MEMORANDUM December 12, 2014

TO: Board Members

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

SUBJECT: **PREKINDERGARTEN EDUCATION PROGRAM: ACADEMIC PERFORMANCE COMPARISON OF HEAD START PROGRAMS, 2013–2014**

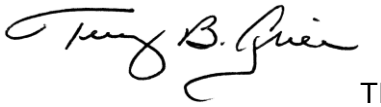
CONTACT: Carla Stevens, (713) 556-6700

Attached is the evaluation report examining the kindergarten performance of students enrolled in Head Start in 2012–2013, and the third grade performance of students enrolled in Head Start in 2008–2009. 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 student performance using the 2013–2014 kindergarten Stanford and Aprenda mathematics and reading tests and the 2013–2014 third grade STAAR reading and mathematics tests.

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 2013–2014 kindergarten Stanford reading and mathematics subtests; b) there was little variation between Head Start programs on the 2013–2014 kindergarten Stanford and Aprenda reading and mathematics subtests; c) the longitudinal data analysis results show that among the four Head Start agencies, AVANCE had the highest percentage of student who met the 2014 STAAR Level II: Satisfactory (Phase-In 1) standard, and obtained the highest mean scale scores on the 2013–2014 STAAR reading and mathematics tests.

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.


TBG

TBG/CS:lp

cc: Superintendent's Direct Reports
Chief School Officers
School Support Officers
Lance Menster
Rachele Vincent
Cindy Puryear
Janice Dingayan

HOUSTON INDEPENDENT SCHOOL DISTRICT

RESEARCH

Educational Program Report

PREKINDERGARTEN EDUCATION PROGRAM: ACADEMIC PERFORMANCE COMPARISON OF HEAD START PROGRAMS, 2013-2014

HISD | Research and Accountability

ANALYZING DATA, MEASURING PERFORMANCE.

2014 BOARD OF EDUCATION

Juliet Stipeche
President

Rhonda Skillern-Jones
First Vice President

Manuel Rodriguez, Jr.
Second Vice President

Anna Eastman
Secretary

Wanda Adams
Assistant Secretary

Michael L. Lunceford
Paula Harris
Greg Meyers
Harvin C. Moore

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

Carla Stevens
Assistant Superintendent
Department of Research and Accountability

Lai Pei , Ph.D.
Research Specialist

Venita Holmes, Dr.P.H.
Research Manager

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

www.HoustonISD.org

PREKINDERGARTEN EDUCATION PROGRAM: ACADEMIC PERFORMANCE COMPARISON OF HEAD START PROGRAMS, 2013–2014

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 (**Appendix D-Table 1-4,** p. 41-51). The purpose of this evaluation was to examine the effect of the Head Start programs on student performance using the 2013–2014 kindergarten Stanford and Aprenda mathematics and reading subtests. This evaluation also explored the effect of Head Start on students' performance on the third grade STAAR mathematics and reading tests.

Highlights

- Students who were dually-enrolled in HISD and one of the four Head Start programs in 2012–2013 scored higher on both Stanford reading and mathematics subtests compared to students who were enrolled in standalone programs.
- Students who were dually-enrolled in HISD and one of the four Head Start programs in 2012–2013 obtained a comparable mean NCE score on the Aprenda reading subtest as students who were enrolled in standalone programs. However, the dually-enrolled students scored lower than the students who were enrolled in standalone programs on the Aprenda mathematics subtest.
- The mean NCE scores of four Head Start agencies on the 2014 Stanford reading subtest varied by agencies. The largest difference found was between GCCSA and HCDE (7.7 NCEs).
- The mean NCE scores of four Head Start agencies on the 2014 Stanford mathematics subtest varied by agencies, with the largest difference found was between NCI and HCDE (8.4 NCEs).
- The mean NCE scores of four Head Start agencies on the 2014 Aprenda reading subtest varied slightly, with the largest difference found was between NCI and HCDE (6.8 NCEs).
- The mean NCE scores of four Head Start agencies on the 2014 Aprenda mathematics subtest varied slightly, with the largest difference found was between GCCSA and AVANCE (5 NCEs).
- Students from the four Head Start agencies obtained a lower mean NCE score compared to the district mean NCE score on the 2013–2014 kindergarten Stanford reading and mathematics subtests.
- Students from NCI obtained a mean NCE score that was higher than the district mean NCE score on the 2013–2014 kindergarten Aprenda reading subtest.

- Students from GCCSA and NCI obtained higher mean NCE scores than the district mean NCE score on the 2013–2014 kindergarten Aprenda mathematics subtest.
- Economically-disadvantaged students from GCCSA and NCI obtained slightly higher Stanford mean NCE score than the district's mean NCE score on the 2013–2014 Stanford reading subtest.
- Economically-disadvantaged students from AVANCE, GCCSA and NCI obtained comparable mean NCE scores as the district's mean NCE score on the 2013–2014 kindergarten Stanford mathematics subtest.
- Economically-disadvantaged students from NCI and GCCSA obtained fairly comparable mean NCE score as the district mean NCE score of economically-disadvantaged students on the 2013–2014 kindergarten Aprenda reading and mathematics subtest.
- Longitudinal data analysis shows that among the four Head Start agencies, AVANCE had the highest percentage of student who met the 2014 STAAR Level II: Satisfactory (Phase-In 1) standard on the third grade reading and mathematics tests, and obtained the highest mean scale scores on the 2013–2014 STAAR reading and mathematics tests.

Recommendations

1. The Early Childhood Curriculum Department and the Research and Accountability Department should continue to work with the Head Start collaborative 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 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 student's SSN. In the future, the collaborative should develop a way to track students.

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).

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 Stanford and Aprenda 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 consisted of two parts that examine the impact of Head Start on student academic performance. First, two class models (dully enrolled and standalone) and four Head Start agencies were compared to examine the effect of class models and Head Start agencies on students' performance on the 2013–2014 kindergarten Stanford and Aprenda mathematics and reading subtests. Second, a longitudinal analysis was conducted to measure the effect of the four Head Start programs on students' STAAR performance at third grade. Specifically, the first study compared the kindergarten academic performance of students who attended one of the four Head Start programs in 2012–2013. The second study compared the third grade STAAR mathematics and reading performance longitudinally of a cohort of students who attended one of four Head Start programs in 2008–2009.

Evaluation Questions

The following questions guided the study:

1. What were the demographic characteristics of Head Start students who were enrolled in 2012–2013?
2. What were the 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 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 kindergarten performance differences among the four Head Start Agencies (AVANCE, GCCSA, HCDE, and NCI) on the 2013–2014 Stanford and Aprenda 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 2013–2014 Stanford and Aprenda tests?
6. How did Head Start students enrolled in the four Head Start agencies in 2008–2009 perform on the 2013–2014 third grade STAAR reading and mathematics tests?
7. How did economically-disadvantaged Head Start students enrolled in the four Head Start programs in 2008–2009 perform on the 2013–2014 third grade STAAR reading and mathematics tests?

Methods

Data Collection and Analysis

Measure

Student performance data were collected from the following assessments: Stanford Achievement Test (Stanford 10) and the Aprenda (Aprenda 3) reading and mathematics subtests, as well as the STAAR reading and mathematics tests.

- The Stanford 10 assesses students' academic achievement in various academic subjects across nine grade levels (kindergarten through grade 8). Kindergarten students take the Stanford at the end of the fall semester of the academic year. In order to compare scores from different administrations and from different instruments, the Normal Curve Equivalents (NCEs)

were used for all subtests to assess student kindergarten performance in this evaluation.

- The Aprenda 3 is a norm-referenced, standardized achievement test in Spanish, and is used to assess the level of content mastery for students who receive instruction in Spanish. The Aprenda assesses students' academic achievement in the same content areas as the Stanford (i.e., reading and math); however, the Aprenda is not a translation of the Stanford.
- STAAR is the state of Texas criterion-referenced assessment, and it replaced the Texas Assessment of Knowledge and Skills (TAKS) program in spring 2012. The Texas Education Agency (TEA), in collaboration with the Texas Higher Education Coordinating Board (THECB) and Texas educators, developed this new assessment system in response to requirements set forth by the 80th, 81st and 83rd Texas legislatures. This new system focuses on increasing postsecondary readiness of graduating high school students, and helps to ensure that Texas students are competitive with other students both nationally and internationally. The key outcome measures for the second study in this evaluation were the 2014 STAAR reading and mathematics scale scores of third grade students. The 2014 STAAR Level II: Satisfactory (Phase-in I) performance standard was also used to measure the proportion of students who met the standard in reading and mathematics.

Data Analyses

- The performance of the 2013–2014 HISD kindergarten students enrolled in the four Head Start agencies in 2012–2013 was analyzed in this evaluation. **Appendix A-Table 1** (p. 27) shows a breakdown of the demographic characteristics of the 2012–2013 HISD kindergarteners by two class models. **Appendix B-Table 1** (p. 32) provides a breakdown of the demographic characteristics of the 2013–2014 HISD kindergarteners by the Head Start program they attended in 2012–2013. The Stanford and Aprenda reading and mathematics NCE scores of 2013–2014 kindergarten students across the Head Start agencies and two class models were compared to examine the impact of Head Start on students were enrolled in the programs and on student subgroups.

- In order to examine the effects of the four Head Start agencies on student's third grade performance, a cohort of students who attended one of the four Head Start programs in 2008–2009 was tracked up to the end of third grade. The descriptive statistics (mean scale scores and percentages of students who met STAAR Level II: Satisfactory (Phase-in I) standard on the 2013–2014 STAAR reading and mathematics subtests were used to describe the impact of four Head Start agencies on students were enrolled in the programs and student subgroups.

- 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 Stanford, Aprenda, and third grade STAAR.

Sample

- Each of the four Head Start agencies provided a list of students enrolled in their programs in 2012–2013. The students were matched to the PEIMS 2013–2014 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 agency. For AVANCE, 332 students were identified as 2013–2014 HISD kindergarteners; for GCCSA, 350 students; for HCDE, 232 students; and for NCI, 672 students.
- Students who attended one of the four Head Start programs in 2008–2009 and took the third grade STAAR test in 2013–2014. Only students who had 2014 STAAR reading and mathematics scores were included in this evaluation. Consequently, the sample size of the second study was 718. The demographic characteristic of students in the second study is shown in **Appendix C-Table 1** (p. 37).

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 a 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 were identified as attending HISD kindergarten.
- Furthermore, the Head Start agencies did not provide rosters by locations so that the more detailed report by Head Start agency locations could not be provided.

Results

What were the demographic characteristics of Head Start students who were enrolled in 2012–2013?

- Appendix A-Table 1 (p. 27) shows the demographic characteristics of Head Start students by the two Head Start class models. The students from 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 (over 92%), and at-risk (over 75%). There were some differences in the demographic characteristics of the students from two Head Start class models. The majority of dually-enrolled students were Hispanic (75.8%), while the majority of students from standalone classrooms were African-American (62.7%). The percentage of LEP students from the dually-enrolled classrooms was higher than standalone classrooms (57.5% vs. 24.8%). Finally, the percentage of special education students from the dually-enrolled classrooms was lower than standalone classrooms (5.5% vs. 39.8%).

