MEMORANDUM January 25, 2017

TO: Gwen Johnson
Manager, Health and Medical Services

FROM: Carla Stevens
Assistant Superintendent, Research and Accountability

SUBJECT: **VISION PARTNERSHIP, 2015–2016**

Attached is a copy of the Vision Partnership report for 2015–2016. This report describes the student participation in campus-based screenings and Vision Partnership programs, barriers to program implementation, and the academic performance of students served by the program.

Key findings include:

- From 2009–2010 to 2015–2016, an estimated 25,574 HISD students received services through the Vision Partnership program. A total of 4,215 HISD students were identified as recipients of program services during the 2015–2016 school year, a decrease from the 4,282 participants in 2014–2015.
- Campus-level data for 267 schools in 2015–2016 showed campus-based initial vision screenings were provided to 93,154 students in 2015–2016. In 2015–2016, 12 percent of the screened students failed their vision screenings.
- In 2015–2016, 136 of HISD's 283 schools had students participate in the Vision Partnership program. Despite fewer vision clinic opportunities in 2015–2016, the average number of students per vision clinic trip increased by six students. The increase indicates an improvement in the logistical planning and use of district transportation as organized by the Health and Medical Services Special Projects clerk.
- Of the 4,215 students who were identified through vision screenings on their campuses as needing vision correction and who were examined at Vision Partnership Clinics during the 2015–2016 school year, close out letters from HDHHS was available for 3,668 students. According to the HDHHS records, 3,413 students (93 percent) needed corrective eyewear for some portion of the day. This rate is higher than 2014–2015, when 83 percent of students attending the clinics needed corrective eyewear, indicating an improvement in the initial campus-based screening process.

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

Attachment

cc: Mark Smith
Grenita Lathan

HOUSTON INDEPENDENT SCHOOL DISTRICT

RESEARCH

Educational Program Report

VISION PARTNERSHIP
2015–2016

HISD | Research and Accountability

ANALYZING DATA, MEASURING PERFORMANCE.

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Vision Partnership
2015–2016

Executive Summary

Program Description

The Houston Independent School District (HISD)'s campus-based vision screening program is designed to identify students who experience vision impairments, communicate the potential needs to students along with their parents/guardians, and provide service alternatives for students to receive vision care, including services that are offered free of charge. Through a partnership between the Houston Department of Health and Human Services (HDHHS) and the HISD that began in 2009, vision examinations, consultations, and fittings for corrective eyewear are provided at no cost to students during special clinic events that are held throughout the school year. The services are led by the HDHHS and are supported by the Houston Health Foundation. Community partners include University of Houston, San Jacinto College, Kids Vision for Life (The Essilor Foundation), and the Berkley Eye Center. Services are provided through HISD, OneSight, and See to Succeed (known as Kids Vision Partnership).

Vision health may enable students to fully engage in the academic opportunities offered by the district. As a supplement to the district's vision health services that are offered through campus-based vision screenings, the goal of the Vision Partnership is to enhance HISD students' achievement opportunities by ensuring that their basic vision and vision-related health needs are met. This report provides information on the district's campus-based vision screenings, as well as three aspects of the Vision Partnership program: student participation, barriers to program participation, and the academic performance of students served by the program. Due to limitations of the student-level participation and service data, this report is strictly descriptive and is not intended to be used to make causal inferences of the program's effectiveness at improving student academic performance.

Highlights

- Campus-level data for 228 schools in 2014–2015 and 267 schools in 2015–2016, showed campus-based initial vision screenings were provided to 92,443 students in 2014–2015 and to 93,154 students in 2015–2016. The difference was a one percent increase from the previous year. In 2014–2015 and 2015–2016, respectively, 11 percent and 12 percent of the screened students failed their vision screenings.
- Of the students who failed vision screenings, 97 percent were referred to a specialist in 2014–2015 and 95 percent were referred in 2015–2016.
- Of the 9,764 who were screened and referred to a vision specialist for evaluation and treatment in 2014–2015, 66 percent were treated. In 2015–2016, the number of students referred to a specialist and treated rose to 10,731. The 2015–2016 percentage does not include referred students who transferred out of district before the year ended.
- From 2009–2010 to 2015–2016, an estimated 25,574 HISD students received services through the Vision Partnership program. A total of 4,215 HISD students were identified as recipients of program services during the 2015–2016 school year, a near 2 percentage-point decrease from the 4,282 participants in 2014–2015. The decrease in the number of vision clinic opportunities provided by the City of the Houston in 2015–2016 could explain the small decrease in the overall number of participants.
- In 2015–2016, 136 (48 percent) of HISD's 283 schools had students who participated in the Vision Partnership program, 5 less schools than the 141 schools that participated in 2014–2015. Despite fewer vision clinic opportunities in 2015–2016, the average number of students per vision clinic trip increased

by six students. The increase in students per clinic visit indicates an improvement in the logistical planning and use of district transportation as organized by the Health and Medical Services Special Projects clerk.

