MEMORANDUM September 9, 2015

TO: Board Members

FROM: Terry B. Grier, Ed.D.
Superintendent of Schools

SUBJECT: **PREKINDERGARTEN EDUCATION PROGRAM: ACADEMIC PERFORMANCE COMPARISON OF HEAD START PROGRAMS, 2014–2015**

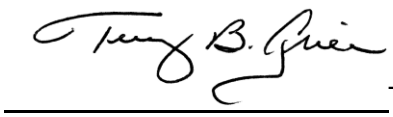
CONTACT: Carla Stevens, (713) 556-6700

Attached is the evaluation report examining the 2014–2015 kindergarten performance of students enrolled in Head Start in 2013–2014. HISD collaborates with four federally funded Head Start agencies: AVANCE, Gulf Coast Community Services Association (GCCSA), Harris County Department of Education (HCDE), and Neighborhood Centers, Inc. (NCI). The purpose of this evaluation was to examine the effect of the Head Start programs on students' academic performance using the 2014–2015 kindergarten IOWA and Logramos English Language Arts (ELA) and mathematics subtests.

The most notable findings of this evaluation were: a) the performance of students who were dually-enrolled in HISD and one of the four Head Start programs outperformed students who were enrolled in standalone programs on the 2014–2015 kindergarten Logramos ELA and mathematics subtests, but their performance on the 2014–2015 kindergarten IOWA ELA and mathematics subtests were comparable; b) there was little variation between Head Start programs on the 2014–2015 kindergarten ELA and mathematics subtests.

Administrative Response:
The Early Childhood Department will examine through professional collaboration with each Head Start agency the factors that influence their success. Program quality, which includes policy, funding allocations, and teacher qualifications will be considered. In addition, program oversight encompassing the curriculum, comprehensive services, level of monitoring, and children served will be analyzed to understand whether these components contribute to their differences. The department will also evaluate the extent to which these disparities affect the variance in performance results.

Should you have any questions or require any further information, please contact me or Carla Stevens in the Department of Research and Accountability, at 713-556-6700.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HOUSTON INDEPENDENT SCHOOL DISTRICT

RESEARCH

Educational Program Report

PREKINDERGARTEN EDUCATION PROGRAM: ACADEMIC PERFORMANCE COMPARISON OF HEAD START PROGRAMS, 2014-2015

HISD | Research and Accountability

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PREKINDERGARTEN EDUCATION PROGRAM: ACADEMIC PERFORMANCE COMPARISON OF HEAD START PROGRAMS, 2014–2015

Executive Summary

The goal of Head Start is to develop the cognitive and social-emotional skills of children from low-income families to prepare them to succeed in kindergarten and beyond. Presently, Houston Independent School District (HISD) collaborates with four federally-funded Head Start agencies: AVANCE, Gulf Coast Community Services Association (GCCSA), Harris County Department of Education (HCDE), and Neighborhood Centers, Inc. (NCI). Each Head Start agency provides not only high-quality educational programs to 3- or 4-year-old low income children, but also offers access to health, dental, and other support services in order to meet families' needs. The purpose of this evaluation was to examine the effect of the Head Start programs on students' academic performance using the 2014–2015 kindergarten IOWA and Logramos English Language Arts (ELA) and mathematics subtests.

Highlights

- Students who were dually-enrolled obtained comparable mean standard scores to students who were enrolled in standalone programs as well as the district's mean standard score on both 2014–2015 IOWA ELA and mathematics subtests.
- On both 2014–2015 Logramos ELA and mathematics subtests, students who were dually-enrolled scored higher than students enrolled in standalone programs and the district mean standard score. The independent two-sample t-tests shows that the standard score differences between two groups on both subtests were statistically significant.
- Economically-disadvantaged students who were dually-enrolled obtained comparable mean standard scores to students who were enrolled in standalone programs as well as the district mean standard score for the economically-disadvantaged students on both 2014–2015 IOWA ELA and mathematics subtests.
- Economically-disadvantaged students who were dually-enrolled obtained a higher mean standard scores than students who were enrolled in standalone programs and the district mean standard score for the economically-disadvantaged students on both 2014–2015 Logramos ELA and mathematics subtests. The standard score differences between two groups on both subtests were statistically significant.
- Students from four Head Start agencies obtained comparable mean standard scores on both 2014–2015 kindergarten IOWA ELA and mathematics subtests, but their mean standard scores were lower than the district mean standard score.
- Students from NCI, GCCSA and AVANCE obtained higher mean standard scores than the district mean standard score on both 2014–2015 kindergarten Logramos ELA and mathematics subtests.
- Economically-disadvantaged students from GCCSA obtained slightly higher IOWA mean standard scores than the district mean standard score for the economically-disadvantaged students on the 2014–2015 IOWA ELA subtest.

- Economically-disadvantaged students from GCCSA and NCI obtained higher mean standard scores than the district mean standard score for the economically-disadvantaged students on the 2014–2015 IOWA mathematics subtest.
- Economically-disadvantaged students from NCI obtained the highest mean standard score, which was higher than the district mean standard score for the economically-disadvantaged students on the 2014–2015 kindergarten Logramos ELA subtest.
- Economically-disadvantaged students from NCI, AVANCE and GCCSA obtained slightly higher mean standard scores than the district mean standard score for economically-disadvantaged students on both 2014–2015 kindergarten Logramos mathematics subtest.

Recommendations

1. The Early Childhood Curriculum Department and the Research and Accountability Department should continue to work with the Head Start collaboratives to develop additional research and program evaluation questions that further enhance our understanding of the performance differences between and within Head Start programs. Understanding what factors contribute to performance differences across programs can help to identify the types of interventions that should be implemented to enhance student performance.
2. Only 40% of students provided by the four Head Start agencies can be identified in the HISD database by using either social security number (SSN) or by a composite of last name, first name, and date of birth, depending on the amount of information provided by the Head Start agency. During the data collection phase this year, only AVANCE provided students' SSN. In the future, the collaborative should develop a way to track students into HISD schools.

Administrative Response

The Early Childhood Department will examine through professional collaboration with each Head Start agency the factors that influence their success. Program quality, which includes policy, funding allocations, and teacher qualifications will be considered. In addition, program oversight encompassing the curriculum, comprehensive services, level of monitoring, and children served will be analyzed to understand whether these components contribute to their differences. The department will also evaluate the extent to which these disparities affect the variance in performance results.

Introduction

Head Start programs are publicly-funded and managed at the local level but must adhere to federal quality guidelines. These guidelines suggest that Head Start agencies provide a learning environment that promotes cognitive and social-emotional development to enhance the school-readiness of low-income students. In addition, Head Start agencies are expected to provide a wide array of social services to assist families. The Head Start programs are expected to: 1) allow students to experience a more integrated school day with in-depth study of prek curriculum, 2) promote school readiness, and 3) contribute to the narrowing of achievement gaps related to school readiness at the start of kindergarten and subsequent grade levels (Gormley, Gayer, & Phillips, 2005). Presently, Houston Independent School District (HISD) collaborates with four federally-funded Head Start agencies: AVANCE, Gulf Coast Community Services Association (GCCSA), Harris County Department of Education (HCDE), and Neighborhood Centers, Inc. (NCI). Each Head Start agency provides not only high quality educational programs to 3- or 4-year-old low income children, but also provides access to health, dental, and other support services in order to meet families' needs (**Appendix C-Tables 1-4**, p. 31-41).

Literature Review

Past evaluations of Head Start programs suggest that a Head Start intervention can have both short-term and long-term benefits for children. For example, short-term benefits include improvements in cognitive and achievement outcomes (Shager et al., 2013). Longer-term benefits of Head Start include a reduction in the likelihood of special education placement, and a reduction in the incidence of early grade retention. In addition, some studies have found that a quality Head Start intervention increases the likelihood of high school graduation (Currie, 2001; Currie & Neidell, 2007).

Variations in findings regarding the benefits of Head Start sometimes have to do with methodological differences and the selection of comparison groups (Zhai, Brooks-Gunn, & Waldfogel, 2011; Shager et al., 2013). Previous studies have compared students who received a formal preschool education to all other students who did not receive a formal preschool education without controlling for demographic characteristics, such as economic status, that influence student performance (Gormley et al., 2005). Given the negative effects of low socio-economic status on academic outcomes (e.g., Aikens & Barbarin, 2008; Brooks-Gunn, 2003; Chatterji, 2006), the current evaluation has taken into consideration students' demographic characteristics when comparing the Head Start students' performance on the IOWA and Logramos tests.

The four Head Start agencies reviewed in this report are AVANCE, GCCSA, HCDE, and NCI. The Head Start students can be categorized into two categories based on their enrollment status in Head Start programs, which are dually enrolled or standalone. These two types of Head Start class models will also be reviewed in this report. Dually-enrolled children are those who dually enrolled in Head Start and Houston ISD classrooms located on an HISD campus. Standalone children are those who enrolled in one of the Head Start centers that is operated solely by one of the agencies (AVANCE, GCCSA, HCDE, and NCI) with no HISD affiliation or partnership in place for classroom instruction.

Scope of the Evaluation

Purpose of the Study

This evaluation was to examine the impact of Head Start on student academic performance. First, two class models (dully enrolled and standalone) were compared to examine the effect of class models on Head Start students' academic performance. Second, students' performance on the 2014–2015 kindergarten IOWA and Logramos mathematics and ELA subtests were compared by Head Start agency.

Evaluation Questions

The following questions guided the study:

1. What were the demographic characteristics of Head Start students who were enrolled in 2013–2014?
2. What were the 2014–2015 kindergarten performance differences among Head Start students who were dually-enrolled versus students enrolled in standalone programs in one of the four Head Start agencies?
3. What were the 2014–2015 kindergarten performance differences among Head Start economically-disadvantaged students who were dually-enrolled versus students enrolled in standalone programs in one of the four Head Start agencies?
4. What were the 2014–2015 kindergarten performance differences among the four Head Start agencies (AVANCE, GCCSA, HCDE, and NCI) on the 2014–2015 IOWA and Logramos tests?
5. What were the kindergarten performance differences of economically-disadvantaged Head Start students among the four Head Start agencies (AVANCE, GCCSA, HCDE, and NCI) on the 2014–2015 IOWA and Logramos tests?

Methods

Data Collection and Analysis

Measure

Student performance data were collected from the following assessments: IOWA Achievement Test (IOWA) and the Logramos 3rd edition (Logramos) ELA and mathematics subtests.

- The IOWA assesses students' academic achievement in various academic subjects across nine grade levels (kindergarten through grade 8).
- The Logramos is a standardized achievement test in Spanish, and is used to assess the level of content mastery for students who receive instruction in Spanish. The Logramos assesses students' academic achievement in the same content areas as the IOWA (i.e., ELA and mathematics); however, the Logramos is not a translation of the IOWA.
- Both IOWA and Logramos are norm-referenced assessments. Kindergarten students take either IOWA or Logramos in the December of students' kindergarten year in HISD. In order to compare students' scores from subgroups, the standard score in both IOWA and Logramos were used for all subtests in this evaluation.

Data Analyses

- The academic performance of the 2014–2015 HISD kindergarten students enrolled in the four Head Start agencies in 2013–2014 was analyzed in this evaluation. **Appendix A-Table 1** (p. 21) shows a breakdown of the demographic characteristics of the 2014–2015 HISD kindergarteners by two class models. **Appendix B-Table 1** (p. 26) provides a breakdown of the demographic characteristics of the 2014–2015 HISD kindergarteners by the Head Start program they attended in 2013–2014. The IOWA and Logramos ELA and mathematics standard scores of 2014–2015 kindergarten students across the Head Start agencies and two class models were compared to examine the impact of Head Start on students' academic performance at the programlevel and student groups level.
- Economic status has a strong effect on student achievement (Aikens & Barbarin, 2008). Other factors, such as limited English proficiency (LEP) and at-risk status are also associated with student performance. Thus, student groups were disaggregated by ethnicity, gender, economically-disadvantaged, special education placement, limited English proficiency (LEP), and at-risk status to control for the effect of student demographic characteristics on the students' academic performance on the kindergarten IOWA and Logramos ELA and mathematics subtests.