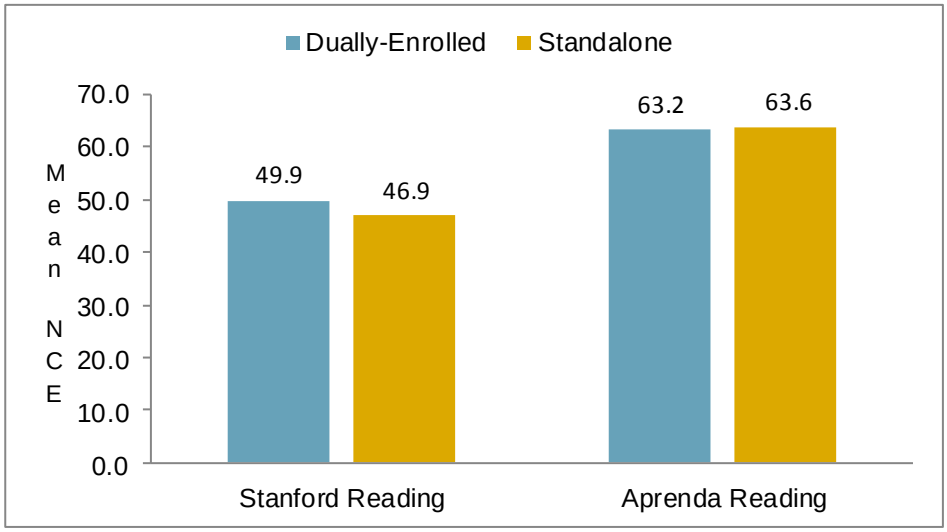
- Appendix B-Table 1 (p. 32) shows the demographic characteristics of Head Start students by four Head Start agencies. The students from four Head Start agencies were comparable with respect to gender, economically-disadvantaged status, and special education placement. Notably, in both groups, the majority of students (over 95%) were economically-disadvantaged, over 80% 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 (84%). NCI had the highest percentage of LEP students (65.8%).

What were the 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?

Stanford and Aprenda Reading

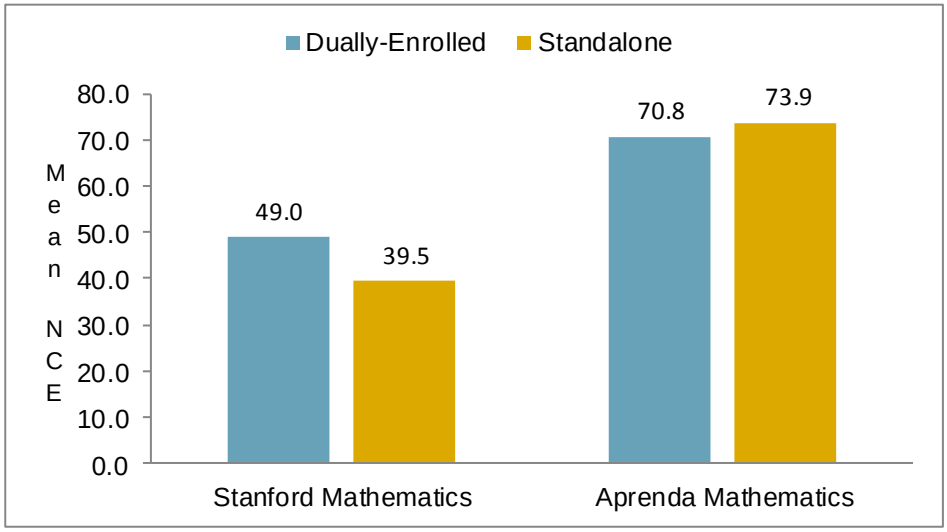
Figure 1. Mean NCE scores on the 2013–2014 Stanford and Aprenda reading subtests for HISD kindergarten students by Head Start enrollment status.



- Stanford and Aprenda mean NCE reading scores for kindergarten students who attended one of the four Head Start agencies' dual or standalone programs in 2012–2013 are displayed in **Figure 1**. **Appendix A-Table 2** (p. 28) and **Appendix A-Table 4** (p. 30) present the number of students who took the Stanford and Aprenda reading subtests in 2013–2014, and the means and standard deviations of the NCE scores by ethnicity, gender, economically-disadvantaged, special education placement, LEP, and at-risk status.
- Students who were dually-enrolled in one of the four Head Start programs in 2012–2013 scored higher on the 2013–2014 Stanford reading subtest compared to students enrolled in standalone programs by 3 NCEs.
- On the 2013–2014 Aprenda reading subtest, students who were dually-enrolled (M = 63.2) obtained comparable mean NCE score as students who were enrolled in standalone programs (M = 63.6).

Stanford and Aprenda Mathematics

Figure 2. Mean NCE scores on the 2013–2014 Stanford and Aprenda mathematics subtests for HISD kindergarten students by Head Start enrollment status.

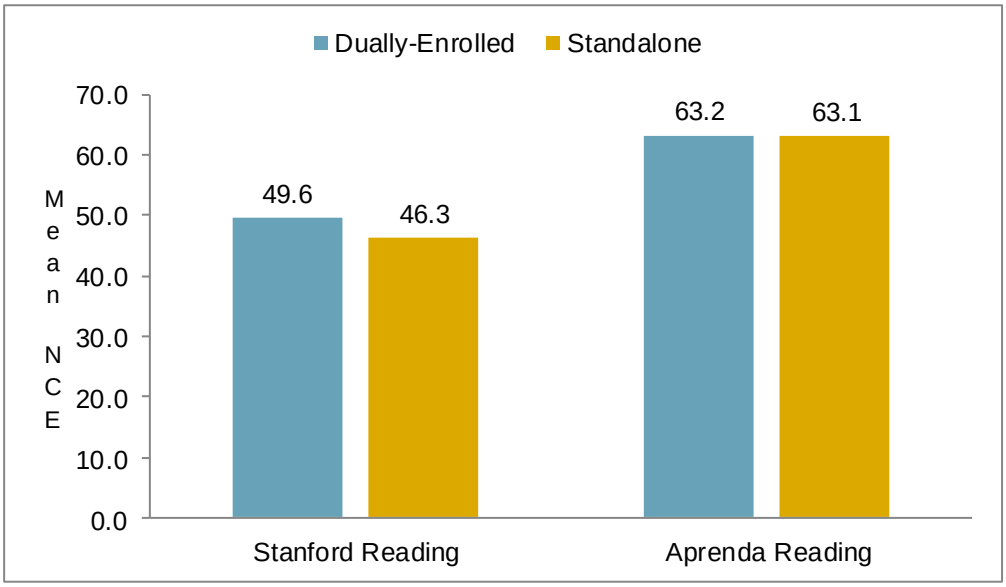


- Stanford and Aprenda mean NCE mathematics scores for kindergarten students who attended one of the four Head Start agencies' dual or standalone program in 2012–2013 are displayed in **Figure 2**. **Appendix A-Table 3** (p. 29) and **Appendix A-Table 5** (p. 31) present the number of students who took the Stanford and Aprenda mathematics subtest in 2013–2014, and the means and standard deviations of the NCE scores by ethnicity, gender, economically-disadvantaged, special education placement, LEP, and at-risk status.
- Students who were dually-enrolled (M = 49.0) in one of the four Head Start programs in 2012–2013 scored higher on the 2013–2014 Stanford mathematics subtest compared to students who were enrolled in a standalone program (M = 39.5) by 9.5 NCEs.
- On the 2013–2014 Aprenda mathematics subtest, students who were dually-enrolled (M = 70.8) scored lower than students who were enrolled in a standalone program (M = 73.9) by 3.1 NCEs.

What were the 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?

Stanford and Aprenda Reading

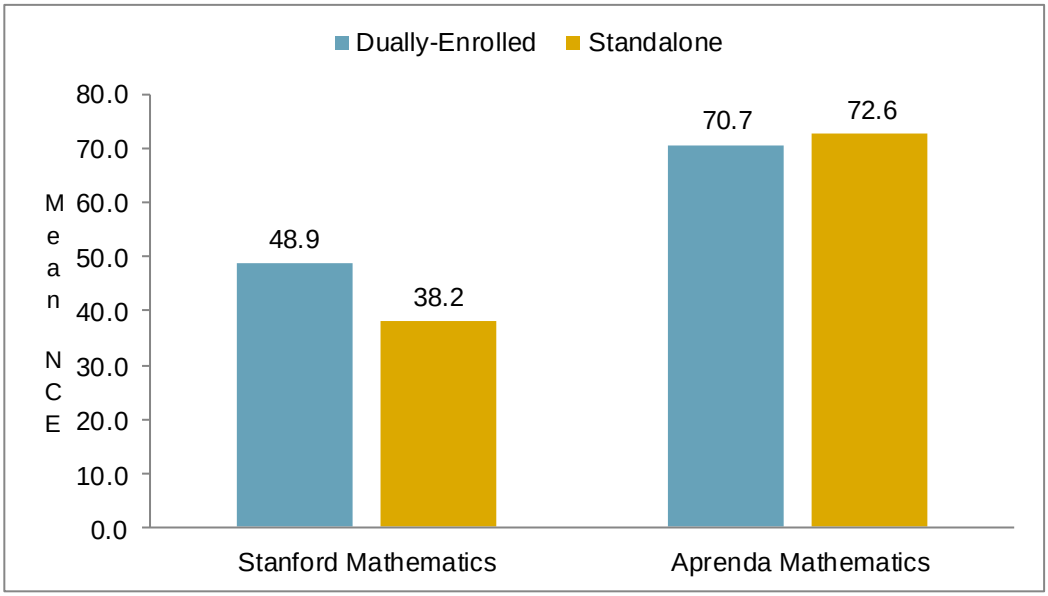
Figure 3. Mean NCE scores on the 2013–2014 Stanford and Aprenda reading subtest for HISD economically-disadvantaged kindergarten students by Head Start enrollment status.



- Stanford and Aprenda mean NCE reading scores for economically-disadvantaged kindergarten students who attended one of the four Head Start agencies' dual or standalone programs in 2012–2013 are displayed in **Figure 3**. Appendix A-Table 2 (p. 28) and Appendix A-Table 4 (p. 30) presents the number of economically-disadvantaged students who took the Stanford and Aprenda reading subtests in 2013–2014, and the means and standard deviations of the NCE scores by Head Start enrollment status.
- Economically-disadvantaged students who were dually-enrolled (M = 49.6) in one of the four Head Start programs in 2012–2013 scored higher on the Stanford reading subtest compared to students who were enrolled in a standalone program (M = 46.3) by 3.3 NCEs.
- On the 2013–2014 Aprenda reading subtest, economically-disadvantaged students who were dually-enrolled (M = 63.2) obtained a comparable mean NCE score as the economically-disadvantaged students who were enrolled in standalone programs (M = 63.1).

Stanford and Aprenda Mathematics

Figure 4. Mean NCE scores on the 2013–2014 Stanford and Aprenda Mathematics subtest for HISD economically-disadvantaged kindergarten students by Head Start enrollment status.

