	*	*	*
	Spanish	129	160.3	12.1	296	169.6	16.8	77	165.6	14.1	508	168.4	15.1
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	5	165.0	8.5	17	171.7	19.3	7	156.0	11.3	16	168.8	13.5
	Yes	124	160.1	12.3	281	169.5	17.0	73	166.6	13.9	492	168.4	15.1
Special Education	No	122	160.7	12.1	292.0	170.1	17.0	75.0	166.5	13.7	501.0	168.5	15.0
	Yes	7	153.4	12.1	6.0	148.7	9.2	5.0	153.4	12.4	7.0	160.0	16.7

Source: Iowa Assessments and Logramos 3, 2016–2017, HISD student databases; Head Start students lists, 2015–2016; PEIMS, 2015–2017 HISD student databases. Students had both ELA and Math scores.

Table 13. HISD Kindergarten Mean Standard Math Scores on the 2016 Logramos by Their 2015–2016 Head Start Agency Affiliation													
Attributes	Overall Sample	AVANCE			GCCSA			HCDE			Baker Ripley (NCI)		
		n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
			129	157.4	11.6	298	167.9	18.3	80	160.1	14.3	508	162.5
Gender	Female	63	159.1	11.0	143	168.9	18.4	39	162.1	13.9	240	163.0	16.0
	Male	66	155.9	12.0	155	167.4	18.2	41	158.3	14.6	268	162.0	15.6
Race and Ethnicity	Black	*	*	*	*	*	*	*	*	*	*	*	*
	Hispanic	127	157.4	11.7	297	168.1	18.3	79	160.1	14.4	505	162.5	15.8
	White	*	*	*	*	*	*	*	*	*	*	*	*
At-Risk	No	*	*	*	*	*	*	*	*	*	*	*	*
	Yes	129	157.4	11.6	296	168.2	18.3	80	160.1	14.3	507	162.5	15.8
Home Language	English	*	*	*	*	*	*	*	*	*	*	*	*
	Spanish	129	157.4	11.6	296	168.0	18.2	77	160.0	14.5	508	162.5	15.8
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	5	153.0	16.4	17	167.6	23.6	7	159.0	19.2	16	164.7	13.7
	Yes	124	157.6	11.4	281	167.9	17.9	73	160.2	13.9	492	162.4	15.8
Special Education	No	122	157.7	11.8	292	168.4	18.2	75	160.9	14.3	501	162.4	15.4
	Yes	7	152.0	3.4	6	152.7	17.7	5	147.8	8.4	7	167.4	32.6

Source: Iowa Assessments and Logramos 3, 2016–2017, HISD student databases; Head Start students lists, 2015–2016, PEIMS, 2015–2017 HISD student databases. Students had both ELA and Math scores.