Sample

- Each of the four Head Start agencies provided a list of students enrolled in their programs in 2013–2014. The students were matched to the PEIMS 2014–2015 database of HISD kindergarteners by either social security number or by a composite of last name, first name, and date of birth, depending on the amount of information provided by the Head Start agencies. For AVANCE, 400 students were identified as 2014–2015 HISD kindergarteners; for GCCSA, 555 students; for HCDE, 188 students; and for NCI, 709 students.

Data Limitations

- This report has several limitations. The first limitation is that the data provided by the Head Start agencies did not always contain a unique identifier for their students. Consequently, the less reliable method of linking students from Head Start to their HISD kindergarten enrollment data was used with their first name, last name, and date of birth. For this reason, it is possible that some students who attended Head Start were not captured as enrolled in HISD in this analysis. Approximately 40 percent of students who attended a local Head Start program in 2013–2014 were identified as attending HISD kindergarten in 2014–2015.

Results

What were the demographic characteristics of Head Start students who were enrolled in 2013–2014?

- Appendix A-Table 1 (p. 21) shows the demographic characteristics of Head Start students by the two Head Start class models. The students from the two Head Start class models were comparable with respect to gender, economically-disadvantaged status, and at-risk status. Notably, in both groups, the majority of students were economically-disadvantaged (around 90%), and at-risk (around 95%).

- There were some differences in the demographic characteristics of the students from the two Head Start class models. The percentage of LEP students from the dually-enrolled classrooms was higher than standalone classrooms (60.4% vs. 50.0%). The majority of dually-enrolled students were Hispanic (76.3%), while the percentage of Hispanic students from standalone classrooms were 60.8%.

- Appendix B-Table 1 (p. 26) shows the demographic characteristics of Head Start students by the four Head Start agencies. The students from the four Head Start agencies were comparable with respect to gender, economically-disadvantaged status, and special education placement. Notably, in four Head Start agencies, the majority of students (over 90%) were economically-disadvantaged, over 95% were at-risk, and over 60% were Hispanic.

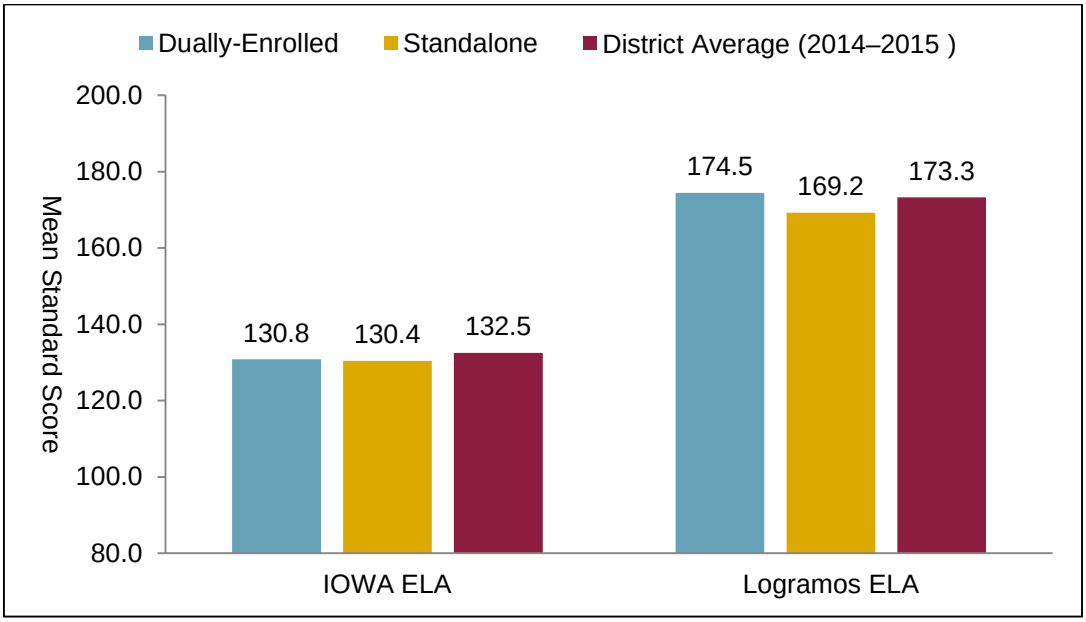
- There are some differences in the demographic characteristics of the students from the four Head Start agencies. AVANCE had the highest percentage of Hispanic students (82.5%). NCI had the highest percentage of LEP students (72.6%).

What were the 2014–2015 kindergarten performance differences among Head Start students who were dually-enrolled versus students enrolled in standalone programs in one of the four Head Start agencies?

- IOWA and Logramos ELA mean standard scores for kindergarten students who attended one of the four Head Start agencies' dually-enrolled or standalone programs in 2013–2014 are displayed in **Figure 1** (p. 7). **Appendix A-Table 2** (p. 22) and **Appendix A-Table 4** (p. 24) present the number of students who took the IOWA and Logramos ELA subtests in 2014–2015, and the means and standard deviations of the standard scores by ethnicity, gender, economically-disadvantaged, special education placement, LEP, and at-risk status.

IOWA and Logramos ELA

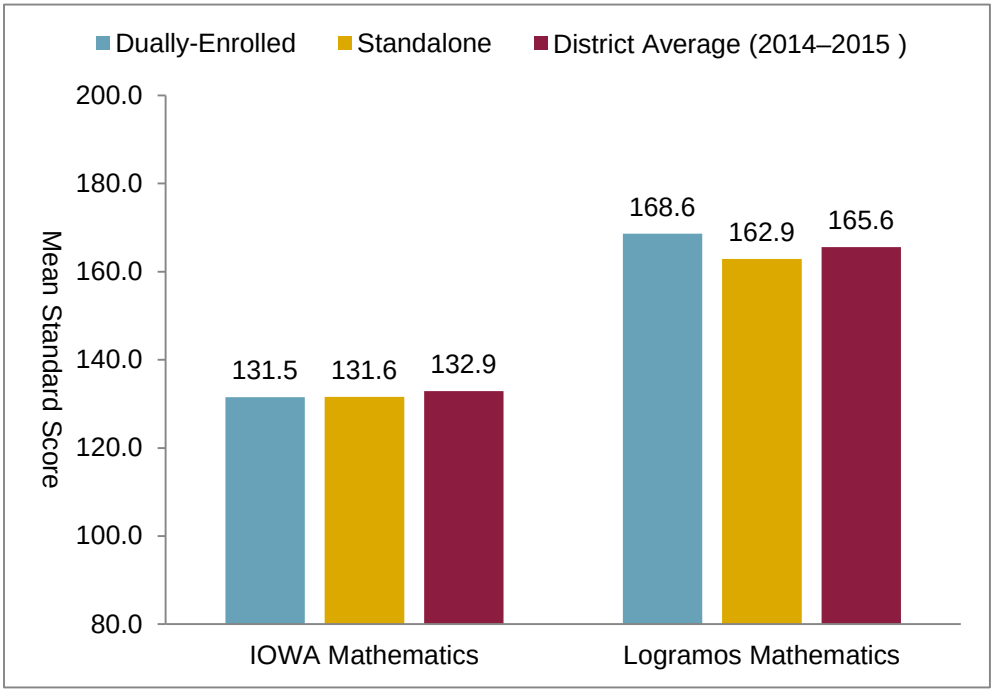
Figure 1. Mean standard scores on the 2014–2015 IOWA and Logramos ELA subtests for HISD kindergarten students by Head Start enrollment status.



- Students who were dually-enrolled (M = 130.8) obtained a comparable mean standard score to students who were enrolled in standalone programs (M = 130.4) on the 2014–2015 IOWA ELA subtest (Figure 1).
- Students who were dually-enrolled in one of the four Head Start programs in 2013–2014 scored higher on the 2014–2015 Logramos ELA subtest compared to students enrolled in standalone programs. The independent two-sample t-tests shows that the standard score difference between two groups was statistically significant with p = 0.004.
- Students who were dually-enrolled (M = 130.8) and who were enrolled in a standalone program (M = 130.4) obtained lower mean standard score than the district mean standard score (M = 132.5) on the 2014–2015 kindergarten IOWA ELA subtest (Figure 1).
- Students who were dually-enrolled (M = 174.5) obtained a slightly higher mean standard score than the district mean standard score (M = 173.3) while the students who were enrolled in a standalone program (M = 169.2) scored lower than the district on the 2014–2015 kindergarten Logramos ELA subtest (Figure 1).

IOWA and Logramos Mathematics

Figure 2. Mean standard scores on the 2014–2015 IOWA and Logramos mathematics subtests for HISD kindergarten students by Head Start enrollment status.

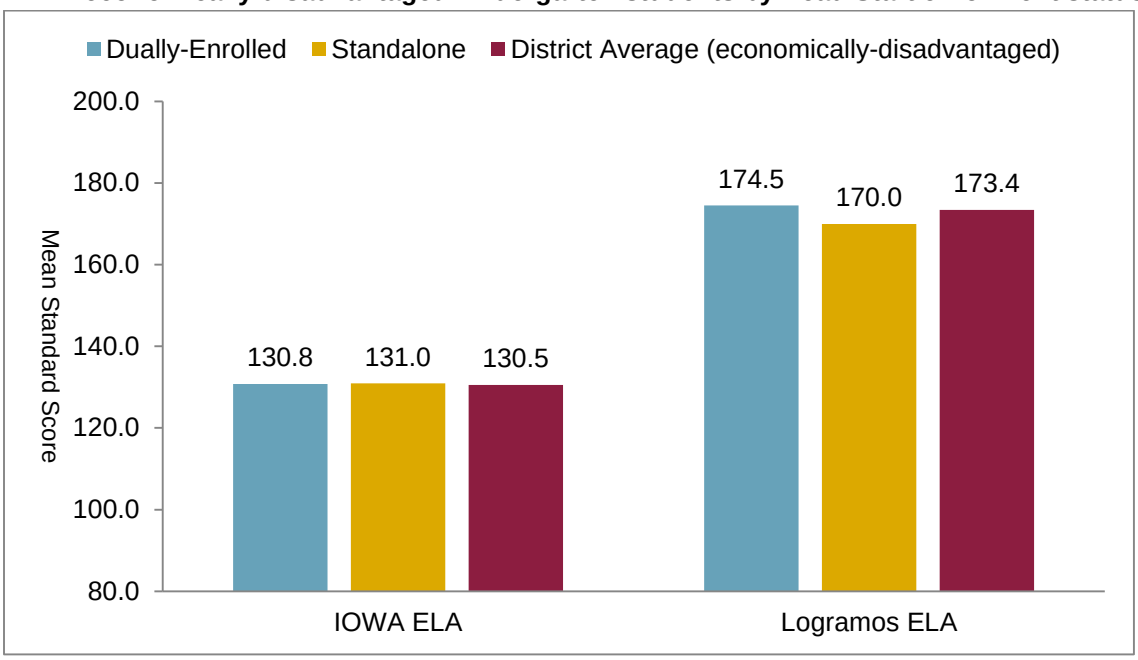


- IOWA and Logramos mathematics mean standard scores for kindergarten students who attended one of the four Head Start agencies' dually-enrolled or standalone programs in 2013–2014 are displayed in **Figure 2**. **Appendix A-Table 3** (p. 23) and **Appendix A-Table 5** (p. 25) present the number of students who took the IOWA and Logramos mathematics subtest in 2014–2015, and the means and standard deviations of the standard scores by ethnicity, gender, economically-disadvantaged, special education placement, LEP, and at-risk status.
- Students who were dually-enrolled (M = 131.5) obtained a comparable mean standard score to students who were enrolled in standalone programs (M = 131.6), but they scored lower than the district mean standard score (M = 132.9) on the 2014–2015 IOWA mathematics subtest (Figure 2).
- Students who were dually-enrolled in one of the four Head Start programs in 2013–2014 scored higher on the 2014–2015 Logramos mathematics subtest compared to students enrolled in standalone programs. The independent two-sample t-tests shows that the standard score difference between two groups was statistically significant with p = 0.021.
- Students who were dually-enrolled (M = 168.6) obtained a higher mean standard score than the district mean standard score (M = 165.6) on the 2014–2015 kindergarten Logramos mathematics subtest (Figure 2).