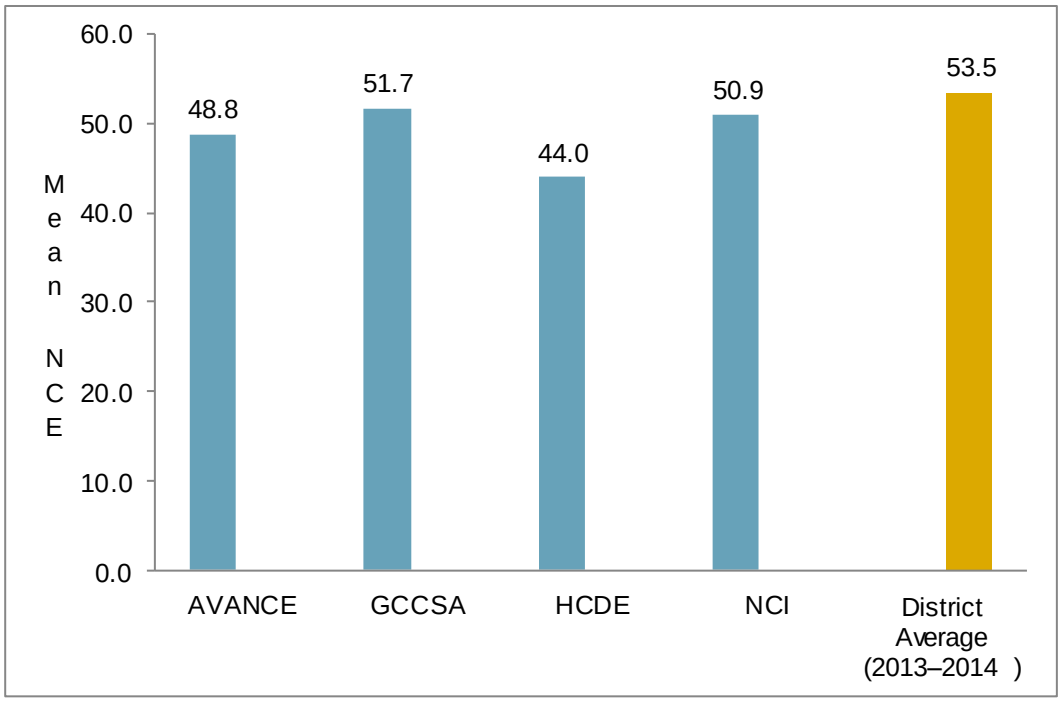


- Stanford and Aprenda mean NCE mathematics scores for kindergarten students who attended one of the four Head Start agencies' dual or standalone programs in 2012–2013 are displayed in **Figure 4**. Appendix A-Table 3 (p. 29) and Appendix A-Table 5 (p. 31) present the number of economically-disadvantaged students who took the Stanford and Aprenda mathematics subtests in 2013–2014, and the means and standard deviations of the NCE scores by Head Start enrollment status.
- Economically-disadvantaged students who were dually-enrolled (M = 48.9) in one of the four Head Start programs in 2012–2013 scored higher on the 2013–2014 Stanford mathematics subtest compared to the economically-disadvantaged students who were enrolled in a standalone program (M = 38.2) by 10.7 NCEs.
- On the 2013–2014 Aprenda mathematics subtest, economically-disadvantaged students who were dually-enrolled (M = 70.7) obtained a lower mean NCE score than the economically-disadvantaged students who were enrolled in a standalone program (M = 72.6) by 1.9 NCEs.

What were the kindergarten performance differences among the four Head Start Agencies (AVANCE, GCCSA, HCDE, and NCI) on the 2013–2014 Stanford and Aprenda tests?

Stanford Reading

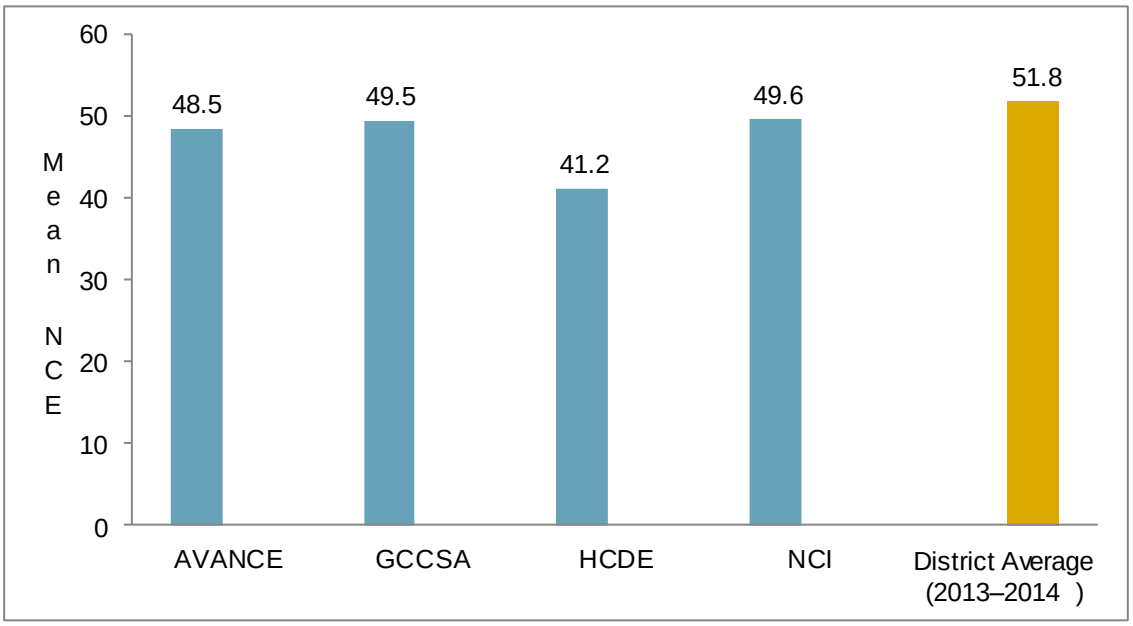
Figure 5. Mean NCE scores on the 2013–2014 Stanford reading subtest by Head Start agency.



- Stanford mean NCE reading scores for students who attended Head Start in 2012–2013 are displayed in **Figure 5. Appendix B-Table 2** (p. 33) presents the number of students who took the Stanford reading subtest in 2013–2014, the means and standard deviations of the NCE 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 lower mean NCE score than the district mean NCE score (M = 53.5) on the 2013–2014 kindergarten Stanford reading subtest.
- Students from GCCSA (M = 51.7) had the highest Stanford mean NCE reading score, while students from HCDE (M = 44.0) had the lowest Stanford mean NCE reading score. The mean NCE score difference between these two agencies was 7.7 NCEs.

Stanford Mathematics

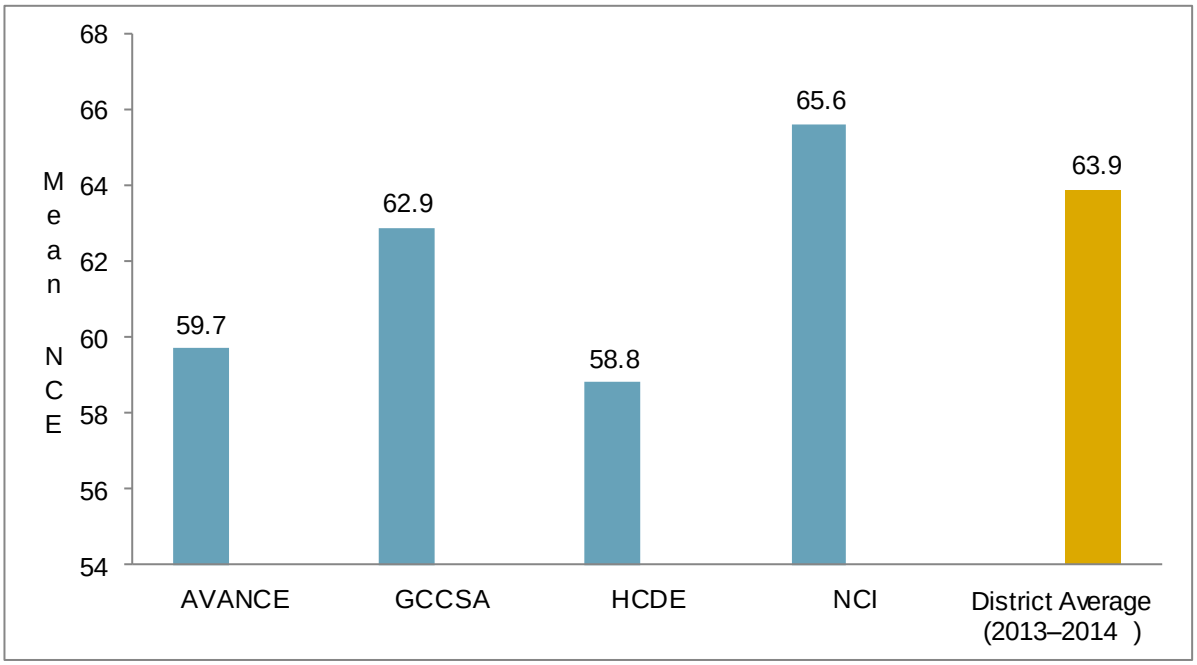
Figure 6. Mean NCE scores on the 2013–2014 Stanford Mathematics subtest by Head Start agency.



- Stanford mean NCE mathematics scores for students who attended Head Start in 2012–2013 are displayed in **Figure 6**. **Appendix B-Table 3** (p. 34) presents the number of students who took the Stanford mathematics subtest in 2013–2014, the means and standard deviations of the NCE 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 lower mean NCE score than the district mean NCE score (M = 51.8) on the 2013–2014 kindergarten Stanford mathematics subtest.
- Students from AVANCE (M = 48.5), GCCSA (M = 49.5), and NCI (M = 49.6) obtained comparable mean NCE scores on the 2013–2014 kindergarten Stanford mathematics subtest.

Aprenda Reading

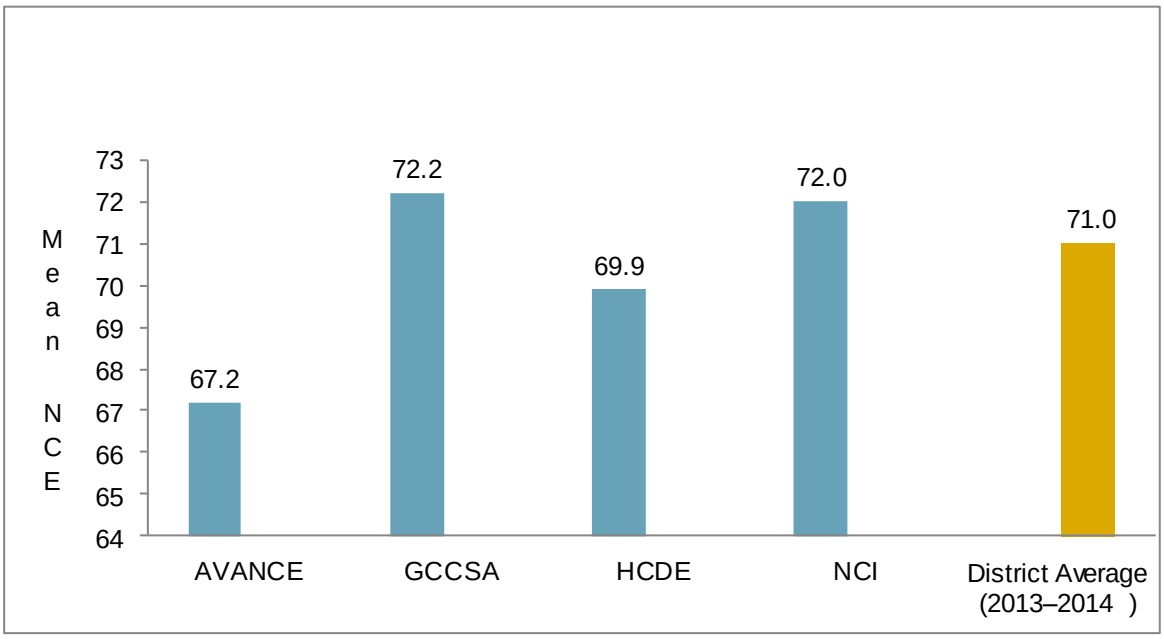
Figure 7. Mean NCE scores on the 2013–2014 Aprenda reading subtest by Head Start agency.