- According to the data provided by HDHHS, the group of Vision Partnership participants was comprised of notably larger proportions students than the general population of HISD students. The groups are listed in order from the greatest proportion difference: special education (29 percent), Limited English Proficient (LEP) (23 percent), African American (21 percent), economically disadvantaged (16 percent), At-Risk (13 percent), and female (10 percent).
- Of the 4,215 students who were identified through vision screenings on their campuses as needing vision correction and who were examined at Vision Partnership Clinics during the 2015–2016 school year, close out letters from HDHHS was available for 3,668 students. According to the HDHHS records, 3,413 students (93 percent) needed corrective eyewear for some portion of the day. This rate is higher than 2014–2015, when 83 percent of students attending the clinics needed corrective eyewear, indicating an improvement in the initial campus-based screening process.
- The primary obstacles to vision correction for students continue to be insufficient time to screen and identify all children needing vision corrections – especially at schools without fulltime campus nurses, insufficient time to coordinate the vision clinic with the district needs, fewer vision clinics for schools to participate in, and by proxy, more stringent deadlines and inflexibility to adjust for last minute parent approval. This year's addition of a district Special Projects clerk to assist with logistics and data recording has helped relieve some of the burden from the schools.
- Overall, the greatest challenge to program participation from 2014–2015 through 2015–2016 continues to be obtaining parent permission for students to participate in the vision clinic or families to follow up on the recommendation for further specialist evaluations. There is evidence of buy-in into the program from a small cohort of parents, as communicated by nursing and district staff, but many parents/guardians do not return written permission slips, even with multiple contacts from school personnel.

Recommendations

- Continue to refine and provide administrative support for school nurses (or identified support staff). Specifically, nurses are in need of providing vision screenings in an efficient timeframe to access fall Vision Partnership clinics. This support includes coding data into the student information system in a timely manner. Additionally, not every campus has a nurse, providing a further barrier for participation given the identified support staff already have a primary function on the campus and the nurse-related duties are supplemental to their position. Given the concern for missing student-level data, additional administrative support could include assistance to track and identify student-receipt or non-receipt of services and corrective lenses, reasons for students' unresolved vision needs, service providers, and all related vision services. Ideally, the data entry would be coded within one week following each activity, rather than at the end of year or not at all. The goals for improved data remain the same as 2014–2015: to improve (1) the capacity of nurses and program administrators to utilize up-to-date student information to monitor the extent to which students' vision needs are resolved, (2) the alignment between school-level reports made to the state and the student-level Chancery and HDHHS reports, and (3) the capacity to assess program participation and program impact.
- Continue to improve communication among campus administrators, counselors, teachers, nurses, and parents/guardians regarding the academic and life-long consequences of students' poor vision health, vision care services available to students in the district, and the necessary parental and student actions for student participation in the district's vision-related services. This should include careful attention to

the language used in printed materials to make it accessible to all recipients. Schools or school feeder patterns could host vision nights to present the information to parents and students. The events should focus on educating the parents regarding the importance of vision health, how to access vision services in the community (including participating in the Vision Partnership clinics), and how to provide care and follow-up after the receipt of corrective eye-wear.

- Further maximize the benefits of the program for students by exploring strategies to ensure that students in need are able to receive corrective eyewear and eyewear fitting during the first semester of the school year, and timely repair and replacement of corrective eyewear as needed. Best practices from HISD campuses include maintaining a list of unresolved vision issues for students from prior years and prioritizing screening and parental/guardian communication. The Health and Medical Services department should continue to provide program packets to campuses at the beginning of the year and refine their administrative support to match the needs of campuses, including providing logistical support for HISD campuses and being a liaison with the City of Houston.
- Current document strategies do not include recording which students received glasses or when their vision impairments were corrected. We recommend the Medical and Health Services department work with the City of Houston and school nurses to identify students who successfully received corrective eye-wear and when the eye-wear was delivered to each student. Building a record when a student's vision is corrected could help determine the program impact. If a record of which students received corrective eyewear was compiled, an evaluation could be conducted to investigate the educational achievement impact Vision Partnership has on participants as compared to their HISD peers.
- A case study could be conducted to evaluate the relationship between the program and student achievement. The Health and Medical Services department would need to work with school nurses to identify students who were first screened and needed corrective vision services in 2015–2016, received corrective eye-wear by the end of the year, and who successfully used the corrective eye-wear in the 2016–2017 school year. Furthermore, the case study could examine the cohort (students who use their glasses consistently) to build an understanding of best practices for program communication between the City of Houston, district staff, school staff, students, and parents.

Introduction

Consideration of educationally relevant disparities in students' health is an important element of a comprehensive strategy for closing achievement gaps (Basch, 2011; Morsey and Rothstein, 2015). A critical component of a strong foundation for academic achievement is healthy vision. As one of the most chronic childhood conditions, impaired vision potentially reduces one's self-esteem, ability to read, to concentrate, and to process information. Poor vision may impede academic motivation and academic success (Chu, Huang, Barnhardt, and Chen, 2015). The causal pathways through which health needs obstruct students' motivation and ability to learn are sensory perception, cognition, engagement with school, absenteeism, and dropping out. In fact, vision is among seven educationally relevant health disparities selected by school leaders as strategic priorities using three criteria: (1) prevalence and extent of health disparities negatively affecting urban and minority youth, (2) evidence of causal effects on educational outcomes, and (3) feasibility of implementing proven or promising policies and programs to address health concerns (Basch, 2011).

The Vision Partnership program aligns with the district's Strategic Direction Core Initiative 3, "Rigorous Instructional Standards and Supports." The goal of the Vision Partnership is to enhance student academic opportunities by ensuring the basic vision and vision-related health needs of HISD's students are met. The Vision Partnership alliance between the HDHHS and the One Sight Foundation addresses the vision and vision-related health needs of students who need, but cannot afford, eye care services. Vision screenings, consultations, and fittings for corrective eyewear were provided at no cost to students, or their families, during special vision clinics that were held throughout the school year at multiple clinics in non-academic community locations. Since 2009, these services have been provided through HISD, OneSight, and See to Succeed (known as Kids Vision Partnership) led by the HDHHS and supported by the Houston Health Foundation. Community partners include the University of Houston, San Jacinto College, Kids Vision for Life (The Essilor Foundation), and the Berkley Eye Center.