What were the 2014–2015 kindergarten performance differences among Head Start economically-disadvantaged students who were dually-enrolled versus students enrolled in standalone programs in one of the four Head Start agencies?

IOWA and Logramos ELA

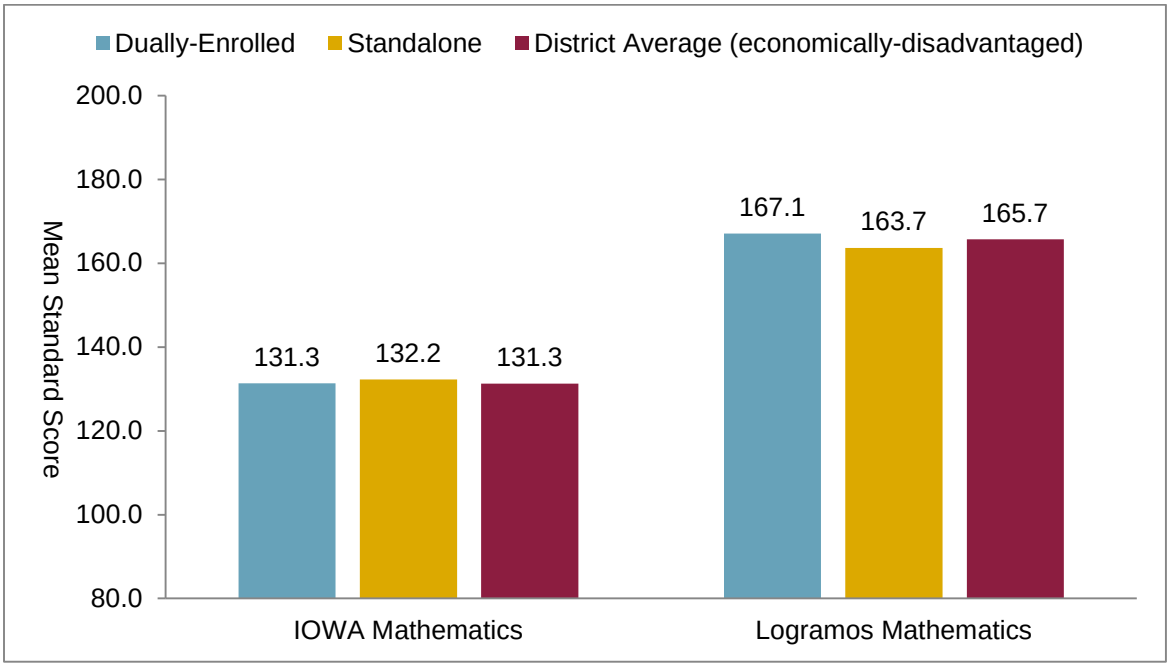
Figure 3. Mean standard scores on the 2014–2015 IOWA and Logramos ELA subtest for HISD economically-disadvantaged kindergarten students by Head Start enrollment status.



- IOWA and Logramos ELA mean standard scores for economically-disadvantaged kindergarten students who attended one of the four Head Start agencies' dual or standalone programs in 2013–2014 are displayed in **Figure 3**. Appendix A-Table 2 (p. 22) and Appendix A-Table 4 (p. 24) presents the number of economically-disadvantaged students who took the IOWA and Logramos ELA subtests in 2014–2015, and the means and standard deviations of the standard scores by Head Start enrollment status.
- On the 2014–2015 IOWA ELA subtest, economically-disadvantaged students who were dually-enrolled (M = 130.8) obtained a comparable mean standard score as students who were enrolled in standalone programs (M = 131.0) as well as the district's mean standard score for economically-disadvantaged students (M = 130.5) (Figure 3).
- Economically-disadvantaged students who were dually-enrolled (M = 174.5) in one of the four Head Start programs in 2013–2014 scored higher on the 2014–2015 Logramos ELA subtest compared to students enrolled in standalone programs (M = 170.0). The independent two-sample t-tests shows that the standard score difference between two groups was statistically significant with p = 0.004 (Figure 3).
- Economically-disadvantaged students who were dually-enrolled (M = 174.5) obtained a higher mean standard score than the district mean standard score for economically-disadvantaged students (M = 173.4) on the 2014–2015 kindergarten Logramos ELA subtest (Figure 3), but the difference was not statistically significant.

IOWA and Logramos Mathematics

Figure 4. Mean NCE scores on the 2014–2015 IOWA and Logramos mathematics subtest for HISD economically-disadvantaged kindergarten students by Head Start enrollment status.



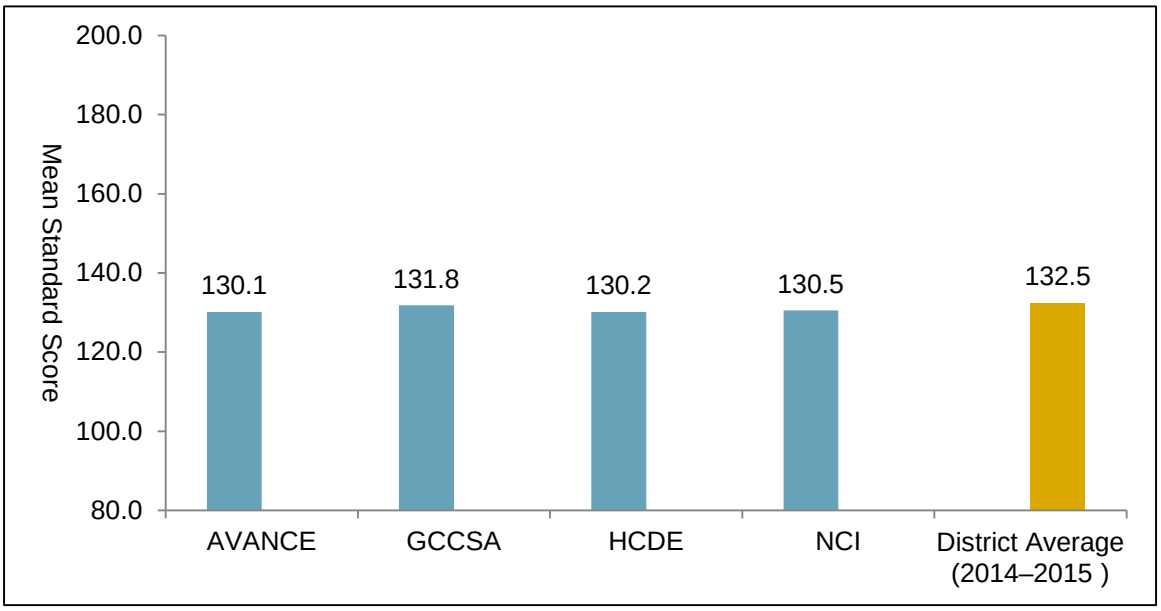
- IOWA and Logramos mathematics mean standard scores for kindergarten students who attended one of the four Head Start agencies' dual or standalone programs in 2013–2014 are displayed in **Figure 4**. Appendix A-Table 3 (p. 23) and Appendix A-Table 5 (p. 25) present the number of economically-disadvantaged students who took the IOWA and Logramos mathematics subtests in 2014–2015, and the means and standard deviations of the standard scores by Head Start enrollment status.
- On the 2014–2015 IOWA mathematics subtest, economically-disadvantaged students who were dually-enrolled (M = 131.3) obtained a comparable mean standard score as students who were enrolled in standalone programs (M = 132.2) as well as the district's mean standard score for economically-disadvantaged students (M = 131.3) (Figure 4).
- Economically-disadvantaged students who were dually-enrolled (M = 167.1) in one of the four Head Start programs in 2013–2014 scored higher on the 2014–2015 Logramos mathematics subtest compared to the economically-disadvantaged students who were enrolled in a standalone program (M = 163.7). The independent two-sample t-tests shows that the standard score difference between two groups was statistically significant with p = 0.004.
- Economically-disadvantaged students who were dually-enrolled (M = 167.1) obtained a higher mean standard score than the district mean standard score for economically-disadvantaged students (M = 165.7) on the 2014–2015 kindergarten Logramos mathematics subtest (Figure 4).

What were the kindergarten performance differences among the four Head Start Agencies (AVANCE, GCCSA, HCDE, and NCI) on the 2014–2015 IOWA and Logramos tests?

- The following series of analyses reflect performance by agency. **Appendix D** (pp. 42-52) presents results by agency location.

IOWA ELA

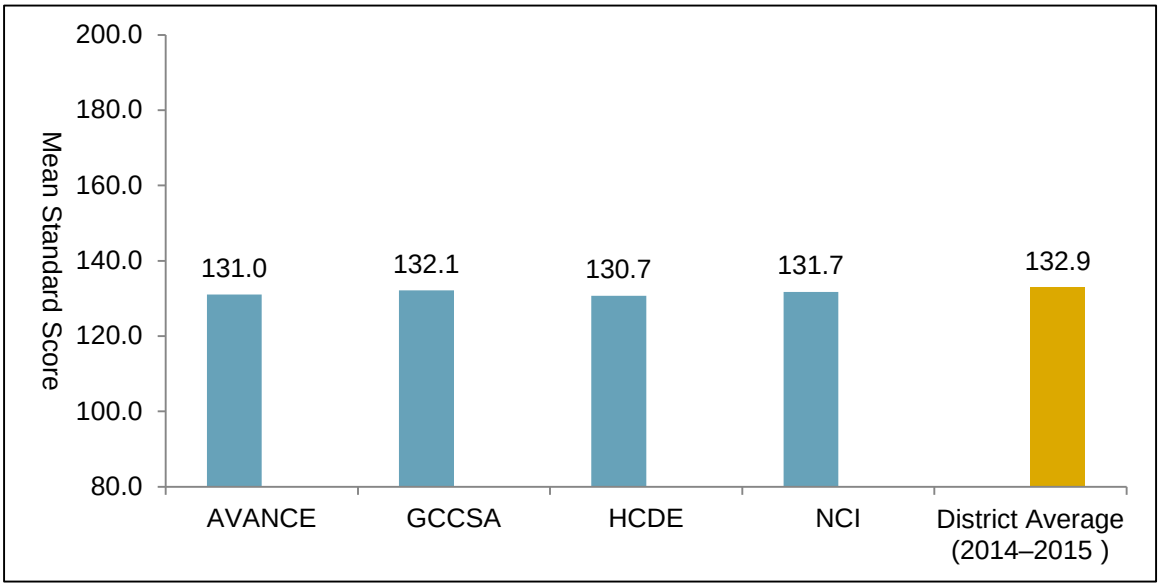
Figure 5. Mean standard scores on the 2014–2015 IOWA ELA subtest by Head Start agency.



- IOWA ELA mean standard scores for students who attended Head Start in 2013–2014 are displayed in **Figure 5**. **Appendix B-Table 2** (p. 27) presents the number of students who took the IOWA ELA subtest in 2014–2015, the means and standard deviations of the standard scores by the four Head Start agencies and by student groups (ethnicity, gender, economically-disadvantaged, special education placement, limited English proficiency (LEP), and at-risk status).
- Students from the four Head Start agencies obtained a slightly lower mean standard scores than the district mean standard score (M = 132.5) on the 2014–2015 kindergarten IOWA ELA subtest (Figure 5).
- Students from four Head Start agencies obtained comparable mean standard score on the 2014–2015 kindergarten IOWA ELA subtest. The ANOVA test shows that the mean standard score differences among the four agencies were not statistically significant with p = 0.13.