- Aprenda mean NCE reading scores for students who attended Head Start in 2012–2013 are displayed in **Figure 7**. **Appendix B-Table 4** (p. 35) presents the number of students who took the Aprenda reading subtest in 2013–2014, the means and standard deviations of the NCE 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 = 65.6) obtained a higher mean NCE score than the district mean NCE score (M = 63.9) on the 2013–2014 kindergarten Aprenda reading subtest.
- Students from AVANCE (M = 59.7) obtained the lowest mean NCE scores on the 2013–2014 kindergarten Aprenda reading subtest.

Aprenda Mathematics

Figure 8. Mean NCE scores on the 2013–2014 Aprenda mathematics subtest by Head Start agency.

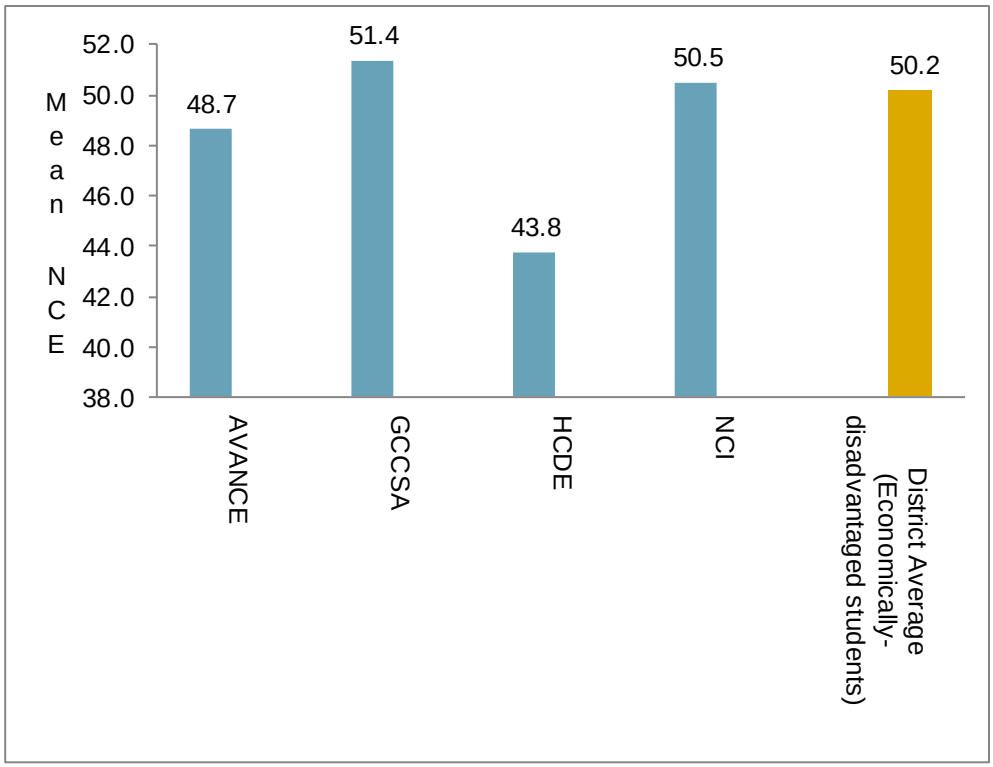


- Aprenda mean NCE mathematics scores for students who attended Head Start in 2012–2013 are displayed in **Figure 8**. **Appendix B-Table 5** (p. 36) presents the number of students who took the Aprenda mathematics subtest in 2013–2014, and the means and standard deviations of the NCE scores by the four Head Start agencies and by student groups (gender, economically-disadvantaged, special education placement, LEP, and at-risk status).
- Students from GCCSA (M = 72.2) and NCI (M = 72.0) obtained higher mean NCE scores than the district mean NCE score (M = 71.0) on the 2013–2014 kindergarten Aprenda mathematics subtest.
- Students from AVANCE (M = 67.2) obtained the lowest mean NCE scores on the 2013–2014 kindergarten Aprenda mathematics subtest.

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 2013–2014 Stanford and Aprenda tests?

Stanford Reading

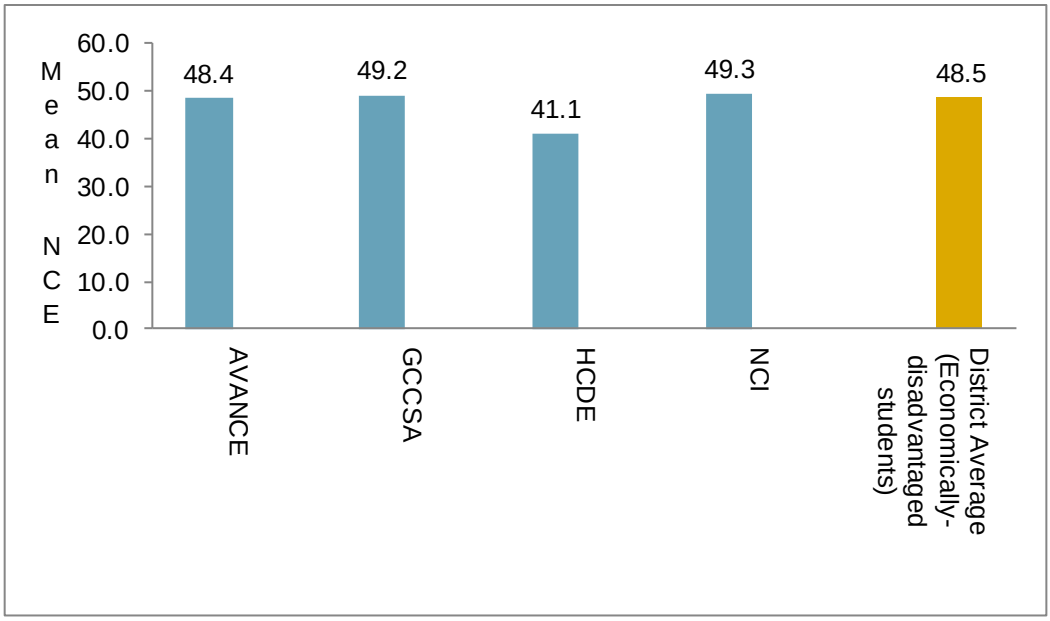
Figure 9. Mean NCE scores on the 2013–2014 Stanford reading subtest for economically-disadvantaged HISD kindergarten students enrolled in Head Start the previous year.



- 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.
- Stanford mean NCE reading scores for economically-disadvantaged kindergarten students are displayed in **Figure 9**. Appendix B-Table 2 (p. 33) presents the number of economically-disadvantaged students who took the Stanford reading subtest in 2013–2014, and the means and standard deviations of the NCE scores by the four Head Start agencies.
- Economically-disadvantaged students from GCCSA (M = 51.7) and NCI (M = 50.5) obtained slightly higher Stanford mean NCE scores than the district mean NCE score for the economically-disadvantaged students (M = 50.2) on the 2013–2014 Stanford reading subtest.
- The Stanford mean NCE reading scores of economically-disadvantaged students from AVANCE (M = 48.7) and HCDE (M = 43.8) were lower than the district mean NCE score for economically-disadvantaged students.

Stanford Mathematics

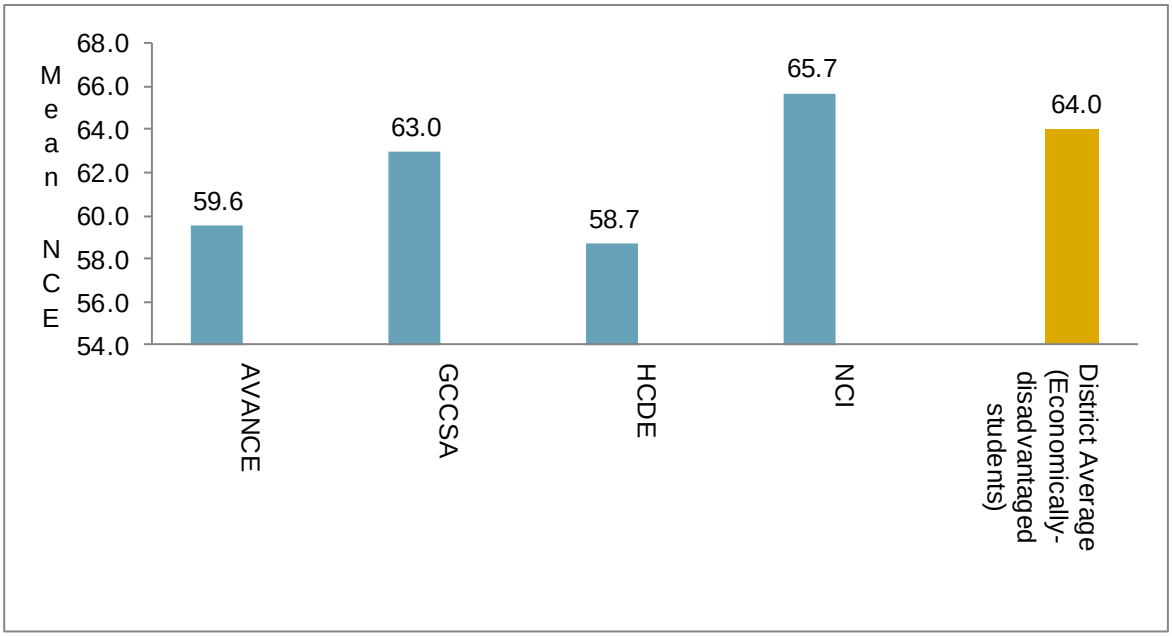
Figure 10. Mean NCE scores on the 2013–2014 Stanford mathematics subtest for economically-disadvantaged HISD kindergarten students enrolled in Head Start the previous year.



- Stanford mean NCE mathematics scores for the economically-disadvantaged kindergarten students are displayed in **Figure 10.** Appendix B-Table 3 (p. 34) presents the number of economically-disadvantaged students who took the Stanford mathematics subtest in 2013–2014, and the means and standard deviations of the NCE scores by the four Head Start agencies.
- Economically-disadvantaged students from AVANCE (M = 48.4), GCCSA (M = 49.2), and NCI (M = 49.3) obtained comparable mean NCE scores as the district mean NCE score for the economically-disadvantaged students (M = 48.5) on the 2013–2014 Stanford mathematics subtest.

Aprenda Reading

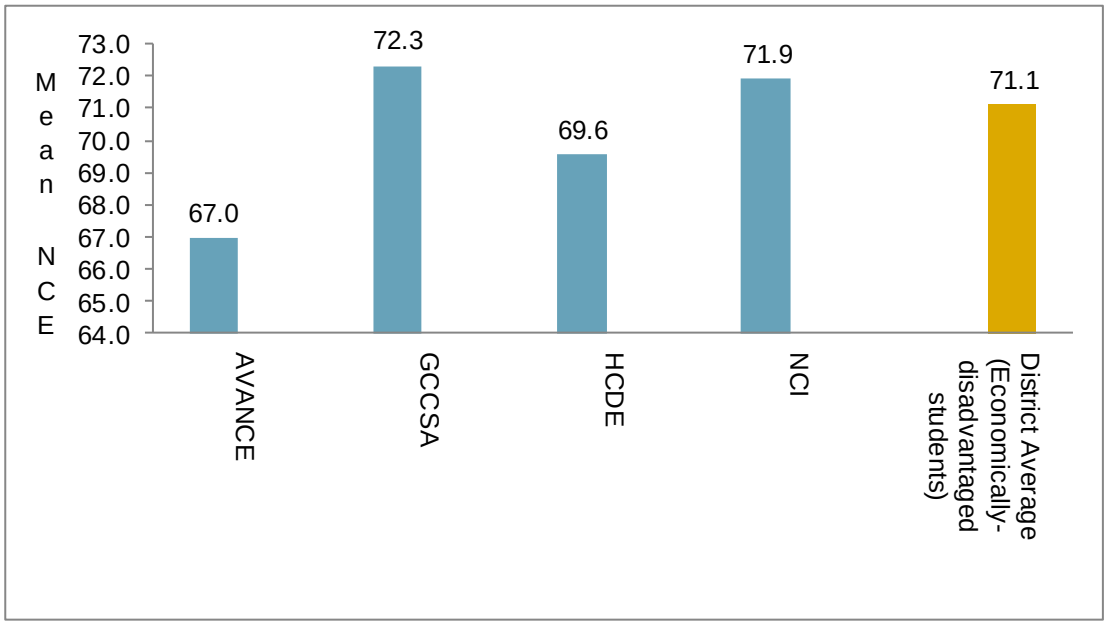
Figure 11. Mean NCE scores on the 2013–2014 Aprenda reading subtest for economically-disadvantaged HISD kindergarten students enrolled in Head Start the previous year.