At the beginning of each school year, students enrolled in HISD schools are screened by HISD nurses, campus staff, or community partners for vision impairments. Teachers and parents can also request a screening if concerns exist about a student's vision. When the need for vision correction is apparent, the district's nurses and health care professionals make student-referrals to specialists for eye examinations, which are followed by professional treatment when needed. The Vision Partnership is one of the programs that provide an avenue for students who are identified as needing vision correction to receive eye care and corrective eyewear free of charge. Beginning with the 2011–2012 school year, HISD has paid the cost of students' transportation to the clinic sites rather than requiring schools to do so out of their campus budgets, as previously required. Student participants have received comprehensive vision examinations that have included tests for disease, acuity, color blindness, depth perception, and muscle balance.

The purpose of this report is to provide information on student participation in Vision Partnership program, as well as student participation in HISD campus-based vision screenings. Barriers to students receiving vision correction and the academic performance of students who received corrective eyewear are also provided in this report. However, due to limitations of the student-level data regarding program services, this report is strictly descriptive and is not intended to be used to make causal inferences of the program's effectiveness at improving student achievement.

Methods

Data Collection

Multiple sources of data were used to evaluate this program. The following sources were used to identify students who participated in campus-based vision screenings:

- Campus-level participation data and results of students whose vision was examined during 2014–2015 and 2015–2016 campus-based vision screenings were obtained from the HISD Manager of Medical and Health Services. These data were based on campus nurses' submissions for the Texas Department of State Health Services (TDSHS) Child Health Reporting System report.
- HISD's Chancery student information system (Chancery) Ad Hoc Student Health Vision Test Results were obtained from the HISD IBM Cognos database for 2015–2016. A total of 79,510 unduplicated students' vision screening records were retrieved and 70,971 records had data sufficient for this analysis. For analyses of campus-based screening outcomes, Chancery Vision Screening data that included "Result" (i.e., "fail" "pass," or "pass and complete" outcome) and "Solution" (i.e., "glasses," "contacts," "no correction required", or "N/A" regarding plan for vision correction) were used. Default, inconsistent, or missing "Result" or "Solution" data were found for 8,536 students whose data were not utilized for this report. The Manager of Health and Medical Services provided guidance on default and inconsistent coding errors.

The following data sources were provided to identify students who participated in the City of Houston's Vision Partnership Clinics:

- For the 2015–2016 school year, HDHHS submitted more than 4,445 unduplicated records for Vision Partnership participants from HISD schools. Of these, 4,215 students' information were found in the HISD Chancery database and their records were retained for this analysis.
- The City of Houston's Vision Partnership clinic participation data does not match the aggregate data recorded by the Special Projects clerk for the Health and Human Medical Services department. This report uses the student information from the City of Houston to analyze student characteristics, which schools attended the vision clinics, and for student attendance records. HISD's data is used to estimate how many HISD paid trips were used to transport the students to the vision clinics.

The following data sources provided the student demographic and assessment data:

- Demographic and academic outcome data were retrieved through Chancery student information system (Chancery) Ad Hoc, STAAR, and STAAR EOC databases. School counts and school levels were obtained from the HISD School Information database for 2015–2016.
- STAAR English and Spanish achievement results include only those students whose data showed they needed and received vision correction, recorded as "glasses" under "vision solution." These students were identified participants of the campus-based screenings and/or the Vision Partnership who received vision correction, for whom sufficient data were available for vision-related services, vision examination solutions, and at least one 2015–2016 State of Texas Assessments of Academic Readiness (STAAR) or STAAR End of Course (EOC) examination.
- The proportions of participating students who met the Level II Satisfactory 2016 progression standards on STAAR reading, mathematics, writing, social studies, science, or STAAR EOC Algebra I, English I, English II, Biology, and U.S. History in 2015–2016 were assessed. In this analysis of students' academic performance, districtwide student performance was used only as a context to consider the performance of program participants. Participating students were not matched to peers districtwide because unidentified program participants were among the districtwide population, which precluded the mutual exclusivity between the groups.
- Student performance indicators for students who participated in the campus-based vision screenings and received vision correction were analyzed. In addition, the performance of students who participated in the Vision Partnership and received vision correction was analyzed. Some Vision Partnership participants were documented in the Chancery Vision Screening database as students who received vision screenings on their campuses. The 2015–2016 STAAR (n=3,881) and STAAR EOC results

(n=1,673) were assessed for screened students who received vision correction. In addition, 2015–2016 STAAR (n=267) and STAAR EOC results (n=12) were assessed for Vision Partnership participants who received vision correction.

- Insights regarding program services, program participation, and impediments to program involvement were provided through interviews with the Manager of Health and Medical Services, the Special Projects clerk in Health and Medical Services, and the 2015–2016 Campus-based Vision Screenings and Vision Partnership Survey/Interview. The survey/interview was administered to a sample of HISD campus-based nurses or staff members overseeing the Vision Partnership participation on their campus (n=5) from September 9, 2016 through October 11, 2016.
- The 2015–2016 Campus-based Vision Screenings and Vision Partnership nurse interview and survey results were combined to gather feedback on the administrative processes and barriers to student participation in the Vision Partnership program. Campuses were chosen in collaboration between the Research and Accountability department and the Health and Medical Services department. Schools were recruited to represent all grade levels and participation levels (from none, low, to high) in the 2015–2016 Vision Partnership program, or an outside agency such as Eye Care for Kids. Out of five campus-based nurses or staff across the district, 80% participated (n=4) in the 2015–2016 Vision Partnership program. The fifth campus was included in the interviews due to a lack of participation in the 2015–2016 Vision Partnership Program.