IOWA Mathematics

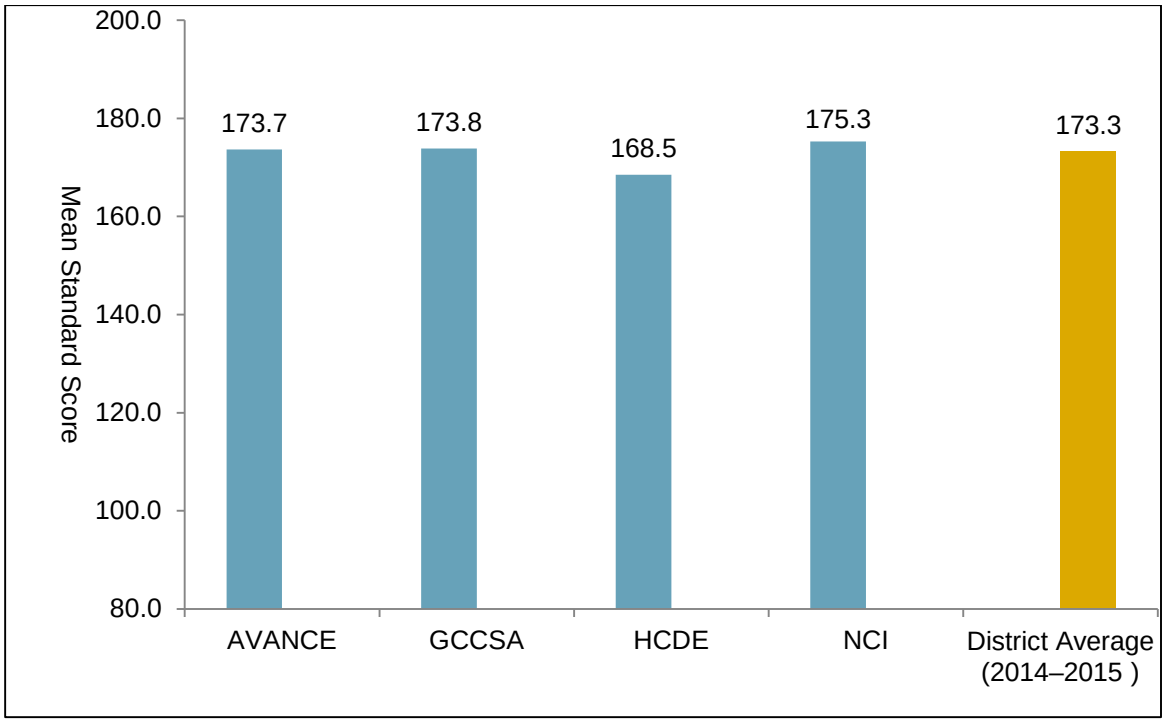
Figure 6. Mean standard scores on the 2014–2015 IOWA Mathematics subtest by Head Start agency.



- IOWA mathematics mean standard scores for students who attended Head Start in 2013–2014 are displayed in **Figure 6**. **Appendix B-Table 3** (p. 28) presents the number of students who took the IOWA mathematics subtest in 2014–2015, the means and standard deviations of the standard scores by the four Head Start agencies and by student groups (ethnicity, gender, economically-disadvantaged, special education placement, limited English proficiency (LEP), and at-risk status).
- Students from the four Head Start agencies obtained a slightly lower mean standard score than the district mean standard score (M = 132.9) on the 2014–2015 kindergarten IOWA mathematics subtest.
- Students from GCCSA (M = 132.1) had the highest mean standard score, while students from HCDE (M = 130.7) had the lowest mean standard score on the 2014–2015 IOWA mathematics subtest. However, the ANOVA test shows that the mean standard score differences among the four agencies on the IOWA mathematics subtest were not statistically significant with p = 0.43 (Figure 6).

Logramos ELA

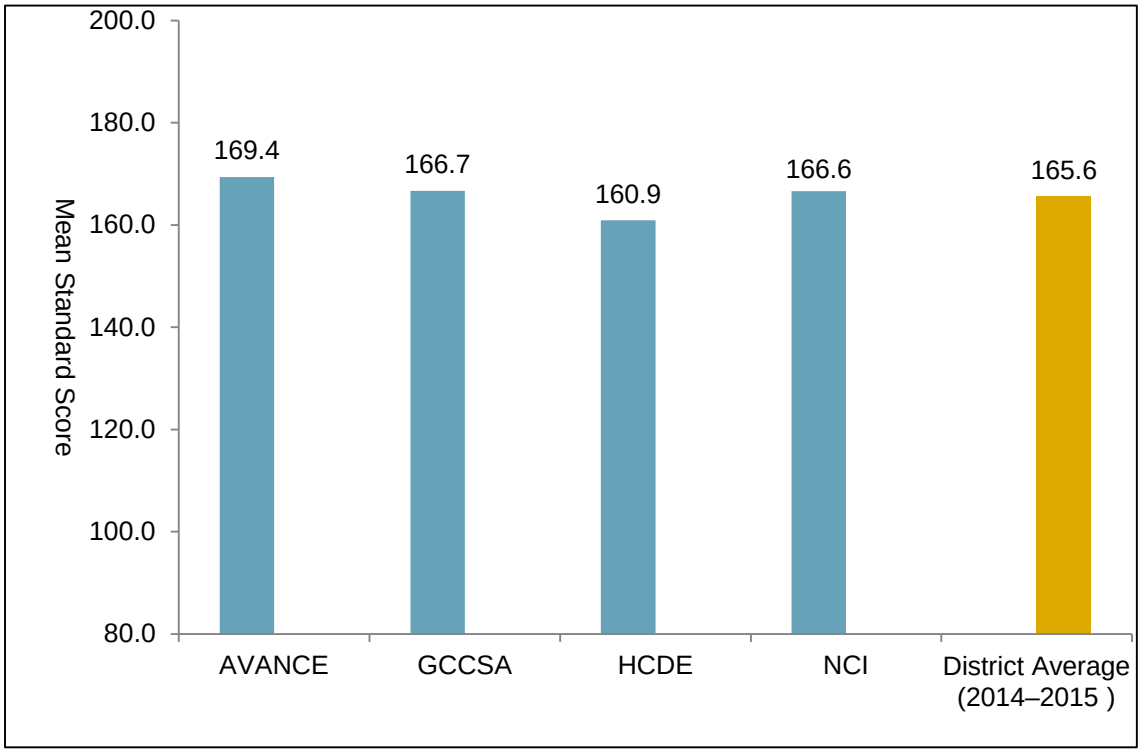
Figure 7. Mean standard scores on the 2014–2015 Logramos ELA subtest by Head Start agency.



- Logramos ELA mean standard scores for students who attended Head Start in 2013–2014 are displayed in **Figure 7**. **Appendix B-Table 4** (p. 29) presents the number of students who took the Logramos ELA subtest in 2014–2015, the means and standard deviations of the standard scores by the four Head Start agencies and by student groups (gender, economically-disadvantaged, special education placement, limited English proficiency (LEP), and at-risk status).
- Students from NCI (M = 175.3), GCCSA (M = 173.8) and AVANCE (M = 173.7) obtained higher mean standard scores than the district mean standard score (M = 173.3) on the 2014–2015 kindergarten Logramos ELA subtest.
- Among four Head Start agencies, students from NCI (M = 175.3) had the highest mean standard score, while students from HCDE (M = 168.5) had the lowest mean standard score on the 2014–2015 kindergarten Logramos ELA subtest. The ANOVA test shows that the mean standard score differences among the four agencies on the Logramos ELA subtest were statistically significant with p = 0.002.

Logramos Mathematics

Figure 8. Mean standard scores on the 2014–2015 Logramos mathematics subtest by Head Start agency.

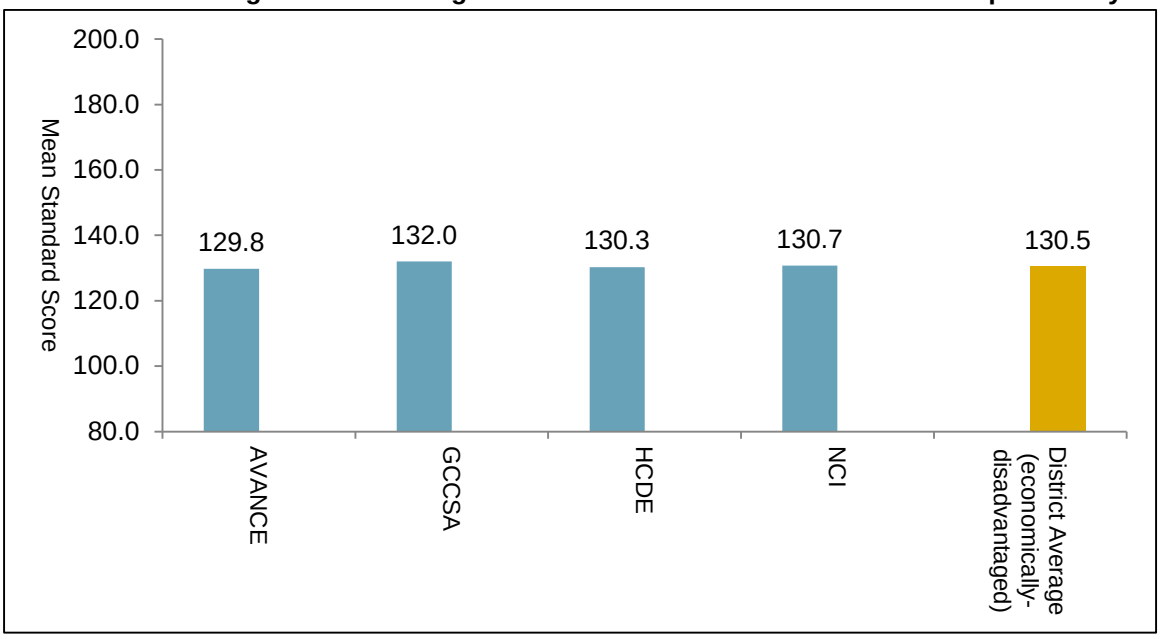


- Logramos mathematics mean standard scores for students who attended Head Start in 2013–2014 are displayed in **Figure 8**. **Appendix B-Table 5** (p. 30) presents the number of students who took the Logramos mathematics subtest in 2014–2015, and the means and standard deviations of the standard scores by the four Head Start agencies and by student groups (gender, economically-disadvantaged, special education placement, LEP, and at-risk status).
- Students from AVANCE (M = 169.4), GCCSA (M = 166.7) and NCI (M = 166.6) obtained higher mean standard scores than the district mean standard score (M = 165.6) on the 2014–2015 kindergarten Logramos mathematics subtest.
- Among the four Head Start agencies, students from AVANCE (M = 169.4) had the highest mean standard score, while students from HCDE (M = 160.9) had the lowest mean standard score on the 2014–2015 kindergarten Logramos mathematics subtest. The ANOVA test shows that the mean standard score differences among the four agencies on the Logramos mathematics subtest were statistically significant with p = 0.00.

What were the kindergarten performance differences of economically-disadvantaged Head Start students among the four Head Start Agencies (AVANCE, GCCSA, HCDE, and NCI) on the 2014–2015 IOWA and Logramos tests?

IOWA ELA

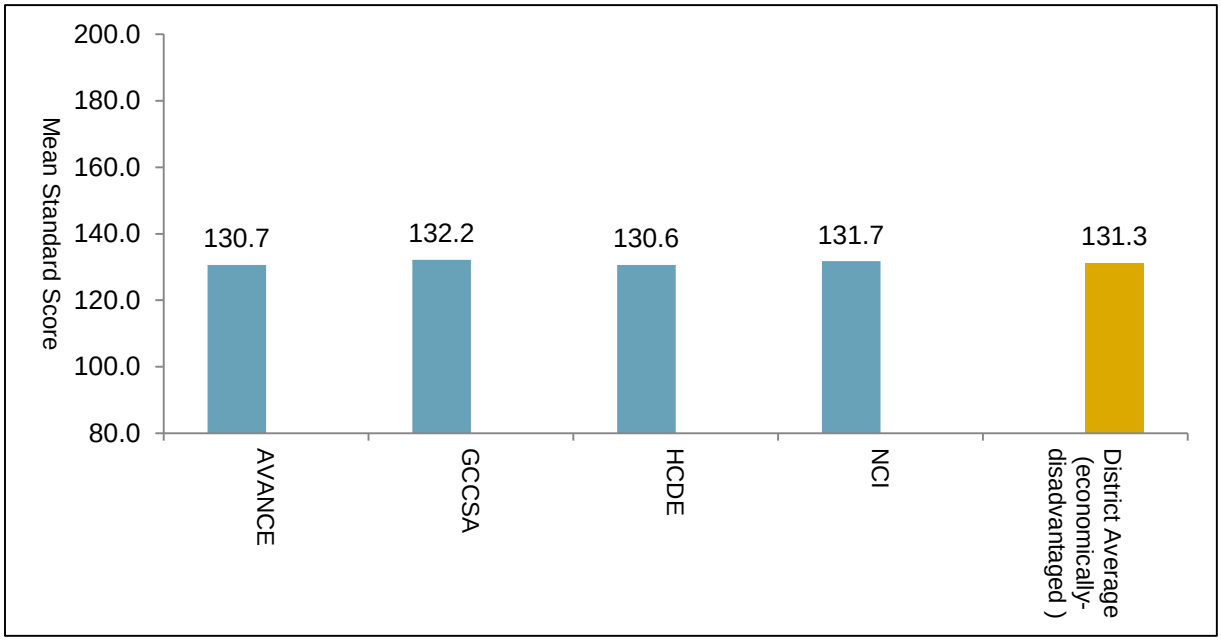
Figure 9. Mean standard scores on the 2014–2015 IOWA ELA subtest for economically-disadvantaged HISD kindergarten students enrolled in Head Start the previous year.