- Aprenda mean NCE reading scores for the economically-disadvantaged kindergarten students are displayed in **Figure 11**. Appendix B-Table 4 (p. 35) presents the number of economically-disadvantaged students who took the Aprenda reading subtest in 2013–2014, and the means and standard deviations of the NCE scores by the four Head Start agencies.
- Economically-disadvantaged students from NCI (M = 65.7) and GCCSA (M = 63.0) obtained fairly comparable mean NCE score as the district mean NCE score of economically-disadvantaged students (M = 64.0) on the 2013–2014 kindergarten Aprenda reading subtest.
- Economically-disadvantaged students from AVANCE (M = 59.6) and HCDE (M = 58.7) obtained comparable mean NCE score on the 2013–2014 kindergarten Aprenda reading subtest, but their scores were lower than the district mean NCE score of economically-disadvantaged students (M = 64.0).

Aprenda Mathematics

Figure 12. Mean NCE Scores on the 2013–2014 Aprenda Mathematics Subtest for economically-disadvantaged HISD kindergarten students enrolled in Head Start the previous year.

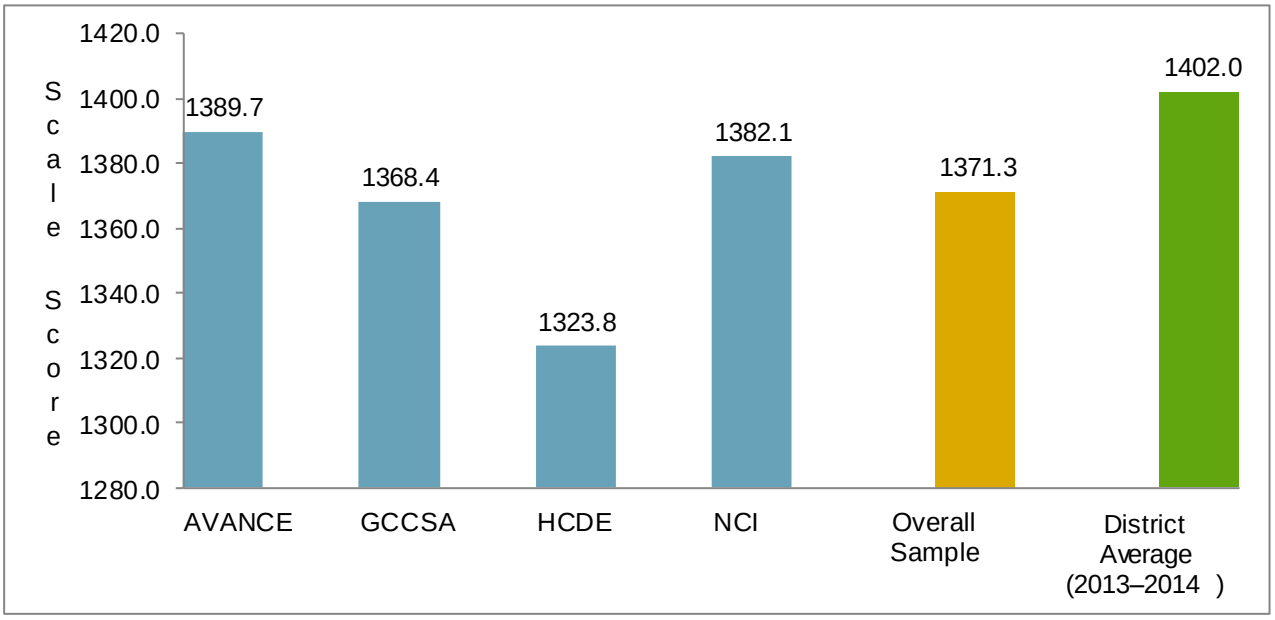


- Aprenda mean NCE mathematics scores for economically-disadvantaged kindergarten students are displayed in **Figure 12**. Appendix B-Table 5 (p. 36) presents the number of students who took the Aprenda mathematics subtest in 2013–2014, and the means and standard deviations of the NCE scores by the four Head Start agencies.
- Economically-disadvantaged students from NCI (M = 71.9) and GCCSA (M = 72.3) obtained comparable mean NCE scores, which were slightly higher than the district mean NCE score (M = 71.1) on the 2013–2014 kindergarten Aprenda mathematics subtest.
- Economically-disadvantaged students from AVANCE (M = 67.0) and HCDE (M = 69.6) obtained lower scores than the district mean NCE score for economically-disadvantaged students on the 2013–2014 kindergarten Aprenda mathematics subtest.

How did Head Start students enrolled in the four Head Start agencies in 2008–2009 perform on the 2013–2014 third grade STAAR reading and mathematics tests?

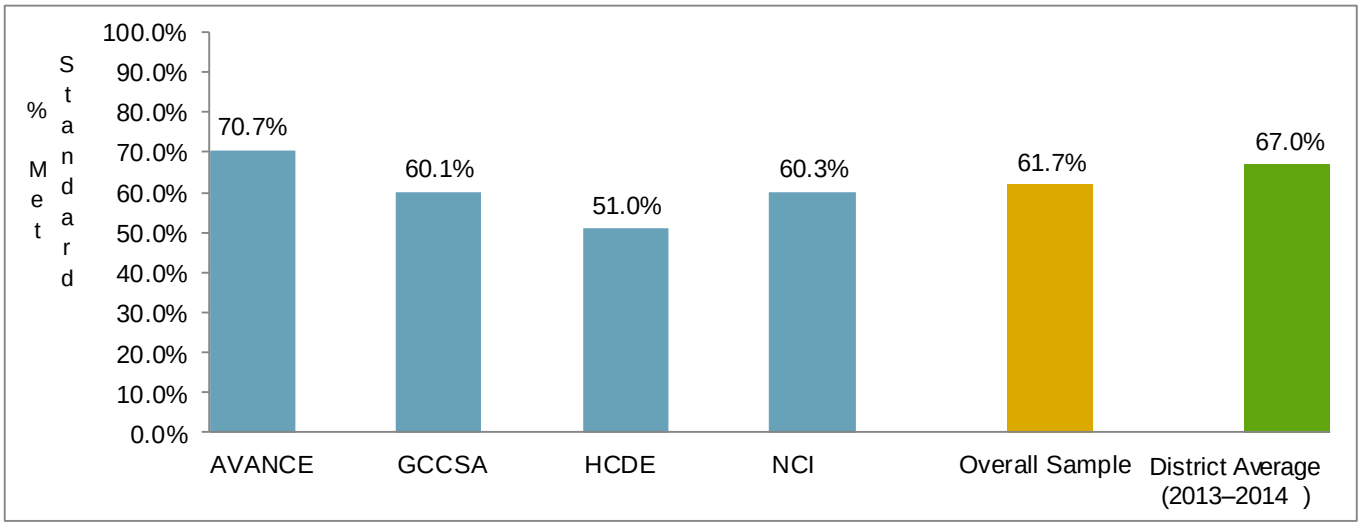
STAAR Reading Test

Figure 13. Mean scale scores on the 2013–2014 third grade STAAR reading test for Head Start students who were enrolled in 2008–2009.



- The 2014 third grade STAAR mean scale scores in reading for students who attended one of the four Head Start agencies' programs in 2008–2009 are displayed in **Figure 13**. **Appendix C-Table 1** (p. 37) presents the number of students who took the third grade STAAR reading test in 2013–2014, and the means and standard deviations of the scale scores by the four Head Start agencies and by other student groups (ethnicity, gender, economically-disadvantaged, special education placement, LEP, and at-risk status).
- Figure 13 shows that in the overall sample Head Start students who were enrolled in one of the four Head Start programs in 2008–2009 (M = 1371.3) scored lower than the district mean scale score (M = 1402) on the 2013–2014 STAAR reading test by 30.7 points.
- Among the four Head Start agencies, students from AVANCE (M = 1389.7) and NCI (M = 1382.1) obtained comparable mean scale scores. Their mean scale scores were higher than the mean scale score of GCCSA (M = 1368.4) and HCDE (M = 1323.8) on the 2013–2014 STAAR reading test (Figure 13).

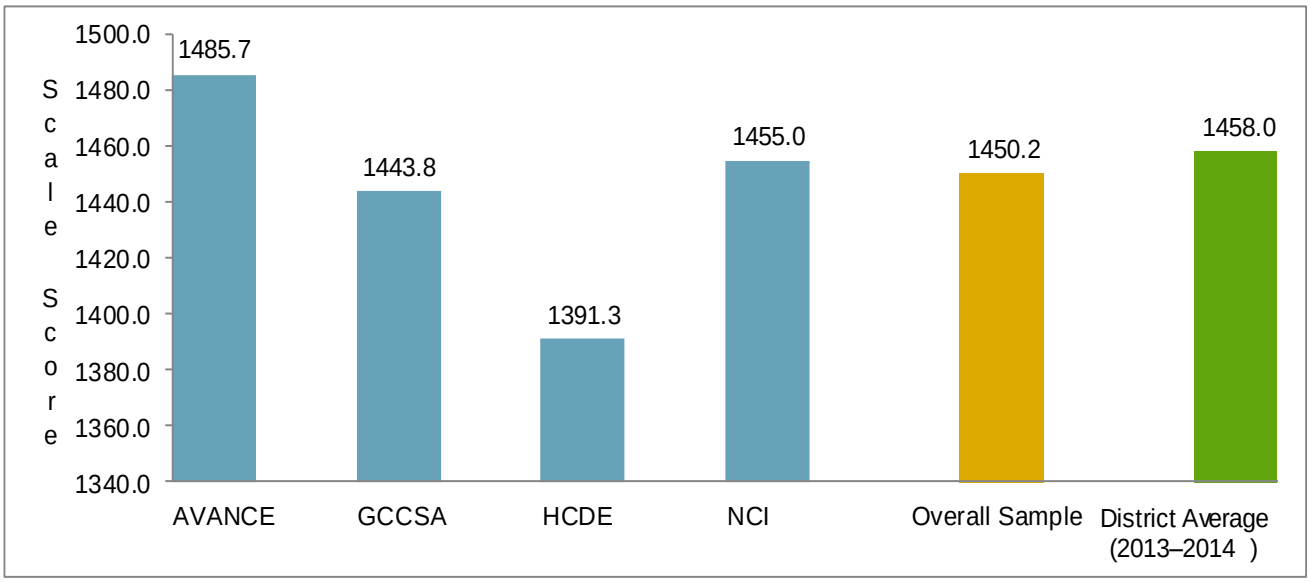
Figure 14. Percentage of Head Start students who were enrolled in 2008–2009 Head Start programs and met the 2014 third grade STAAR Level II: Satisfactory (Phase-In 1) reading standard.