Data Limitations

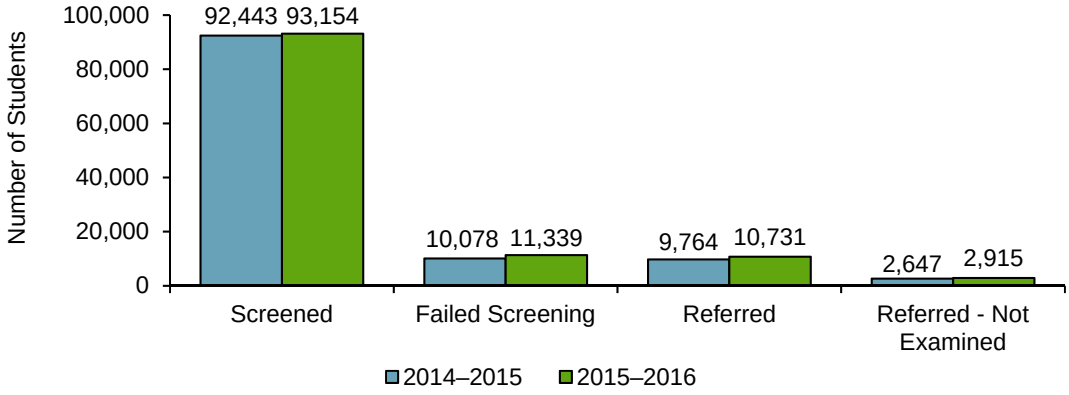
- A small portion of screened students had insufficient data for this analysis. Chancery data used for this analysis were insufficient to identify each participant of campus-based screenings and whether or not the student needed and received corrective eyewear due to inconsistent or missing data. The student information system does not provide a method to record who provides the students' corrective eyewear at this time. The deficiencies precluded performance analysis of students who received corrective eyewear in comparison to students who did not. Missing and inconsistent data disallowed the selection of a comparison sample of students to match with the students who had complete and consistent datasets.
- HISD vision screening data were often missing or had inconsistent "Solution" data for students whose "Result" was "Failed." Therefore, datasets for many of the students who did not need vision correction were incomplete, while data were more often available for students who needed vision correction. This deficit precluded the ability to compare differences in outcomes between program participants who needed vision correction and program participants who did not need vision correction
- The Vision Partnership administrator reported the HDHHS data did not indicate which Vision Partnership participants needed or received corrective eyewear through the program. This precluded performance analyses for Vision Partnership students who received their corrective eyewear compared to students who did not.
- The actual numbers of Vision Partnership participants who received eyewear through the Vision Partnership could not be determined due to a lack of formal data collection regarding the successful delivery of glasses following the vision clinics.

Results

How many students participated in the HISD campus-based vision screenings in 2014–2015 and 2015–2016?

- School-level data reported to the Texas Department of State Health Services (TDSHS) for 228 schools in 2014–2015 and 267 schools in 2015–2016 showed campus-based vision screenings were provided to 92,443 students in 2014–2015 and to 93,154 students in 2015–2016, a one percent increase from the previous year (**Figure 1**).
- When compared to the 2014–2015 campus-based vision screenings, the TDSHS reports increases in 2015–2016 for the number of children who failed their vision screening (13 percent), the number of students referred (10 percent), and the number of students who were referred but did not receive an examination (10 percent) (Figure 1).

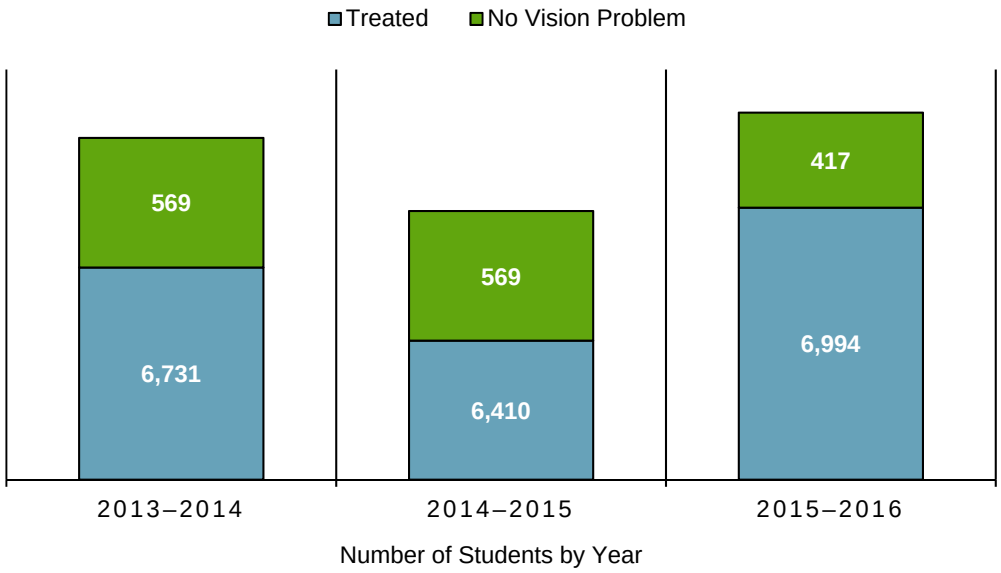
Figure 1. Number of students screened during campus-based vision screenings and results of the screenings as reported to TDSHS, 2014–2015 and 2015–2016



Source: TDSHS Child Health Reporting System, 2015–2016.