- The district average comprised only economically-disadvantaged students, and was compared with the Head Start economically-disadvantaged students because the majority of Head Start students were identified as economically-disadvantaged (over 90%) in kindergarten.
- IOWA ELA mean standard scores for economically-disadvantaged kindergarten students are displayed in **Figure 9**. Appendix B-Table 2 (p. 27) presents the number of economically-disadvantaged students who took the IOWA ELA subtest in 2014–2015, and the means and standard deviations of the standard scores by the four Head Start agencies.
- Economically-disadvantaged students from GCCSA (M = 132) obtained slightly higher IOWA mean standard scores than the district mean standard score for the economically-disadvantaged students (M = 130.5) on the 2014–2015 IOWA ELA subtest.
- The IOWA ELA mean standard scores of economically-disadvantaged students from AVANCE (M = 129.8) were lower than economically-disadvantaged students from other three Head Start agencies.

IOWA Mathematics

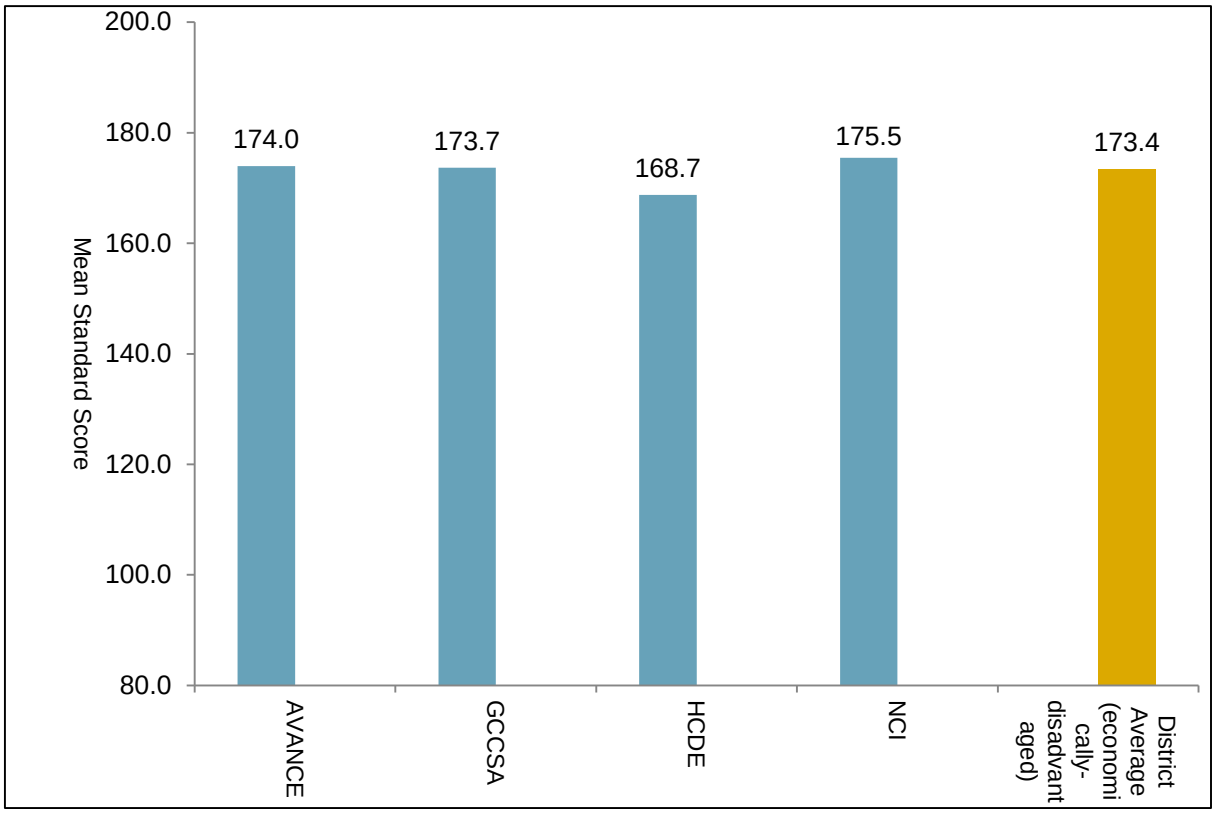
Figure 10. Mean standard scores on the 2014–2015 IOWA mathematics subtest for economically-disadvantaged HISD kindergarten students enrolled in Head Start the previous year.



- IOWA mathematics mean standard scores for the economically-disadvantaged kindergarten students are displayed in **Figure 10.** Appendix B-Table 3 (p. 28) presents the number of economically-disadvantaged students who took the IOWA mathematics subtest in 2014–2015, and the means and standard deviations of the standard scores by the four Head Start agencies.
- Economically-disadvantaged students from AVANCE (M = 130.7) and HCDE (M = 130.6) obtained comparable mean standard scores. The mean standard scores of the economically-disadvantaged students from these two Head Start agencies were slightly lower than the district mean standard score for the economically-disadvantaged peers (M = 131.3) on the 2014–2015 IOWA mathematics subtest.
- Economically-disadvantaged students from GCCSA (M = 132.2) and NCI (M = 131.7) obtained slightly higher mean standard scores than the district mean standard score for the economically-disadvantaged students (M = 131.3) on the 2014–2015 IOWA mathematics subtest.

Logramos ELA

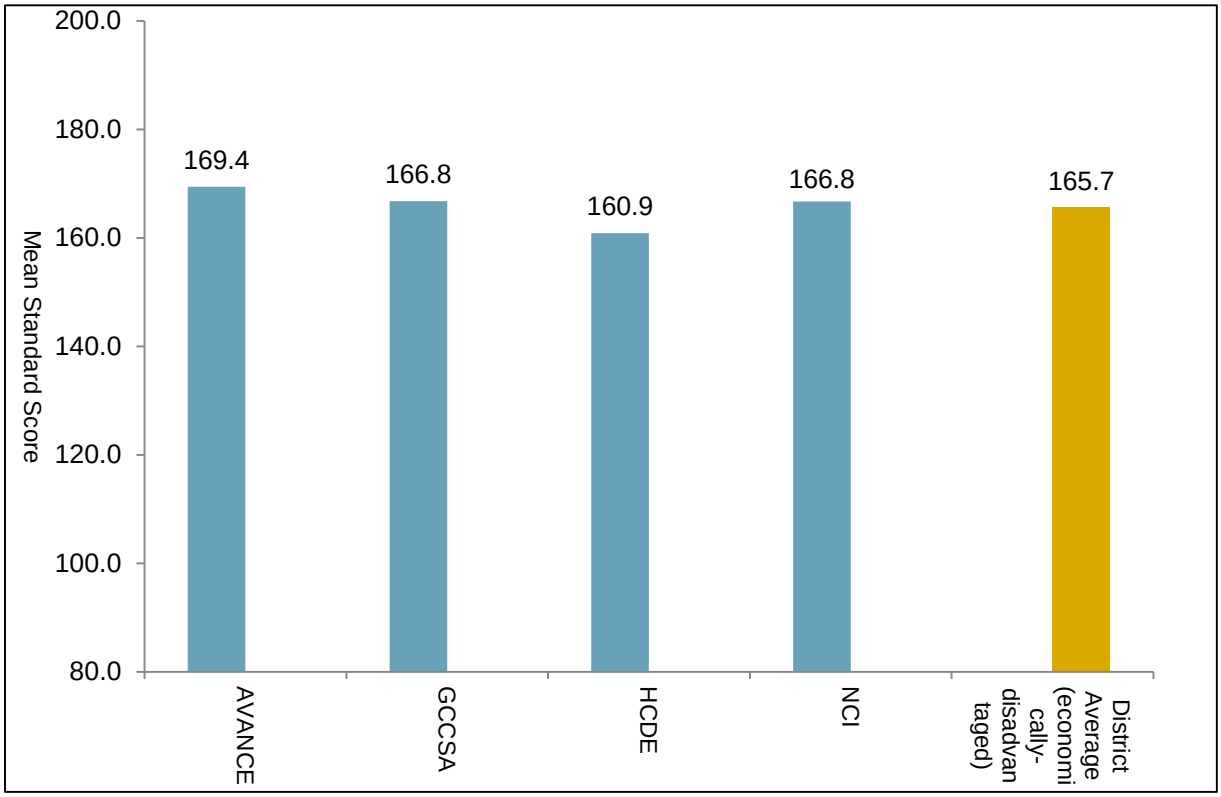
Figure 11. Mean standard scores on the 2014–2015 Logramos ELA subtest for economically-disadvantaged HISD kindergarten students enrolled in Head Start the previous year.



- Logramos ELA mean standard scores for the economically-disadvantaged kindergarten students are displayed in **Figure 11**. Appendix B-Table 4 (p. 29) presents the number of economically-disadvantaged students who took the Logramos ELA subtest in 2014–2015, and the means and standard deviations of the standard scores by the four Head Start agencies.
- Economically-disadvantaged students from AVANCE (M = 174.0) and GCCSA (M = 173.7) obtained fairly comparable mean standard score as the district mean standard score of economically-disadvantaged students (M = 173.4) on the 2014–2015 kindergarten Logramos ELA subtest.
- Economically-disadvantaged students from NCI (M = 175.5) obtained the highest mean standard score, which was higher than the district mean standard score for economically-disadvantaged students (M = 173.4) on the 2014–2015 kindergarten Logramos ELA subtest.
- Economically-disadvantaged students from HCDE (M = 168.7) obtained a lower mean standard score than the district mean standard score for economically-disadvantaged students (M = 173.4) on the 2014–2015 kindergarten Logramos ELA subtest.

Logramos Mathematics

Figure 12. Mean standard scores on the 2014–2015 Logramos mathematics subtest for economically-disadvantaged HISD kindergarten students enrolled in Head Start the previous year.



- Logramos mathematics mean standard scores for economically-disadvantaged kindergarten students are displayed in **Figure 12**. Appendix B-Table 5 (p. 30) presents the number of students who took the Logramos mathematics subtest in 2014–2015, and the means and standard deviations of the standard scores by the four Head Start agencies.
- Economically-disadvantaged students from AVANCE (M = 169.4) obtained the highest mean standard score, which was higher than the district mean standard score for economically-disadvantaged students (M = 165.7) on the 2014–2015 kindergarten Logramos mathematics subtest.
- Economically-disadvantaged students from GCCSA (M = 166.8) and NCI (M = 166.8) obtained comparable mean standard scores, which were slightly higher than the district mean standard score for economically-disadvantaged students (M = 165.7) on the 2014–2015 kindergarten Logramos mathematics subtest.
- Economically-disadvantaged students from HCDE (M = 160.9) obtained lower scores than the district mean standard score for economically-disadvantaged students on the 2014–2015 kindergarten Logramos mathematics subtest.

Discussion

Head Start has the goal of improving educational and developmental outcomes for children from economically disadvantaged families by meeting the needs of the whole child, including the cognitive, social-emotional, health needs of children and positively influence the parenting practices of their parents. However, due to the data limitation, this report only examined the impacts of Head Start on Head Start graduates' cognitive domain by comparing the performance of Head Start students by program, economic status, and enrollment status once they are in kindergarten in HISD.