- The percentage of Head Start students who were enrolled in 2008–2009 Head Start programs and met the 2014 STAAR Level II: Satisfactory (Phase-In 1) reading standard are displayed in **Figure 14**. **Appendix C-Table 2** (p. 38) presents the number of students who took the third grade STAAR reading test in 2013–2014, and the percentage of Head Start students who met the STAAR Level II: Satisfactory (Phase-In 1) reading standard by the four Head Start agencies and by other student groups (ethnicity, gender, economically-disadvantaged, special education placement, LEP, and at-risk status).
- Figure 14 shows that in the overall sample, 61.7% of Head Start students met the 2014 STAAR Level II: Satisfactory (Phase-In 1) reading standard compared to 67.0% for the district.
- Among the four Head Start agencies, AVANCE (70.7%) had the highest percentage of students who met the 2014 STAAR Level II: Satisfactory (Phase-In 1) standard on the reading test, which was higher than the district percentage (Figure 14).
- GCCSA (60.1%) and NCI (60.3%) had comparable percentages of students who met the 2014 STAAR Level II: Satisfactory (Phase-In 1) standard on the reading test, but these percentages were lower than the district percentage (Figure 14).

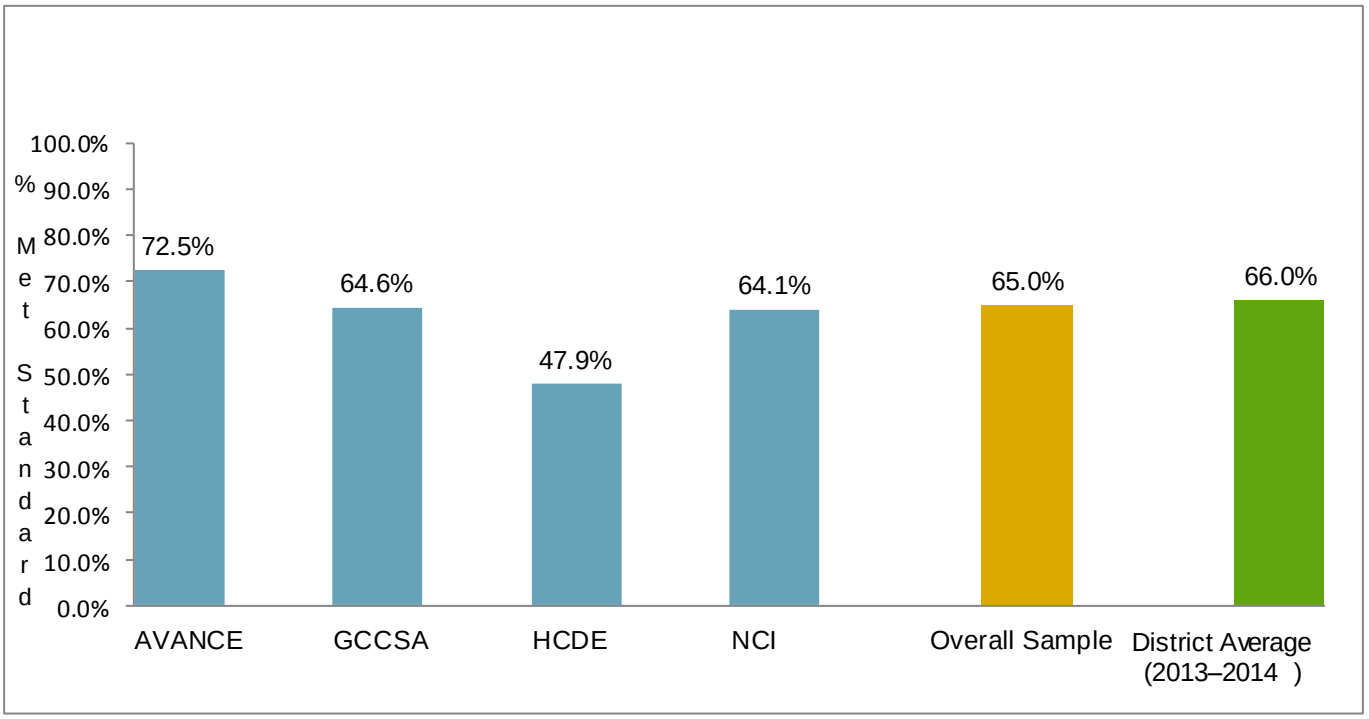
STAAR Mathematics Test

Figure 15. Mean scale scores on the 2013–2014 third grade STAAR mathematics test for Head Start students who were enrolled in 2008–2009.



- The 2014 STAAR mean scale mathematics scores for students who attended one of the four Head Start agencies' programs in 2008–2009 and took the 2014 third grade STAAR mathematics test are displayed in **Figure 15**. **Appendix C-Table 3** (p. 39) presents the number of students who took the third grade STAAR mathematics test in 2013–2014, and the means and standard deviations of the scale scores by the four Head Start agencies and by other student groups (ethnicity, gender, economically-disadvantaged, special education placement, LEP, and at-risk status).
- Figure 15 shows that in the overall sample, Head Start students (M= 1450.2) obtained a lower mean scale score than the district mean scale score (M = 1458.0) on the 2013–2014 STAAR mathematics test by 7.8 points.
- Among the four Head Start agencies, AVANCE (M = 1485.7) obtained the highest mean scale score on the 2013–2014 STAAR mathematics test, which was higher than the district mean scale score (M = 1458.0) (Figure 15).

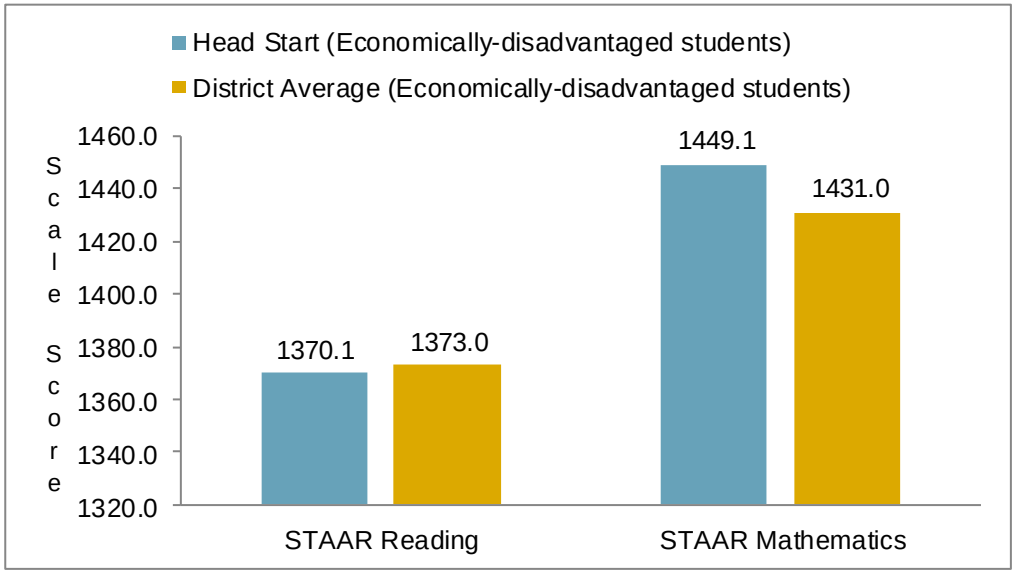
Figure 16. Percentage of Head Start students who were enrolled in 2008–2009 Head Start programs and met the 2014 third grade STAAR Level II: Satisfactory (Phase-In 1) mathematics standard.



- The percentage of Head Start students who were enrolled in 2008–2009 Head Start programs and met the 2014 third grade STAAR Level II: Satisfactory (Phase-In 1) mathematics standard are displayed in **Figure 16**. **Appendix C-Table 4** (p. 40) presents the number of students who took the third grade STAAR mathematics test in 2013–2014, and the percentage of Head Start students who met the STAAR Level II: Satisfactory (Phase-In 1) mathematics standard by the four Head Start agencies and by other student groups (ethnicity, gender, economically-disadvantaged, special education placement, LEP, and at-risk status).
- Figure 16 shows that 65.0% of Head Start students in the overall sample met the 2014 STAAR Level II: Satisfactory (Phase-In 1) mathematics standard compared to 66.0% for the district.
- Among the four Head Start agencies, AVANCE (72.5%) had the highest percentage of students who met the 2014 STAAR Level II: Satisfactory (Phase-In 1) standard on the mathematics test, which was higher than the district percentage by 6.5% (Figure 16).
- GCCSA (64.6%) and NCI (64.1%) had comparable percentages of students who met the 2014 STAAR Level II: Satisfactory (Phase-In 1) standard on the mathematics test (Figure 16).

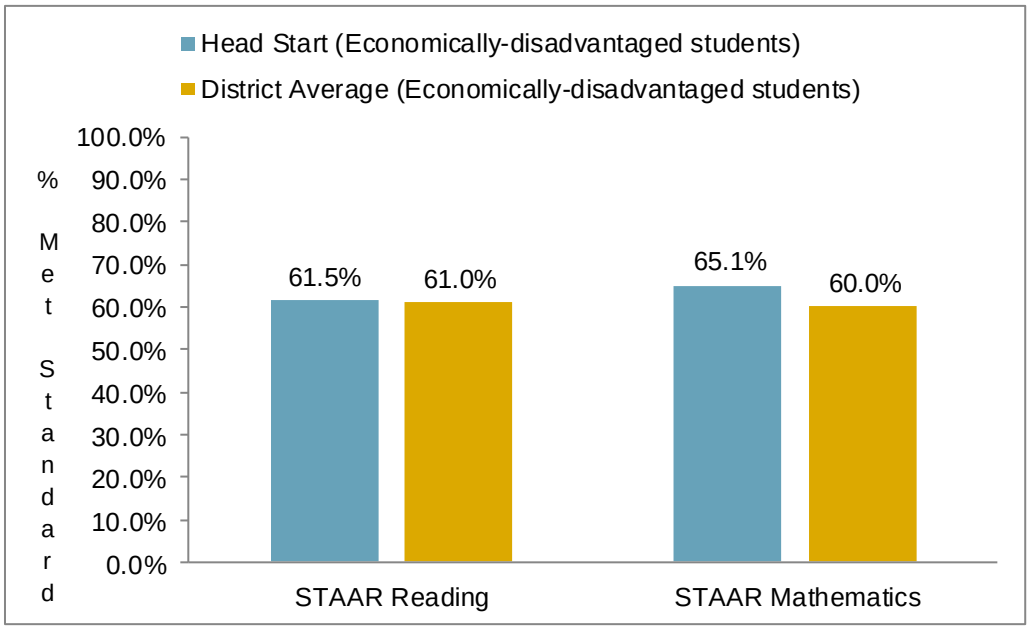
How did economically-disadvantaged Head Start students enrolled in the four Head Start programs in 2008–2009 perform on the 2013–2014 third grade STAAR reading and mathematics tests?

Figure 17. Mean scale scores on the 2013–2014 STAAR reading and mathematics tests for economically-disadvantaged Head Start students who were enrolled in 2008–2009.



- **Figure 17** shows the economically-disadvantaged Head Start students (M = 1370.1) had a lower though comparable mean scale score with the district (M = 1373.0) on the 2014 STAAR reading test.
- Economically-disadvantaged Head Start students (M = 1449.1) had a higher mean scale score than the district (M = 1431.0) on the 2014 STAAR mathematics test (Figure 17).

Figure 18. Percentage of economically-disadvantaged Head Start students who were enrolled in 2008–2009 Head Start programs and met the 2014 third grade STAAR Level II: Satisfactory (Phase-In 1) standard on the reading and mathematics tests.