- The TDSHS Child Health Report for 2015–2016 indicated 12 percent of the screened students failed the vision screening, a one percentage-point increase from 2014–2015. Of the students who failed their screenings, 97 percent in 2014–2015 and 95 percent of the students in 2015–2016 were referred to a specialist (Figure 1).
- Of the referred students, 27 percent in both 2014–2015 and 2015–2016 were not documented as being examined by a specialist during the academic year.
- Accounting for the transferred students, in 2015–2016, a greater portion of students referred for an evaluation (Figure 1) received treatment (**Figure 2**, p. 9) (68 percent) than in 2014–2015 (63 percent).
- The degree of accuracy of the campus-based screenings in determining students' need for vision care by a specialist was high in 2013–2014 and continued to improve through 2015–2016. In 2013–2014, 8 percent of students who were documented as examined by a vision specialist but were found to have no vision problem. In 2015–2016, the accuracy of campus-based vision screenings improved to 6 percent. (Figure 2).

Figure 2. Number of students with reports of treatment or of no vision problem following campus-based vision screenings as reported to TDSHS, 2014–2015 and 2015–2016

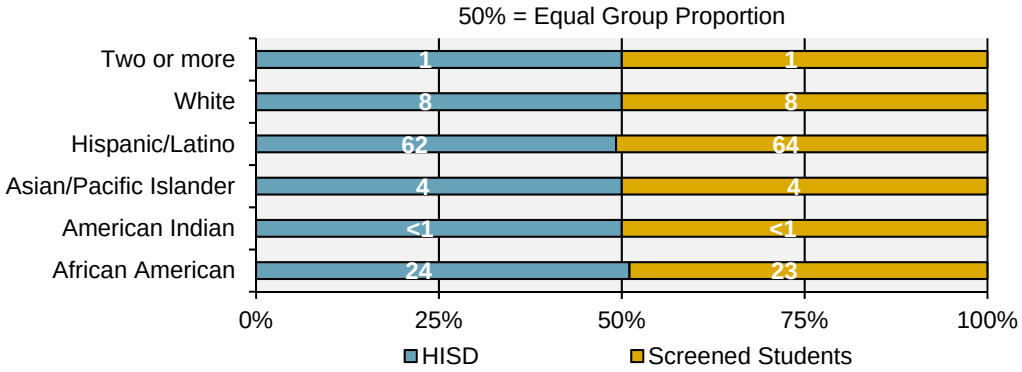


Source: TDSHS Child Health Reporting System, 2013–2014, 2014–2015 and 2015–2016. Title I, Part A Vision Partnership Report, 2014–2015 (Department of Research and Accountability, November, 2015)
Note: In 2015-2016, the students who transferred out of the district before the end of the school year were removed from the number of students with reports of treatment (n=405).

How did the student's participation in 2015–2016 vision screenings compare to both previously screened students and HISD enrolled students?

Of the 93,154 students reported to TDSHS to receive a vision screening, demographic records could be matched for 70,971 students in Chancery (**Table A–1,** p. 23). **Figure 3** shows the race/ethnicity differences between HISD students and students who received a vision screening in 2015–2016. **Figure 4** (p. 10) demonstrates demographic differences between HISD and the vision screening student cohort.

Figure 3. Race/ethnicity proportion comparison between HISD and students receiving a campus-based vision screening, 2015–2016

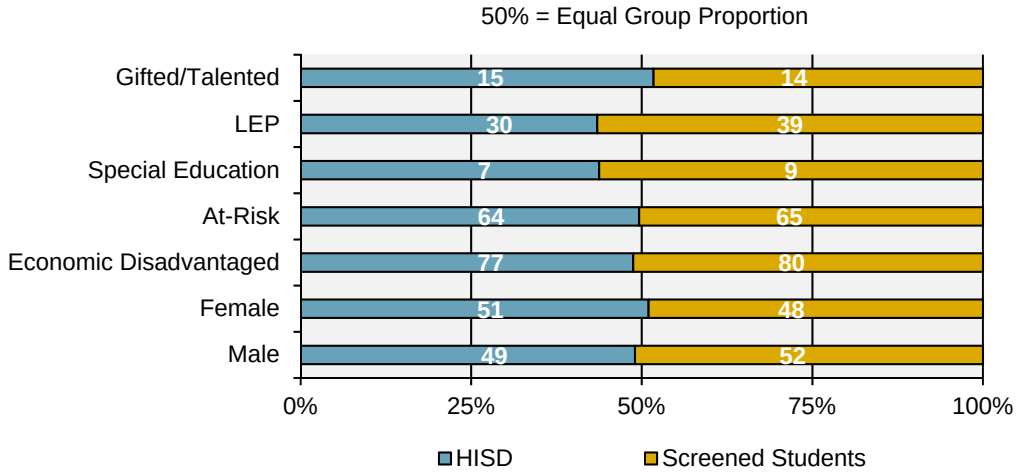


Source: Chancery Ad Hoc Files, September 8, 2016
Note: All percentages are rounded to the nearest whole number. The percentages of HISD or screened students may not equal 100 due to rounding. The demographic information in the figure is listed in Table A–1.

- There were only minor race/ethnicity differences between the students who participated in vision screenings during 2015–2016 and their HISD peers (Figure 3).