Students dually-enrolled in HISD and Head Start receive instruction and support from two instructors rather than one. However, the cognitive impacts of these two class models in students' elementary school year was limited. Findings from this evaluation report suggested that students who were dually-enrolled obtained comparable mean standard score as students who were enrolled in standalone programs on both 2014–2015 IOWA ELA and mathematics subtests, but dually-enrolled students scored higher on both 2014–2015 Logramos ELA and mathematics subtests compared to students enrolled in standalone programs.

When student performance was compared by Head Start agencies, the findings from this evaluation were mixed. The students' performance on the 2014–2015 IOWA and Logramos ELA, and mathematics subtests varied by Head Start agency. However, the impact of each Head Start program on students' performance should be interpreted with caution because each Head Start program is different, such as service targets and teacher qualification. Therefore, when we compare the impact of the four Head Start agencies, we should take the characteristics of each agency and their sites into account (Appendix C Table 1-4, p. 31-41 and Appendix D, p. 42-52).

This report only examined the impacts of Head Start on students' academic performance. It leaves many important questions about Head Start unanswered. These questions include, but are certainly not limited to: What impact does Head Start have on children's social-emotional development, physical development, and on parental practices? Is there a benefit to having two years of Head Start rather than one year? What types of programs, center, classrooms, and other experiences relate to more positive impacts for children and families? Hopefully, future research will be conducted to further the understanding of the role Head Start plays in the well-being of children and families.

References

Aikens, N. L., & Barbarin, O. (2008). Socioeconomic differences in ELA trajectories: The contribution of family, neighborhood, and school contexts. Journal of Educational Psychology, 100(2), 235-251.

Chatterji, M. (2006). ELA achievement gaps, correlates, and moderators of early ELA achievement: Evidence from the Early Childhood Longitudinal Study (ECLS) kindergarten to first grade sample. Journal of Educational Psychology, 98(3), 489-507.

Currie, J. (2001). Early childhood intervention programs: What do we know? Journal of Economic Perspectives, 15, 213-238.

Currie, J., & Neidell, M. (2007). Getting inside the "Black Box" of Head Start quality: What matters and what doesn't. Economics of Education Review, 26(1), 83-99.

Frahm, R. (2010). Test scores and ZIP codes: Educators say housing is a factor in achievement. Retrieved August 15, 2015, from http://ctmirror.org/2010/04/29/test-scores-and-zip-codes-educators-say-housing-factor-achievement/

Gormley, W. T., Gayer, T., Phillips, D., & Dawson, B. (2005). The Effects of Universal Pre-K on Cognitive Development. Developmental Psychology, 41(6), 872-884.

Magnuson, K., Ruhm, C., & Waldfogel, J. (2007). The persistence of preschool effects: Do subsequent classroom experiences matter? Early Childhood Research Quarterly, 22(1), 18-38.

Shager, H.M., Schindler, H.S., Magnuson, K.A., Duncan, G. J., Yoshikawa, H., Hart, C.M.D. (2013). Can research design explain variation in Head Start research results? A meta-analysis of cognitive and achievement outcomes. *Educational Evaluation and Policy Analysis, 35*, 76-95.

Tienken, C. (2015). Predictable Results. Retrieved August 15, 2015, from http://christienken.com/2015/05/07/predictable-results/

University of Texas System/Texas Education Agency. (2010). Texas primary ELA inventory. Austin, TX.

Zhai, F., Brooks-Gunn, J., & Waldfogel, J. (2011). Head Start and urban children's school readiness: A birth cohort study in 18 cities. Developmental Psychology, 47, 134-152.

Appendix A

Table 1. 2014–2015 Demographic Characteristics of HISD Kindergarten Students by Head Start Class Models

		Dually-Enrolled (n = 1,676)		Standalone (n =98)	
Demographic Characteristic		**n**	**%**	**n**	**%**
Gender	Female	846	50.5	92	52.3
	Male	830	49.5	84	47.7
Ethnicity	Asian	15	0.9	7	4.0
	African-American	367	21.9	61	34.7
	Hispanic	1,278	76.3	107	60.8
	White	11	0.7	*	*
	Other	5	0.3	*	*
Economically-Disadvantaged	No	109	6.5	19	10.8
	Yes	1,567	93.5	157	89.2
Special Education	No	1,588	94.7	164	93.2
	Yes	88	5.3	12	6.8
Limited English Proficient (LEP)	No	664	39.6	88	50.0
	Yes	1,012	60.4	88	50.0
At-Risk	No	37	2.2	9	5.1
	Yes	1,639	97.8	167	94.9

Note. 1. * Denotes fewer than 5 students, and were not reported. 2. The demographic information used in this table was based on student information at the time that the student enrolled in kindergarten in 2014–2015.

Table 2. Mean Standard Scores on the 2014–2015 IOWA ELA Subtest by Head Start Class Models

		Dually-Enrolled			Standalone		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
Overall Sample		130.8	9.1	733	130.4	9.0	101
Gender	Female	131.6	8.5	373	131.2	9.2	58
	Male	130.0	9.6	360	129.3	8.8	43
Ethnicity	Asian	127.6	8.3	14	125.7	7.6	7
	African-American	131.8	9.5	339	131.5	8.9	57
	Hispanic	130.1	8.6	366	130.0	9.1	36
	White	126.9	6.1	9	*	*	*
	Other	137.0	10.4	5	*	*	*
Economically disadvantaged	No	131.3	8.4	59	126.5	10.5	13
	Yes	130.8	9.1	674	131.0	8.7	88
Special Education	No	131.2	9.0	697	130.3	9.1	96
	Yes	124.6	8.9	36	132.0	7.0	5
Limited English Proficient (LEP)	No	131.4	9.2	620	130.7	9.0	82
	Yes	127.5	7.7	113	128.9	9.2	19
At-Risk	No	132.6	8.8	33	136.8	6.4	9
	Yes	130.8	9.1	700	129.8	9.0	92

Note. * Denotes fewer than 5 students, and were not reported.

Table 3. Mean Standard Scores on the 2014–2015 IOWA Mathematics Subtest by Head Start Class Models

		Dually-Enrolled			Standalone		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
Overall Sample		131.5	9.3	758	131.6	10.3	105
Gender	Female	132.2	9.2	378	132.4	11.0	62
	Male	130.8	9.3	380	130.3	9.3	43
Ethnicity	Asian	129.7	7.7	14	130.7	10.6	7
	African-American	131.2	9.3	355	131.4	10.8	60
	Hispanic	131.9	9.4	375	132.2	9.6	37
	White	126.2	5.7	9	*	*	*
	Other	137.2	7.9	5	*	*	*
Economically disadvantaged	No	133.5	8.7	61	126.9	12.3	13
	Yes	131.3	9.3	697	132.2	9.9	92
Special Education	No	131.9	9.2	718	131.3	10.1	100
	Yes	124.7	8.5	40	137.8	13.4	5
Limited English Proficient (LEP)	No	131.9	9.3	641	131.4	10.3	86
	Yes	129.4	8.8	117	132.2	10.3	19
At-Risk	No	132.1	7.7	34	134.7	5.8	9
	Yes	131.5	9.4	724	131.3	10.6	96

Note. * Denotes fewer than 5 students, and were not reported.

Table 4. Mean Standard Scores on the 2014–2015 Logramos ELA Subtest by Head Start Class Models

		Dually-Enrolled			Standalone		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
Overall Sample		174.5	13.8	864	169.2	16.0	66
Gender	Female	176.4	14.5	439	166.6	16.0	27
	Male	172.4	12.8	425	171.1	16.0	39
Economically disadvantaged	No	172.9	12.0	43	161.8	16.1	6
	Yes	174.5	13.9	821	170.0	16.0	60
Special Education	No	175.1	13.7	820	170.0	16.3	59
	Yes	162.5	11.3	44	162.4	11.9	7
Limited English Proficient (LEP)	No	167.9	7.8	9	*	*	*
	Yes	174.5	13.9	855	169.2	16.0	66
At-Risk	No	*	*	*	*	*	*
	Yes	174.5	13.8	864	169.2	16.0	66

Note. * Denotes fewer than 5 students, and were not reported.

Table 5. Mean Standard Scores on the 2014–2015 Logramos Mathematics Subtest by Head Start Class Models

		Dually-Enrolled			Standalone		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
Overall Sample		168.6	13.9	889	162.9	12.7	69
Gender	Female	168.5	13.7	456	162.2	12.0	29
	Male	165.3	14.0	433	163.5	13.4	40
Economically disadvantaged	No	165.1	10.3	44	155.5	10.0	6
	Yes	167.1	14.1	845	163.7	12.8	63
Special Education	No	167.6	13.5	843	163.5	12.8	62
	Yes	155.6	17.5	46	158.0	11.7	7
Limited English Proficient (LEP)	No	163.1	6.2	9	*	*	*
	Yes	167.0	14.0	880	163.1	12.7	68
At-Risk	No	*	*	*	*	*	*
	Yes	167.0	14.0	889	162.9	12.7	69

Note. * Denotes fewer than 5 students, and were not reported.

Appendix B

Table 1: 2014–2015 Demographic Characteristics of HISD Kindergarten Students by Head Start Program

		AVANCE (n = 400)		GCCSA (n = 555)		HCDE (n = 188)		NCI (n = 709)	
Student Group		**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Gender	Female	200	50.0	273	49.2	99	52.7	366	51.6
	Male	200	50.0	282	50.8	89	47.3	343	48.4
Ethnicity	Asian	*	*	*	*	*	*	20	2.8
	African-American	65	16.3	173	31.2	69	36.7	121	17.1
	Hispanic	330	82.5	379	68.3	119	63.3	557	78.6
	White	*	*	*	*	*	*	8	1.1
	Other	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	24	6.0	33	5.9	13	6.9	58	8.2
	Yes	376	94.0	522	94.1	175	93.1	651	91.8
Special Education	No	375	93.8	528	95.1	177	94.1	672	94.8
	Yes	25	6.3	27	4.9	11	5.9	37	5.2
Limited English Proficient (LEP)	No	186	46.5	263	47.4	109	58.0	194	27.4
	Yes	214	53.5	292	52.6	79	42.0	515	72.6
At-Risk	No	12	3.0	18	3.2	7	3.7	9	1.3
	Yes	388	97.0	537	96.8	181	96.3	700	98.7

Note. 1. * Denotes fewer than 5 students, and were not reported. 2. The demographic information used in this table was based on student information at the time that the student enrolled in kindergarten in 2014–2015.

Table 2. HISD Kindergarten Student Performance on the 2014–2015 Kindergarten IOWA ELA Subtest By Head Start Program

		AVANCE			GCCSA			HCDE			NCI		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
	Total	130.1	8.0	230	131.8	10.0	272	130.2	8.1	108	130.5	9.2	224
Gender	Female	131.3	7.3	116	132.2	9.2	130	130.4	7.9	59	131.7	9.3	126
	Male	128.9	8.5	114	131.5	10.8	142	129.9	8.4	49	129.0	8.9	98
Ethnicity	Asian	*	*	*	*	*	*	*	*	*	127.7	8.0	19
	African American	130.5	8.7	64	132.1	10.4	160	130.0	7.9	62	132.8	9.1	110
	Hispanic	130.0	7.7	162	131.5	9.6	110	130.3	8.5	46	128.3	8.9	84
	White	*	*	*	*	*	*	*	*	*	124.6	6.4	8
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	134.8	9.4	15	129.9	8.4	22	127.6	12.1	5	129.2	8.3	30
	Yes	129.8	7.8	215	132.0	10.2	250	130.3	7.9	103	130.7	9.4	194
Special Education	No	130.4	7.7	215	132.1	10.0	262	130.1	8.1	104	131.0	9.2	212
	Yes	126.2	10.4	15	125.7	9.3	10	*	*	*	122.7	5.9	12
Limited English Proficient (LEP)	No	130.9	8.0	182	132.2	10.2	244	130.1	8.1	100	131.5	9.2	176
	Yes	127.2	7.1	48	128.8	8.0	28	131.4	8.8	8	127.0	8.5	48
At-Risk	No	133.2	6.3	12	131.4	10.4	17	135.0	6.5	6	137.7	7.9	7
	Yes	129.9	8.0	218	131.9	10.0	255	129.9	8.1	102	130.3	9.2	217

Note. * Denotes fewer than 5 students, and were not reported.