- **Figure 18** shows that on the 2014 STAAR reading test, the percentage of Head Start economically-disadvantaged students (61.5%) who met the STAAR Level II: Satisfactory (Phase-In 1) standard was comparable to the district percentage (61.0%).

- On the 2014 STAAR mathematics test, the percentage of Head Start economically-disadvantaged students (65.1%) who met the STAAR Level II: Satisfactory (Phase-In 1) standard was higher than the district percentage (60.0%) (Figure 18).

Discussion

The goal of Head Start programs is to provide learning opportunities to economically-disadvantaged students to help them develop and maintain foundational skills necessary to be successful in school. The current evaluation compared the performance of Head Start students by program, economic status, and enrollment status. When student performance was compared by Head Start agency, the findings from this evaluation were mixed. The student performance on the 2014 Stanford and Aprenda reading, 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 four Head Start agencies, we should take the characteristics of each agency into account (Appendix D Table 1-4, p. 41-51 and **Appendix E**, p. 52).

Findings from this evaluation report also suggested that students who were dually-enrolled in both Head Start and HISD prekindergarten had a slightly higher average performance on the Stanford reading and mathematics subtests compared to the performance of students who attended a Head Start standalone program. This finding is likely due to the fact that students dually-enrolled in HISD and Head Start receive instruction and support from two instructors rather than one. In addition, all HISD teachers are certified and have a four-year college degree.

The longitudinal data analysis findings suggested that the impact of Head Start programs on student third grade academic performance was significant and evident for both STAAR reading and mathematics scores, especially for the economically-disadvantaged students. When student performance was compared by Head Start agency, the findings suggested that economically-disadvantaged students who attended AVANCE obtained higher mean scale scores than the district mean scale scores on both STAAR reading and mathematics tests. Consequently, the economically-disadvantaged students from AVANCE may have acquired significant academic benefits from the Head Start program and maintained that academic edge to third grade. This phenomenon is opposite to the "fade-out" phenomenon of Head Start. (Barnett & Hustedt, 2005). "Fade-out" phenomenon is the diminished effect of preschool over time. Researchers showed that one factor related to perceived "fade-out" is whether the child's elementary school is a high-poverty school (Brooks-Gun, 2005; Magnuson, Ruhm & Waldfogel, 2007; Barnett & Hustedt, 2005). To better understand the "fade-out" issue of other Head Start agencies, an additional study is recommended to examine the program characteristics of AVANCE to find out whether it is a well-aligned program that could help students to maintain and expand the academic gains made in Head Start. Finally, the students' educational experience after Head Start should be analyzed to better understand the transition process from Head Start to the early elementary grades.

References

Aikens, N. L., & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. Journal of Educational Psychology, 100(2), 235-251. doi:10.1037/0022-0663.100.2.235.

Barnett, S. & Hustedt, J.T (2005). Head Start's Lasting Benefits. Infants & Young Children, 18(1), 16–24.

Brooks-Gunn, J. (2003). Do you believe in magic? What we can expect from early childhood intervention programs? SRCD Social Policy Report, 17, 3-14.

Brooks-Gun, J. (2005). Cause for Celebration? Sustained Effects of Early Childhood Education. National Center for Family and Children Association (NHSA Dialog, 8, No. 1, pp. 1–4 (July 2005). Retrieved November 15, 2011, from http://ccf.tc.columbia.edu/pdf/BrooksGunn_Sustained_ECE_Aug05.pdf.

Chatterji, M. (2006). Reading achievement gaps, correlates, and moderators of early reading achievement: Evidence from the Early Childhood Longitudinal Study (ECLS) kindergarten to first grade sample. Journal of Educational Psychology, 98(3), 489-507. doi:10.1037/0022-0663.98.3.489.

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. doi:10.1016/j.econedurev.2005.03.004.

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. doi:10.1037/0012-1649.41.6.872.

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. doi: 10.3102/0162373712462453.

University of Texas System/Texas Education Agency. (2010). Texas primary reading 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. 2013–2014 Demographic Characteristics of HISD Kindergarten Students by Head Start Class Models

		Dually-Enrolled (n = 1,473)		Standalone (n =113)	
Demographic Characteristic		**n**	**%**	**n**	**%**
Gender	Female	723	49.1%	58	51.3%
	Male	750	50.9%	55	48.7%
Ethnicity	Asian	19	1.3%	*	*
	African-American	316	21.5%	72	63.7%
	Hispanic	1,116	75.8%	40	35.4%
	White	14	1.0%	*	*
	Other	8	0.5%	*	*
Economically-Disadvantaged	No	49	3.3%	9	8.0%
	Yes	1,424	96.7%	104	92.0%
Special Education	No	1,392	94.5%	68	60.2%
	Yes	81	5.5%	45	39.8%
Limited English Proficient (LEP)	No	626	42.5%	85	75.2%
	Yes	847	57.5%	28	24.8%
At-Risk	No	163	11.1%	28	24.8%
	Yes	1,310	88.9%	85	75.2%

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 2013–2014.

Table 2. Mean NCE Scores on the 2013–2014 Stanford Reading Subtest by Head Start Class Models

		Dually-Enrolled			Standalone		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
Overall Sample		49.9	21.7	737	46.9	22.4	89
Gender	Female	52.2	21.4	360	49.9	22.1	43
	Male	47.7	22.1	377	44.1	22.6	46
Ethnicity	Asian	53.1	20.3	90	*	*	*
	African-American	49.5	22.6	335	48.3	22.6	68
	Hispanic	49.6	21.0	296	43.0	20.6	20
	White	45.1	26.6	11	*	*	*
	Other	47.6	16.2	5	*	*	*
Economically disadvantaged	No	55.4	22.6	38	52.5	15.3	8
	Yes	49.6	21.7	699	46.3	22.4	81
Special Education	No	50.4	21.6	702	47.5	22.4	84
	Yes	38.8	16.4	35	36.6	20.9	5
Limited English Proficient (LEP)	No	50.4	21.3	600	47.6	23.0	81
	Yes	47.6	23.3	137	39.7	13.8	8
At-Risk	No	66.1	21.3	152	55.3	28.0	26
	Yes	45.7	19.6	585	43.4	17.7	63

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

Table 3. Mean NCE Scores on the 2013–2014 Stanford Mathematics Subtest by Head Start Class Models

		Dually-Enrolled			Standalone		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
Overall Sample		49.0	22.0	742	39.5	20.8	90
Gender	Female	51.3	20.4	362	39.5	19.8	44
	Male	46.9	23.0	380	39.4	21.3	46
Ethnicity	Asian	62.8	14.7	19	*	*	*
	African-American	47.4	23.7	310	40.1	20.5	69
	Hispanic	50.1	20.5	395	37.6	20.7	20
	White	40.5	27.8	10	*	*	*
	Other	41.4	23.1	8	*	*	*
Economically disadvantaged	No	52.4	24.2	38	52.5	16.4	8
	Yes	48.9	21.9	704	38.2	20.7	82
Special Education	No	49.8	21.6	707	39.8	20.6	85
	Yes	34.0	19.3	35	34.0	26.5	5
Limited English Proficient (LEP)	No	49.4	21.8	604	40.3	21.0	82
	Yes	47.7	22.2	138	30.6	16.2	8
At-Risk	No	63.9	19.7	154	45.3	23.3	26
	Yes	45.2	20.9	588	37.1	18.8	64

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

Table 4. Mean NCE Scores on the 2013–2014 Aprenda Reading Subtest by Head Start Class Models

		Dually-Enrolled			Standalone		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
Overall Sample		63.2	24.6	723	63.6	18.3	20
Gender	Female	65.7	24.5	356	63.8	17.9	13
	Male	60.7	21.0	367	63.2	20.6	7
Economically disadvantaged	No	63.2	17.5	11	*	*	*
	Yes	63.2	24.5	712	63.1	18.7	19
Special Education	No	64.1	24.4	677	67.0	17.7	17
	Yes	49.1	18.1	46	*	*	*
Limited English Proficient (LEP)	No	60.4	19.7	16	*	*	*
	Yes	63.2	24.5	707	63.6	18.3	20
At-Risk	No	68.9	17.1	9	*	*	*
	Yes	63.1	24.6	714	63.6	18.3	20

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

Table 5. Mean NCE Scores on the 2013–2014 Aprenda Mathematics Subtest by Head Start Class Models

		Dually-Enrolled			Standalone		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
Overall Sample		70.8	24.8	722	73.9	22.4	20
Gender	Female	72.5	24.3	356	73.8	24.8	13
	Male	69.1	21.1	366	74.2	18.4	7
Economically disadvantaged	No	75.5	16.5	11	*	*	*
	Yes	70.7	24.7	711	72.6	22.2	19
Special Education	No	71.4	24.5	677	76.4	22.7	17
	Yes	60.5	22.8	45	*	*	*
Limited English Proficient (LEP)	No	70.4	16.4	16	*	*	*
	Yes	70.8	24.8	706	73.9	22.4	20
At-Risk	No	78.1	14.1	9	*	*	*
	Yes	70.7	24.8	713	73.9	22.4	20

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

Appendix B

Table 1: 2013–2014 Demographic Characteristics of HISD Kindergarten Students by Head Start Program

		AVANCE (n = 332)		GCCSA (n = 350)		HCDE (n = 232)		NCI (n = 672)	
Student Group		**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Gender	Female	149	44.9%	191	54.6%	109	47.0%	332	49.4%
	Male	183	55.1%	159	45.4%	123	53.0%	340	50.6%
Ethnicity	Asian	*	*	*	*	*	*	19	2.8%
	African-American	46	13.9%	136	38.9%	54	23.3%	152	22.6%
	Hispanic	279	84.0%	212	60.6%	175	75.4%	490	72.9%
	White	*	*	*	*	*	*	9	1.3%
	Other	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	*	*	15	4.3%	7	3.0%	32	4.8%
	Yes	328	98.8%	335	95.7%	225	97.0%	640	95.2%
Special Education	No	307	92.5%	333	95.1%	210	90.5%	646	96.1%
	Yes	25	7.5%	17	4.9%	22	9.5%	26	3.9%
Limited English Proficient (LEP)	No	153	46.1%	206	58.9%	122	52.6%	230	34.2%
	Yes	179	53.9%	144	41.1%	110	47.4%	442	65.8%
At-Risk	No	32	9.6%	49	14.0%	38	16.4%	72	10.7%
	Yes	300	90.4%	301	86.0%	194	83.6%	600	89.3%

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 2013–2014.