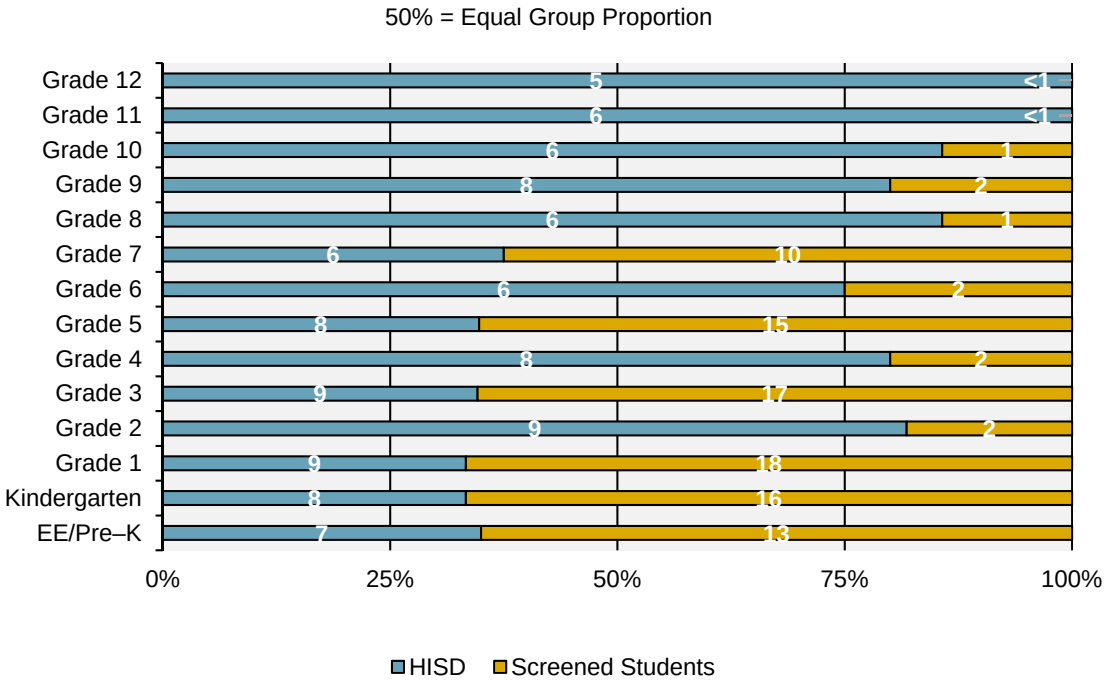
- A larger proportion of LEP, special education, economically disadvantaged, and male students received vision screenings in 2015–2016 as compared to their HISD peers (Figure 4). The demographic information Figure 4 can be found in Table A–1 (p. 23).

Figure 4. Demographic proportion comparison between HISD and students receiving a campus-based vision screening, 2015–2016



Source: Chancery Ad Hoc Files, September 8, 2016
Note: The demographic information in the figure is listed in Table A–1. All percentages are rounded to the nearest whole number.

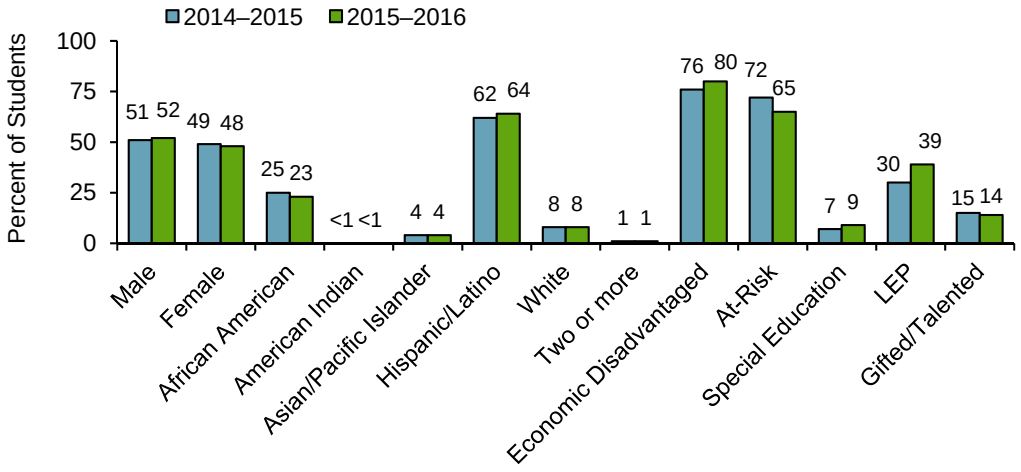
Figure 5. Grade enrollment proportion comparison between HISD and students receiving a campus-based vision screening, 2015–2016



Source: Chancery Ad Hoc Files, September 8, 2016
Note: The demographic information in the figure is listed in Table A–1, p. 23. All percentages are rounded to the nearest whole number.

- When compared to the district enrollment proportion rate, lower grades had higher screening participation rates than upper grades (**Figure 5**, p. 10). Grade level comparisons between HISD students and students who received a vision screening is found in **Table A–2** (p. 23).

Figure 6. Demographics of HISD students receiving a campus-based vision screening, 2014–2015 and 2015–2016



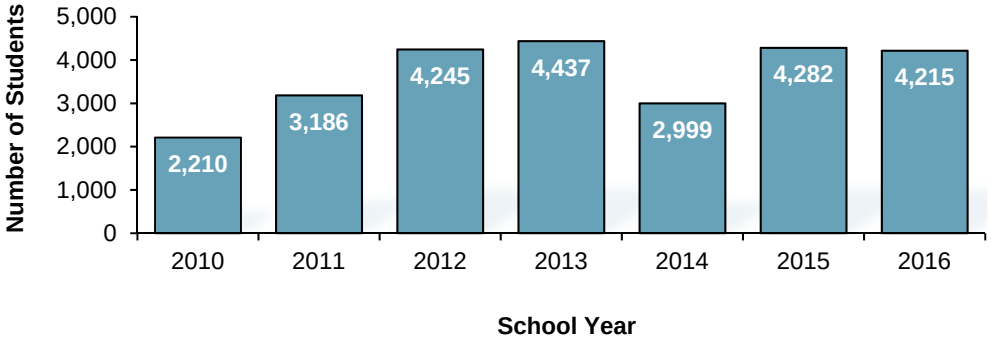
Source: Chancery Ah Hoc files, September 8, 2016; Title I, Part A Vision Partnership Report, 2014–2015 (Department of Research and Accountability, November, 2015)
Note: All percentages are rounded to the nearest whole number.