Table 3. HISD Kindergarten Student Performance on the 2014–2015 Kindergarten IOWA Mathematics Subtest By Head Start Program

		AVANCE			GCCSA			HCDE			NCI		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
	Total	131.0	9.0	234	132.1	9.9	277	130.7	9.1	112	131.7	9.4	240
Gender	Female	131.4	8.6	116	132.7	9.9	132	131.0	9.6	61	133.2	9.7	131
	Male	130.6	9.4	118	131.6	9.9	145	130.3	8.5	51	130.0	8.7	109
Ethnicity	Asian	*	*	*	*	*	*	*	*	*	130.3	8.9	19
	African American	130.1	9.3	65	131.3	9.8	165	130.2	9.7	66	132.4	9.1	119
	Hispanic	131.4	8.9	165	133.3	10.0	110	131.5	8.2	46	131.6	10.0	91
	White	*	*	*	*	*	*	*	*	*	125.1	4.9	8
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	135.7	8.5	16	131.0	8.5	23	*	*	*	131.7	10.7	31
	Yes	130.7	9.0	218	132.2	10.0	254	130.6	9.0	108	131.7	9.2	209
Special Education	No	131.4	8.9	218	132.4	9.8	267	130.3	8.8	108	132.3	9.2	225
	Yes	126.1	9.4	16	125.1	8.5	10	*	*	*	123.1	7.7	15
Limited English Proficient (LEP)	No	131.4	9.1	184	132.2	10.0	249	130.6	9.1	104	132.5	9.2	190
	Yes	129.5	8.6	50	131.3	8.5	28	132.3	9.3	8	128.9	9.8	50
At-Risk	No	134.0	5.4	12	131.3	9.3	16	133.1	7.7	7	132.6	6.2	8
	Yes	130.9	9.1	222	132.2	9.9	261	130.5	9.2	105	131.7	9.5	232

Note. * Denotes fewer than 5 students, and were not reported.

Table 4. HISD Kindergarten Student Performance on the 2014–2015 Kindergarten Logramos ELA Subtest By Head Start Program

		AVANCE			GCCSA			HCDE			NCI		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
	Total	173.7	12.6	164	173.8	13.1	247	168.5	13.9	72	175.3	14.9	447
Gender	Female	175.4	11.9	82	175.3	13.5	127	169.9	15.3	35	177.3	16.2	222
	Male	172.0	13.1	82	172.3	12.5	120	167.1	12.4	37	173.3	13.3	225
Economically-Disadvantaged	No	167.9	11.8	8	177.3	15.8	10	166.5	8.4	8	172.0	12.8	23
	Yes	174.0	12.6	156	173.7	13.0	237	168.7	14.4	64	175.5	15.0	424
Special Education	No	174.2	12.5	155	174.3	13.1	231	170.0	13.6	65	175.9	14.7	428
	Yes	165.0	10.9	9	166.8	11.6	16	154.1	5.2	7	160.7	11.4	19
Limited English Proficient (LEP)	No	*	*	*	168.6	6.9	5	*	*	*	*	*	*
	Yes	173.8	12.6	162	173.9	13.2	242	168.5	14.0	71	175.3	14.9	446
At-Risk	No	*	*	*	*	*	*	*	*	*	*	*	*
	Yes	173.7	12.6	164	173.8	13.1	247	168.5	13.9	72	175.3	14.9	447

Note. * Denotes fewer than 5 students, and were not reported.

Table 5. HISD Kindergarten Student Performance on the 2014–2015 Kindergarten Logramos Mathematics Subtest By Head Start Program

		AVANCE			GCCSA			HCDE			NCI		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
	Total	169.4	13.6	164	166.7	12.9	266	160.9	10.9	73	166.6	14.8	455
Gender	Female	170.2	13.9	82	169.0	13.1	139	161.9	9.3	35	167.9	14.2	229
	Male	168.5	13.3	82	164.1	12.1	127	160.0	12.2	38	165.4	15.2	226
Economically-Disadvantaged	No	167.5	13.1	8	163.7	12.2	10	161.0	7.5	8	163.9	10.3	24
	Yes	169.4	13.7	156	166.8	12.9	256	160.9	11.3	65	166.8	15.0	431
Special Education	No	169.9	13.4	155	167.2	12.5	249	162.5	10.0	66	167.2	14.3	435
	Yes	160.1	14.1	9	159.0	16.1	17	146.3	8.1	7	154.8	19.9	20
Limited English Proficient (LEP)	No	*	*	*	160.8	7.6	5	*	*	*	*	*	*
	Yes	169.4	13.7	162	166.8	12.9	261	161.0	10.9	71	166.6	14.8	454
At-Risk	No	*	*	*	*	*	*	*	*	*	*	*	*
	Yes	169.4	13.6	164	166.7	12.9	266	160.9	10.9	73	166.6	14.8	455

Note. * Denotes fewer than 5 students, and were not reported.

Appendix C

Table 1. AVANCE Program Description for Students Who Were Enrolled in 2013–2014		
	Description	
Service region	AVANCE-Houston, Inc. provides Head Start services in Area II of the northwest region of Harris County, Texas. The Area II northwest region is bordered by Interstate 10 West, Highway 290, and West of Highway 59 North. AVANCE's Head Start service area extends as far north as Cypress, Tomball, and Spring, Texas.	
Average Annual Enrollment	AVANCE's funded enrollment for Head Start is 1,913 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	Number of lead teachers	74
	Number of assistant teachers	53
	Number of collaborating teachers	42
Teacher's average education level	Lead teachers	Bachelor's degree
	Assistant teachers	High School
	Collaborating teachers	Bachelor's degree
Total number of centers	AVANCE-Houston, Inc. operates 13 Head Start centers in Northwest Harris County, Texas. The operation models include stand-alone centers and collaborative school based sites.	
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 1st 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 1st. Families are pre-screened and then required to provide documented proof of eligibility.	
Services Provided	AVANCE Houston, Inc. offers a variety of services to the community which include Head Start/ Early Head Start, Parent and Child (Parenting), Healthy	

	Marriage classes, Fatherhood classes, and Adult Education (GED, ESL, & Computer Literacy). 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.
Program benefit to kids/parents/community	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 multiple 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 and open to its surrounding communities. Families that enroll 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 ELA 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. Head Start recognizes that parents 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.
Challenges	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. 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. AVANCE's services are designed to support parents' attainment of education and employment. Thirty seven (37%) of Head Start parents have less than high school education of which 13% have less than an 8th grade education. Approximately 70% 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 early childhood education services in Area II; therefore it consistently maintains an enrollment waitlist.
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	AVANCE utilizes Frog Street Pre-k as its primary curriculum. The comprehensive and bilingual program 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 2. Gulf Coast Community Services Association (GCCSA) Program Description for Students Who Were Enrolled in 2013–2014		
	Description	
	Gulf Coast Community Services Association (GCCSA), a private nonprofit organization, is the largest Community Action Agency in Texas since 1964. GCCSA promotes individual and communal well-being through outreach operations, economic empowerment initiatives and support services (GCCSA website, 2013).[1]	
Service region	GCCSA serves 30% of Harris County, particularly the Southeast region designated as Area IV. The agency operates a combination of Early Head Start and Head Start programs/services through 21 centers located in Houston, Pasadena and South Houston.	
Average Annual Enrollment	1864	
Total number of teachers	Number of lead teachers	95
	Number of assistant teachers	45
	Number of collaborating teachers	43
Teacher's average education level	Lead teachers	½ Bachelors; ½ Associates
	Assistant teachers	CDA
	Collaborating teachers	Bachelors
Total number of centers	21	
Service Eligibility	In addition to age and pregnancy status (children birth to 3 years and pregnant women are eligible for Early Head Start and children between the ages of 3-5 years are eligible for Head Start), both groups automatically qualify if the child or family receives public assistance (e.g. TANF, SSI); the participating child is in foster care; and/or if the child and their family is homeless. Families that do not meet these criteria are prioritized by a point system that captures income, age, and family characteristics (GCCSA, Head Start Selection Criteria, 2012).	
Services Provided	GCCSA Early Head Start (EHS) offers center-based and home-based services to pregnant women and infants and toddlers. Head Start (HS) offers a full day, center-based program five days a week, from August	

[1] http://www.gulfcoastcommunityservicesassociation.org/

	through May. Parents can enroll their children in extended day option or a part day option known as a double session. A double session is offered to parents who are not employed or attending school or job training with 4 hour sessions either am or pm. This option is offered at two Head Start center locations twice a day from August to June (GCCSA, Refunding, 2012).
Program benefit to kids/parents/community	Gulf Coast Community Services Association (GCCSA), a private nonprofit organization, is the largest Community Action Agency in Texas since 1964. GCCSA promotes individual and communal well-being through outreach operations, economic empowerment initiatives and support services (GCCSA website, 2013).[2] GCCSA initiatives include: • Early Head Start and Head Start • Adult Literacy and Education • Economic Development – Financial literacy, Individual Development Account program , Homebuyer Education Assistance, Employment Skills, Housing Services • Human Service Initiative- food pantry, Rental/mortgage assistance, utilities
Challenges	Education and/or Job Training: The service with the highest need was educational programs to help parents learn a trade or profession followed by helping parents with resume, interview skills, professional clothing. And lastly, helping parents finding and getting a good job. This information was strongly demonstrated through the 2013-2014 parent survey and community assessment update.
Funding Source	Administration For Children and Families / HHS
Curriculum	Frog Street Pre-K. Although GCCSA does not offer a bi-lingual or dual language program, the program does support ESL learners as they mature in their native language and develop their English speaking abilities.
Assessment	LAP-3 (Learning Accomplishment Profile – 3rd Revision)

[1] http://www.gulfcoastcommunityservicesassociation.org/
[1] Texas Workforce Commission for 2011

[2] http://www.gulfcoastcommunityservicesassociation.org/

Table 3. Harris County Department of Education (HCDE) Program Description, 2014–2015		
	Description	
Service region	HCDE Head Start centers are located throughout southwest Harris County. We serve the following zip codes: 77013 77059 77503 77015 77062 77505 77016 77075 77507 77020 77078 77520 77026 77089 77521 77028 77093 77530 77029 77336 77532 77034 77338 77536 77039 77339 77546 77044 77345 77547 77047 77346 77562 77048 77357 77571 77049 77365 77586 77050 77396 77598 77058 The boundaries of Area I are the Harris County line on the north south and east. On the west, the boundary is Highway 59 running south from the Harris County line to Buffalo Bayou to Beltway 8, then south and west on Beltway 8 to Almeda Road and south on Almeda Road to the Harris County line.	
Average Annual Enrollment	Funded 1230; Actually 1344	
Total number of teachers	Number of lead teachers	667
	Number of assistant teachers	8-
	Number of collaborating teachers	14
	Lead teachers	Bachelors

Teacher's average education level	Assistant teachers	High School
	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.	
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	The majority of our parents struggle with lack of employment opportunities. Nearly one-quarter of our 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 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	• Frog Street Pre-K Assessment • Observations • Portfolio Collection	

Table 4. . Neighborhood Centers Inc (NCI) Program Description for Students Who Were Enrolled in 2013–2014	
	Description
Service region	Neighborhood Centers Head Start/Early Head Start centers (NCI) are located throughout southwest Harris County. 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). The Head Start/Early Head Start service areas contains the following zip codes: 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
Average Annual Enrollment	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 2,090 children and families.

Total number of teachers	Number of lead teachers	58
	Number of assistant teachers	58
	Number of collaborating teachers	44
Teacher's average education level	Lead teachers	Bachelor & Highly Qualified Certified
	Assistant teachers	CDA
	Collaborating teachers	Bachelor
Total number of centers	We currently operate 21 locations: eleven within HISD, one childcare center and nine stand-alone sites throughout Southwest Harris County.	
Service Eligibility	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.	
Services Provided	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. 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.	
Program benefit to kids/parents/community	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 better men. 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. 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.
Challenges	The majority 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 good job. Access to affordable healthcare is an issue for many of our families in southwest Harris County. Over the past several years, Neighborhood Centers has experienced a rise in the number of immigrant and refugee families seeking services. Only 33% of Neighborhood Centers' Head Start families reported English as their primary language, while more than 61% 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 Service Workers work closely with each family to better identify services that will assist them in reaching their goals.
Funding Source	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.
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. 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."