Table 2. HISD Kindergarten Student Performance on the 2013–2014 Kindergarten Stanford Reading Subtest By Head Start Program

		AVANCE			GCCSA			HCDE			NCI		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
	Total	48.8	16.3	189	51.7	21.9	226	44.0	18.3	130	50.9	20.8	281
Gender	Female	52.8	14.2	84	53.4	22.7	123	47.7	18.0	62	52.0	19.4	134
	Male	45.6	17.2	105	49.8	20.9	103	40.6	18.1	68	49.9	21.9	147
Ethnicity	Asian	*	*	*	*	*	*	*	*	*	56.4	23.3	19
	African American	50.3	19.7	45	49.0	21.2	133	45.4	19.8	49	52.0	19.7	150
	Hispanic	48.5	15.3	140	55.8	22.5	91	43.2	17.5	80	48.7	21.4	101
	White	*	*	*	*	*	*	*	*	*	42.4	25.3	9
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	*	*	*	57.6	18.5	13	48.0	13.4	6	55.0	24.0	24
	Yes	48.7	16.3	186	51.4	22.1	213	43.8	18.5	124	50.5	20.4	257
Special Education	No	49.2	16.5	179	52.3	21.3	216	45.1	18.1	120	51.2	20.9	271
	Yes	41.8	10.6	10	38.2	31.2	10	30.8	16.8	10	43.1	14.3	10
Limited English Proficient (LEP)	No	47.9	16.3	151	52.2	21.4	200	44.6	18.6	106	52.2	20.8	224
	Yes	52.2	16.0	38	48.0	25.4	26	41.1	17.2	24	45.9	20.1	57
At-Risk	No	64.3	15.8	32	64.5	28.9	44	59.8	16.2	31	66.7	17.4	71
	Yes	45.6	14.5	157	48.6	18.7	182	39.0	16.0	99	45.6	19.1	210

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

Table 3. HISD Kindergarten Student Performance on the 2013–2014 Kindergarten Stanford 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	48.5	18.8	191	49.5	21.5	228	41.2	19.5	132	49.6	20.8	281
Gender	Female	54.4	16.7	86	48.8	22.1	124	45.3	17.6	62	50.6	20.1	134
	Male	43.7	19.0	105	50.4	20.8	104	37.6	20.5	70	48.7	21.4	147
Ethnicity	Asian	*	*	*	*	*	*	*	*	*	62.8	15.3	19
	African American	46.3	21.3	46	45.8	20.7	134	38.9	20.0	51	48.7	20.5	148
	Hispanic	49.5	18.1	141	55.2	21.6	92	43.4	18.7	79	49.0	20.6	103
	White	*	*	*	*	*	*	*	*	*	40.1	28.0	9
	Other	*	*	*	*	*	*	*	*	*	*	*	*
Economically-Disadvantaged	No	*	*	*	55.6	18.0	13	43.3	12.3	6	49.6	20.8	281
	Yes	48.4	18.8	188	49.2	21.7	215	41.1	19.8	126	49.3	20.1	257
Special Education	No	48.8	18.6	181	50.1	20.9	218	42.6	18.6	122	50.2	20.7	271
	Yes	43.7	22.4	10	35.9	29.3	10	23.9	22.8	10	32.6	16.3	10
Limited English Proficient (LEP)	No	46.6	19.0	152	49.7	21.1	202	41.9	19.9	109	51.2	20.1	223
	Yes	55.9	16.2	39	48.1	25.0	26	38.1	17.4	23	43.4	22.3	58
At-Risk	No	64.5	13.8	32	57.1	27.0	45	56.4	17.0	32	64.4	16.0	71
	Yes	45.3	18.0	159	47.7	19.5	183	36.3	17.7	100	44.6	19.8	210

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

Table 4. HISD Kindergarten Student Performance on the 2013–2014 Kindergarten Aprenda Reading Subtest By Head Start Program

		AVANCE			GCCSA			HCDE			NCI		
Student Group		**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	**n**
	Total	59.7	22.2	141	62.9	22.5	121	58.8	20.4	95	65.6	22.4	386
Gender	Female	61.5	23.2	63	66.7	22.4	66	58.9	18.4	44	68.2	21.9	196
	Male	58.2	21.4	78	58.4	22.1	55	58.8	22.1	51	63.0	22.7	190
Economically-Disadvantaged	No	*	*	*	*	*	*	*	*	*	62.7	23.7	8
	Yes	59.6	22.3	140	63.0	22.5	119	58.7	20.4	94	65.7	22.4	378
Special Education	No	60.4	22.4	126	64.4	21.9	114	61.1	19.4	84	66.1	22.5	370
	Yes	53.5	20.7	15	39.2	20.4	7	41.5	20.2	11	53.6	15.3	16
Limited English Proficient (LEP)	No	*	*	*	*	*	*	63.4	27.0	9	*	*	*
	Yes	59.6	22.3	140	63.2	22.7	118	58.4	19.7	86	65.7	22.4	383
At-Risk	No	*	*	*	*	*	*	74.7	19.5	5	*	*	*
	Yes	59.7	22.2	141	63.2	22.7	118	58.0	20.2	90	65.6	22.4	385

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

Table 5. HISD Kindergarten Student Performance on the 2013–2014 Kindergarten Aprenda 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	67.2	23.0	141	72.2	23.3	121	69.9	20.9	94	72.0	21.3	386
Gender	Female	68.2	22.6	63	73.2	23.5	66	70.5	21.9	44	74.2	20.1	196
	Male	66.4	23.5	78	71.0	23.1	55	69.3	20.2	50	69.7	22.3	190
Economically-Disadvantaged	No	*	*	*	*	*	*	*	*	*	75.2	18.3	8
	Yes	67.0	23.0	140	72.3	23.2	119	69.6	20.8	93	71.9	21.4	378
Special Education	No	68.8	22.1	126	73.7	22.5	114	70.5	20.9	84	72.1	21.5	370
	Yes	54.2	27.2	15	47.0	22.4	7	64.5	21.5	10	69.6	17.4	16
Limited English Proficient (LEP)	No	*	*	*	*	*	*	69.7	23.2	9	*	*	*
	Yes	67.2	23.1	140	72.1	23.5	118	69.9	20.8	85	72.0	21.4	383
At-Risk	No	*	*	*	*	*	*	79.3	19.5	5	*	*	*
	Yes	67.2	23.0	141	72.1	23.5	118	69.3	21.0	89	72.0	21.3	385

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

Appendix C

Table 1. Mean Scale Scores on the 2013–2014 STAAR Reading Test

Student Group		Mean	SD	n	%
Overall Sample		1371.3	134.3	721	
Agency	AVANCE	1389.7	141.5	150	20.8%
	GCCSA	1368.4	131.9	444	61.6%
	HCDE	1323.8	111.6	49	6.8%
	NCI	1382.1	140.5	78	10.8%
Gender	Female	1384.5	135.1	372	51.6%
	Male	1357.2	132.1	349	48.4%
Ethnicity	Asian	*	*	*	*
	African-American	1354.1	129.6	203	28.2%
	Hispanic	1378.1	135.8	512	71.0%
	White	*	*	*	*
	Other	*	*	*	*
Economically disadvantaged	No	1404.2	126.3	25	3.5%
	Yes	1370.1	134.5	696	96.5%
Special Education	No	1374.9	133.7	695	96.4%
	Yes	1274.0	112.8	26	3.6%
Limited English Proficient (LEP)	No	1369.4	128.1	334	46.3%
	Yes	1372.8	140.1	377	52.3%
At-Risk	No	1443.4	119.3	148	20.5%
	Yes	1352.6	131.7	573	79.5%

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 took STAAR test.

Table 2. Percentage of Students Who Met the 2014 STAAR Level II: Satisfactory (Phase-In 1) Reading Standard			
Student Group		**%**	**n**
Overall Sample		61.7%	721
Agency	AVANCE	70.7%	150
	GCCSA	60.1%	444
	HCDE	51.0%	49
	NCI	60.3%	78
Gender	Female	67.7%	372
	Male	55.3%	349
Ethnicity	Asian	*	*
	African- American	50.7%	203
	Hispanic	66.0%	512
	White	*	*
	Other	*	*
Economically disadvantaged	No	68.0%	25
	Yes	61.5%	696
Special Education	No	63.3%	695
	Yes	19.2%	26
Limited English Proficient (LEP)	No	57.8%	334
	Yes	65.5%	377
At-Risk	No	82.4%	148
	Yes	56.4%	573

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

Table 3. Mean Scale Scores on the 2013–2014 STAAR Mathematics Test

Student Group		Mean	SD	n
Overall Sample		1450.2	149.0	718
Agency	AVANCE	1485.7	164.1	149
	GCCSA	1443.8	142.6	443
	HCDE	1391.3	136.6	48
	NCI	1455.0	148.3	78
Gender	Female	1458.8	156.6	371
	Male	1440.9	140.0	347
Ethnicity	Asian	*	*	*
	African-American	1406.9	141.5	203
	Hispanic	1467.9	148.8	509
	White	*	*	*
	Other	*	*	*
Economically disadvantaged	No	1480.0	179.1	25
	Yes	1449.1	147.8	693
Special Education	No	1453.3	147.5	692
	Yes	1367.2	167.1	26
Limited English Proficient	No	1439.0	155.8	334
	Yes	1460.1	143.1	374
At-Risk	No	1519.5	152.6	148
	Yes	1432.2	142.8	570

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

Table 4. Percentage of Students Who Met the 2014 STAAR Level II: Satisfactory (Phase-In 1) Mathematics Standard			
Student Group		**%**	**n**
Overall Sample		65.0%	718
Agency	AVANCE	72.5%	149
	GCCSA	64.6%	443
	HCDE	47.9%	48
	NCI	64.1%	78
Gender	Female	66.6%	371
	Male	63.4%	347
Ethnicity	Asian	*	*
	African- American	53.2%	203
	Hispanic	69.9%	509
	White	*	*
	Other	*	*
Economically disadvantaged	No	64.0%	25
	Yes	65.1%	693
Special Education	No	66.0%	692
	Yes	38.5%	26
Limited English Proficient (LEP)	No	60.2%	334
	Yes	69.3%	374
At-Risk	No	80.4%	148
	Yes	61.1%	570

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

Appendix D

Table 1. AVANCE Program Description, 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 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. 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, 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 through May. Parents can enroll their children in extended day option or a	

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

	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	Based on the most recent data available, 19,403 children under the age of five were estimated to be living below poverty in GCCSA's service area, and were therefore, eligible for Head Start services. To determine the number of available children, the next step involved subtracting the number of children in the service area receiving subsidized child care[3] (11,082) from the eligible group. This left approximately 10,503 children available for GCCSA Head Start program in 2011-2012. During that year, GCCSA had a total funded enrollment of 1,948 participants and served 2,174 infants, children, and pregnant women (PIR 2011-12). Therefore, the agency served approximately 18.5% - 22.7% of its total eligible and available population which is less than the saturation level of 85% (Buckley and Watkins, 2003)**.**
Funding Source	Administration For Children and Families / HHS
Curriculum	Frog Street Pre-K
Assessment	LAP-3 (Learning Accomplishment Profile – 3rd Revision)

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

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

Table 3. Harris County Department of Education (HCDE) Program Description, 2013–2014		
	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 1080; Actually 1385	
Total number of teachers	Number of lead teachers	60
	Number of assistant teachers	9.5
	Number of collaborating teachers	72

Teacher's average education level	Lead teachers	Bachelors
	Assistant teachers	High School
	Collaborating teachers	Bachelor's Certified
Total number of centers	14	
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.	
Assessment	• Frog Street Pre-K Assessment • Observations • Portfolio Collection	

Table 4. . Neighborhood Centers Inc (NCI) Program Description, 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 Reading 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 reading 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 E

Schools Attended by 2013–2014 Kindergarten Students Enrolled in 2012–2013 Head Start Program

Number	School Name	Head Start
120	BROWNING	AVANCE
182	JEFFERSON	AVANCE
389	KETELSEN	AVANCE
108	BASTIAN	GCCSA
154	FOSTER	GCCSA
155	FRANKLIN	GCCSA
162	GREGG	GCCSA
216	PATTERSON	GCCSA
360	BELLFORT EARLY CHILDHOOD CENTER	GCCSA
140	DOGAN	Harris County
167	HARRIS, R P	Harris County
223	PUGH	Harris County
111	BONHAM	NCI
114	BRAEBURN	NCI
131	HALPIN EARLY CHILDHOOD CTR	NCI
151	BELL	NCI
153	FONDREN	NCI
227	MCNAMARA	NCI
239	SHEARN	NCI
271	FOERSTER	NCI
295	BENAVIDEZ	NCI
355	KING EARLY CHILDHOOD CTR	NCI
372	RODRIGUEZ	NCI
392	YOUNG LEARNERS	MULTI-CENTER