- As compared to the 2014–2015 students who received vision screenings, in 2015–2016, the student demographics were relatively stable. However, in 2015–2016, the At-Risk population dropped by seven percentage-points, and the proportion of LEP students grew by nine percentage-points (**Figure 6**).

How many students participated in a Vision Partnership clinic during 2015–2016?

- During the seven years of program implementation, Vision Partnership Clinics provided examinations and/or treatments to at least 25,574 HISD students and has grown by 91 percent since its first year in 2009–2010. A total of 4,215 HISD students were identified as recipients of program services during the 2015–2016 school year, a nearly two percentage decrease from the 4,282 participants in 2014–2015 (**Figure 7**).

Figure 7. Vision Partnership participation by school year, 2009–2010 to 2015–2016



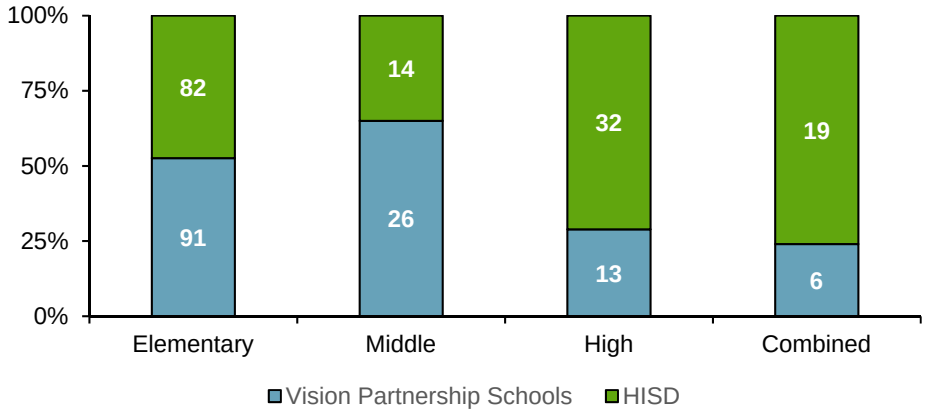
Source: HDHHS 2015–2016; Title I, Part A Vision Partnership Report, 2014–2015 (Department of Research and Accountability, November, 2015)
Note: Participants refers to students who were examined at a Vision Partnership Clinic and who may or may not have received vision correcting eyewear through a Vision Partnership provider.

How did the student participation in a Vision Partnership clinic compare from 2014–2015 to 2015–2016?

Figure 8 shows the academic levels of HISD schools with students who participated in at least one 2015–2016 Vision Partnership clinic.

- Most of the schools attending Vision Partnership clinics were either elementary or middle schools. The highest participation rate was among middle schools (65 percent), followed by elementary schools (53 percent), combined schools (24 percent), and high schools (29 percent) in 2015–2016 (Figure 8 and **Table A–3,** pp. 24-25).

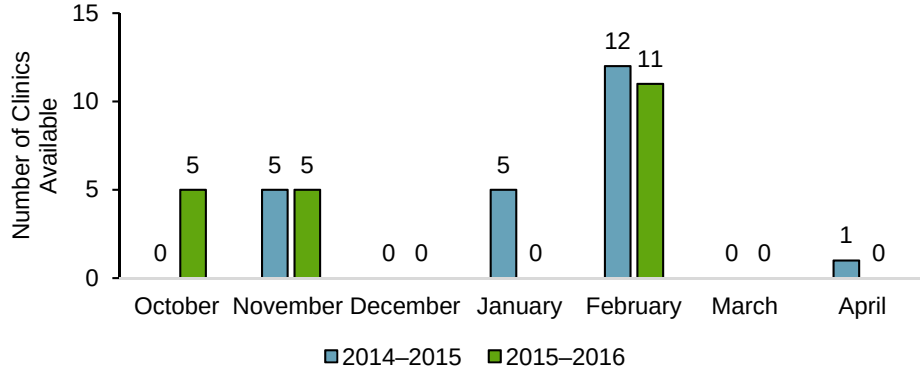
Figure 8. Count of schools participating in Vision Partnership as compared to non-participating HISD schools, 2015–2016



Source: HDHHS 2015–2016; HISD School Information 2015–2016 data.

- HISD students from 136 schools participated in an estimated 148 visits to Vision Partnership Clinics in 2015–2016, comprising one to three visits per school. This represents a 24 percent decrease in clinic visits when compared to 196 visits in 2014–2015, which also comprised one to five visits per school (Department of Research and Accountability, November 2015).
- In 2015–2016, the Vision Partnership offered five See to Succeed Vision Clinics to Houston ISD and allowed two schools to attend a One Sight Clinic (intended to be only for a neighboring district). In 2015–2016, 136 (48 percent) of HISD's 283 schools had students who participated in the Vision Partnership program, five fewer schools than the 141 schools that participated in 2014–2015. The decrease in the number of vision clinic opportunities provided by the City of the Houston in 2015–2016 could explain the small decrease in the overall number of participants.
- **Figure 9** (p. 13) shows the months the 21 Vision Partnership Clinics were scheduled to perform student eye examinations and vision corrections in 2015–2016. In addition to fewer months, the number of clinics available for schools decreased by 9 percent from the previous year (n=23).
- Opportunities for students to attend Vision Partnership clinics were provided during three of the nine months in the 2015–2016 school year, as compared to five of the nine months of the 2014–2015 school year. Ten clinic dates were provided during the fall semester and 11 clinic dates were offered during the spring semester for a total of 21 clinics offered during the 2015–2016 school year (Figure 9).