Assessment	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. To assure 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. 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.

Appendix D

Table 1. HISD Kindergarten Student Performance on the 2014–2015 Kindergarten IOWA ELA Subtest By Zip Code, Head Start Program, and Site

Zip code	Agency	Site	n	Mean	SD
77009	AVANCE	Browning	31	132.9	8.7
		Jefferson	39	129.3	8.6
		Ketelsen	31	130.1	6.6
77022	AVANCE	Oxford	20	129.9	6.9
77091	AVANCE	Acres Homes	14	129.6	10.1
77092	AVANCE	Golden Forest	7	131.1	7.8
		Lincoln Park	12	125.4	7.7
		Mangum	21	131.1	7.1
		Mt Houston	7	132.0	7.8
77093	AVANCE	Jensen	48	129.6	7.9
77003	GCCSA	Clayton Homes	18	130.1	6.0
77004	GCCSA	TSU Lab School	34	128.8	9.4
77011	GCCSA	East End	6	129.0	9.7
		Franklin Elementary	15	131.3	10.7
77017	GCCSA	Raul Yzaguirre	3	*	*
77021	GCCSA	Foster Elementary	24	130.1	9.0
77033	GCCSA	Bastian Elementary	52	131.0	8.6
		Bellfort Early Childhood Center	50	138.2	12.0
77061	GCCSA	Garden Villa	23	132.4	7.8

Zip code	Agency	Site	n	Mean	SD
		Gregg Elementary	11	125.1	7.1
		Houston Gateway	2	*	*
		Patterson Elementary	20	133.4	7.3
		Plum Creek	3	*	*
77087	GCCSA	Reveille	11	135.3	13.6
77013	HCDE	Coolwood	5	125.8	6.9
77016	HCDE	Compton	39	130.6	8.1
		Fifth Ward	11	133.2	10.7
77020	HCDE	Pugh	18	129.1	9.2
77026	HCDE	Dogan	29	128.8	6.3
77044	HCDE	Tidwell	2	*	*
77049	HCDE	Sheffield	1	*	*
77530	HCDE	Channelview	2	*	*
77571	HCDE	LaPorte	1	*	*
77025	NCI	Shearn-HISD	24	128.6	8.1
77031	NCI	Bell-HISD	13	131.2	9.5
77035	NCI	Foerster-HISD	22	131.8	9.9
		KBC HS	12	127.5	7.7
77045	NCI	MLKECC-HISD	32	131.3	9.5
		Bonham-HISD	13	127.9	9.7
		Gulfton Promise	11	129.4	10.5
		McNamara-HISD	11	128.8	10.9
77074	NCI	New Horizon HS	10	128.9	10.8

Zip code	Agency	Site	n	Mean	SD
		Benavidez-HISD	11	129.3	7.8
		Braeburn-HISD	3	*	*
		Klein HS	3	*	*
		Robindell	2	*	*
77081	NCI	Rodriguez-HISD	14	128.0	6.4
77085	NCI	Fondren-HISD	14	129.4	6.9
		Albury	1	*	*
77096	NCI	Halpin ECC-HISD	28	136.2	9.2

Note. 1.) * Denotes fewer than 5 students. 2.) The district mean standard score on the 2014–2015 kindergarten IOWA ELA Subtest (M = 132.5).

Table 2. HISD Kindergarten Student Performance on the 2014–2015 Kindergarten IOWA Mathematics Subtest By Zip Code, Head Start Program, and Site					
Zip code	**Agency**	**Site**	**n**	**Mean**	**SD**
77009	AVANCE	Browning	31	134.6	7.9
		Jefferson	39	130.9	9.1
		Ketelsen	31	132.1	8.3
77022	AVANCE	Oxford	20	132.0	7.9
77091	AVANCE	Acres Homes	15	128.3	8.7
77092	AVANCE	Golden Forest	7	127.6	14.8
		Lincoln Park	13	122.9	10.8
		Mangum	22	131.2	6.8
		Mt Houston	7	135.4	6.7
77093	AVANCE	Jensen	49	130.5	9.1
77003	GCCSA	Clayton Homes	18	129.8	7.9
77004	GCCSA	TSU Lab School	33	129.2	7.7
77011	GCCSA	East End	6	129.8	10.5
		Franklin Elementary	14	129.8	8.4
77017	GCCSA	Raul Yzaguirre	3	*	*
77021	GCCSA	Foster Elementary	28	127.9	8.1
77033	GCCSA	Bastian Elementary	53	130.6	9.0
		Bellfort Early Childhood Center	50	138.9	10.7
77061	GCCSA	Garden Villa	24	134.1	8.8

Zip code	Agency	Site	n	Mean	SD
		Gregg Elementary	11	128.5	6.8
		Houston Gateway	2	*	*
		Patterson Elementary	21	136.0	10.5
		Plum Creek	3	*	*
77087	GCCSA	Reveille	11	134.5	11.2
77013	HCDE	Coolwood	5	125.0	6.4
77016	HCDE	Compton	41	131.3	9.5
		Fifth Ward	12	136.3	11.0
77020	HCDE	Pugh	18	132.1	8.2
77026	HCDE	Dogan	30	126.5	6.6
77044	HCDE	Tidwell	2	*	*
77049	HCDE	Sheffield	1	*	*
77530	HCDE	Channelview	2	*	*
77571	HCDE	LaPorte	1	*	*
77025	NCI	Shearn-HISD	25	126.9	9.0
77031	NCI	Bell-HISD	13	129.2	6.9
77035	NCI	Foerster-HISD	25	130.7	7.4
		KBC HS	12	128.8	11.5
77045	NCI	MLKECC-HISD	35	133.4	8.1
		Bonham-HISD	15	130.7	9.1
		Gulfton Promise	11	131.6	10.3
		McNamara-HISD	13	130.1	10.5
77074	NCI	New Horizon HS	10	130.9	13.9

Zip code	Agency	Site	n	Mean	SD
		Benavidez-HISD	11	128.9	8.0
		Braeburn-HISD	3	*	*
		Klein HS	3	*	*
		Robindell	3	*	*
77081	NCI	Rodriguez-HISD	16	130.4	8.7
77085	NCI	Fondren-HISD	15	134.3	9.4
		Albury	2	*	*
77096	NCI	Halpin ECC-HISD	28	140.0	7.5

Note. 1.) * Denotes fewer than 5 students. 2.) The district mean standard score on the 2014–2015 kindergarten IOWA mathematics Subtest (M = 132.9).

Table 3. HISD Kindergarten Student Performance on the 2014–2015 Kindergarten Logramos ELA Subtest By Zip Code, Head Start Program, and Site					
Zip code	**Agency**	**Site**	**n**	**Mean**	**SD**
77009	AVANCE	Browning	35	176.0	11.6
		Jefferson	16	169.0	7.3
		Ketelsen	33	171.7	12.5
77022	AVANCE	Oxford	8	182.0	15.5
77091	AVANCE	Acres Homes	1	*	*
77092	AVANCE	Golden Forest	6	168.2	12.2
		Lincoln Park	2	159.5	4.9
		Mangum	20	174.6	13.9
		Mt Houston	6	180.5	19.4
77093	AVANCE	Jensen	37	173.6	12.3
77003	GCCSA	Clayton Homes	1	*	*
77011	GCCSA	East End	5	176.4	13.4
		Franklin Elementary	37	171.8	15.5
77017	GCCSA	Raul Yzaguirre	4	*	*
77021	GCCSA	Foster Elementary	1	*	*
77033	GCCSA	Bastian Elementary	16	168.4	9.6
		Bellfort Early Childhood Center	77	180.7	12.0
77061	GCCSA	Garden Villa	13	171.7	14.1

Zip code	Agency	Site	n	Mean	SD
		Gregg Elementary	37	165.4	8.4
		Houston Gateway	6	172.7	4.6
		Patterson Elementary	33	175.0	12.5
		Plum Creek	1	*	*
77087	GCCSA	Reveille	16	169.8	10.9
77013	HCDE	Coolwood	7	154.3	13.4
77016	HCDE	Compton	6	158.2	15.2
		Fifth Ward	5	172.6	17.9
77020	HCDE	Pugh	17	169.2	12.9
77026	HCDE	Dogan	37	172.0	11.6
77025	NCI	Shearn-HISD	35	162.9	9.6
77031	NCI	Bell-HISD	29	183.0	11.2
		KBC HS	7	172.1	10.8
77045	NCI	MLKECC-HISD	47	177.6	14.9
		Bonham-HISD	35	177.1	10.4
		Gulfton Promise	9	170.6	20.0
		McNamara-HISD	21	161.1	10.3
77074	NCI	New Horizon HS	11	172.5	16.8
		Benavidez-HISD	62	173.7	16.9
		Braeburn-HISD	45	175.6	12.5
		Klein HS	3	*	*
77081	NCI	Rodriguez-HISD	37	185.4	15.7
77085	NCI	Fondren-HISD	18	181.7	15.5

Zip code	Agency	Site	n	Mean	SD
77096	NCI	Albury	17	172.6	11.5
		Halpin ECC-HISD	71	176.0	13.3

Note. 1.) * Denotes fewer than 5 students. 2.) The district mean standard score on the 2014–2015 kindergarten Logramos ELA Subtest (M = 173.3).

Table 4. HISD Kindergarten Student Performance on the 2014–2015 Kindergarten Logramos Mathematics Subtest By Zip Code, Head Start Program, and Site					
Zip code	**Agency**	**Site**	**n**	**Mean**	**SD**
77009	AVANCE	Browning	35	171.1	12.8
		Jefferson	16	165.4	9.8
		Ketelsen	33	172.3	14.1
77022	AVANCE	Oxford	8	176.9	14.8
77091	AVANCE	Acres Homes	1	*	*
77092	AVANCE	Golden Forest	6	167.0	6.8
		Lincoln Park	2	*	*
		Mangum	20	169.7	16.3
		Mt Houston	6	173.5	16.1
77093	AVANCE	Jensen	37	165.9	13.3
77011	GCCSA	East End	5	169.6	4.7
		Franklin Elementary	37	162.1	8.6
77017	GCCSA	Raul Yzaguirre	4	*	*
77021	GCCSA	Foster Elementary	1	*	*
77033	GCCSA	Bastian Elementary	16	170.3	9.6
		Bellfort Early Childhood Center	94	173.7	13.1
77061	GCCSA	Garden Villa	14	166.7	17.2
77087	GCCSA	Gregg Elementary	37	157.5	9.3
		Houston Gateway	6	162.2	8.5
		Patterson Elementary	35	165.4	11.5
		Plum Creek	1	*	*
		Reveille	16	159.1	9.8
77013	HCDE	Coolwood	8	157.3	9.7

Zip code	Agency	Site	n	Mean	SD
77016	HCDE	Compton	6	152.3	10.0
77020	HCDE	Fifth Ward	5	168.0	15.9
		Pugh	17	159.8	10.6
77026	HCDE	Dogan	37	162.7	10.0
77025	NCI	Shearn-HISD	35	157.5	7.4
77031	NCI	Bell-HISD	30	177.9	11.3
77045	NCI	KBC HS	7	165.0	11.6
		MLKECC-HISD	46	169.4	12.4
77074	NCI	Bonham-HISD	35	165.1	10.4
		Gulfton Promise	10	161.1	16.3
		McNamara-HISD	23	154.3	11.6
		New Horizon HS	11	165.1	16.0
77081	NCI	Benavidez-HISD	64	162.4	20.4
		Braeburn-HISD	46	168.7	14.6
		Klein HS	3	*	*
		Rodriguez-HISD	37	175.4	13.1
77085	NCI	Fondren-HISD	18	176.1	11.8
77096	NCI	Albury	18	165.6	5.7
		Halpin ECC-HISD	72	166.0	12.7

Note. 1.) * Denotes fewer than 5 students. 2.) The district mean standard score on the 2014–2015 kindergarten Logramos mathematics Subtest (M = 165.6).