Figure 9. Vision Partnership clinic availability by month, 2014–2015 to 2015–2016



Source: HDHHS, (2015); HDHHS, (2016)

- The availability of vision clinics shifted to earlier in the school year to assist students in getting their glasses earlier in the year to maximize benefits. Data were not sufficient to provide accurate clinic student counts.
- Both the number of students and the number of vision clinic trips decreased between 2014–2015 and 2015–2016. However, the average number of students per vision clinic trip increased by six students in 2015–2016 (**Table 1**). The student to clinic ratio increase indicates more students are accessing the Vision Partnership clinic with each trip, reducing HISD transportation costs.

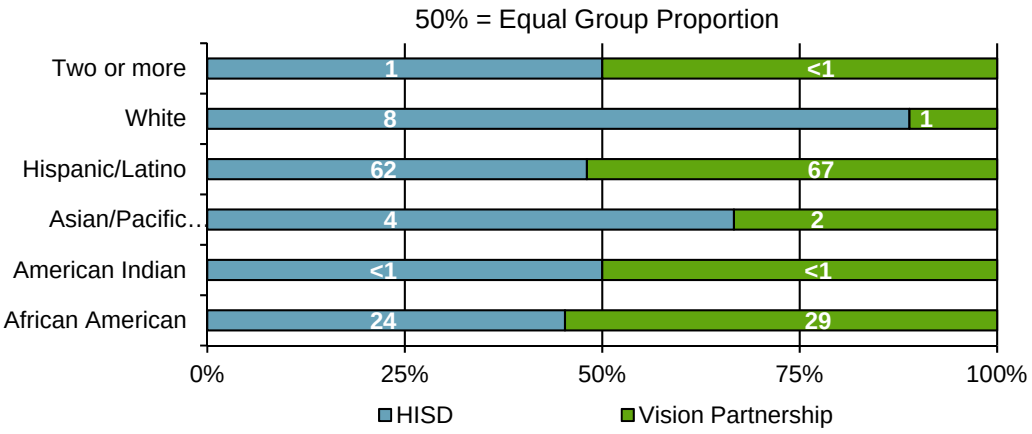
Table 1. HISD student attendance at Vision Partnership clinics; 2014–2015 to 2015–2016

Total HISD Student Attendance			Total HISD Vision Clinic Trips		
2014–2015	2015–2016	Change	2014–2015	2015–2016	Change
4293	4215	-78	196	148	-48
Average Student Attendance/Trip			22	28	+6

Source: HISD Health and Medical Services Vision Partnership Attendance Report, 2015–2016; HDHHS 2015–2016; Title I, Part A Vision Partnership Report, 2014–2015 (Department of Research and Accountability, November, 2015)

- **Figure 10** (p. 14) displays the race/ethnicity differences between HISD and Vision Partnership participants and **Figure 11** (p. 14) displays the demographic differences. Table A–1 (p. 23) in **Appendix A** also displays the demographic comparisons between HISD, screened students, and students who participated in Vision Partnership clinics.
- Notable differences between HISD students and students participating in the Vision Partnership, as displayed in Figure 10, were a larger African American and Hispanic population attending Vision Partnership clinics, with a 5 percentage-point difference in both groups. There were minor differences between American Indian, Asian/Pacific Islander, and Two or More. The largest difference was in White students, whose Vision Partnership participation was much lower given their HISD enrollment proportion (7 percentage-points lower).

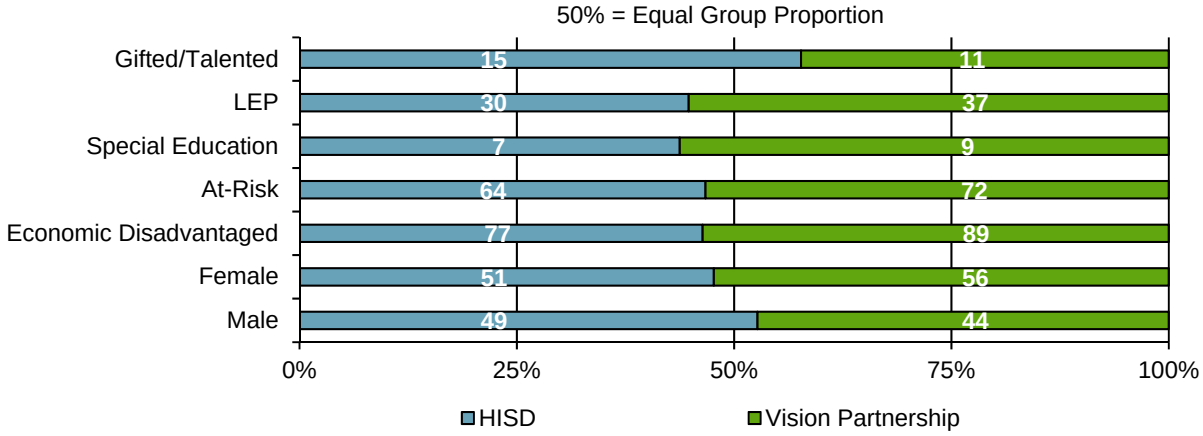
Figure 10. Race/ethnicity proportion comparison between HISD and Vision Partnership participation, 2015–2016



Source: Chancery Ad Hoc Files, September 8, 2016; HDHHS, 2015–2016
Note: The demographic information in the figure is listed in Table A–1 (p. 23) in Appendix A. All percentages are rounded to the nearest whole number.

- The group of Vision Partnership participants was comprised of notably larger proportions of students than the general population of HISD students. The groups are listed in order from the greatest proportion difference: Special Education (29 percent), (LEP) (23 percent), Economically Disadvantaged (16 percent), At-risk (14 percent), and Females (10 percent) (Figure 11).

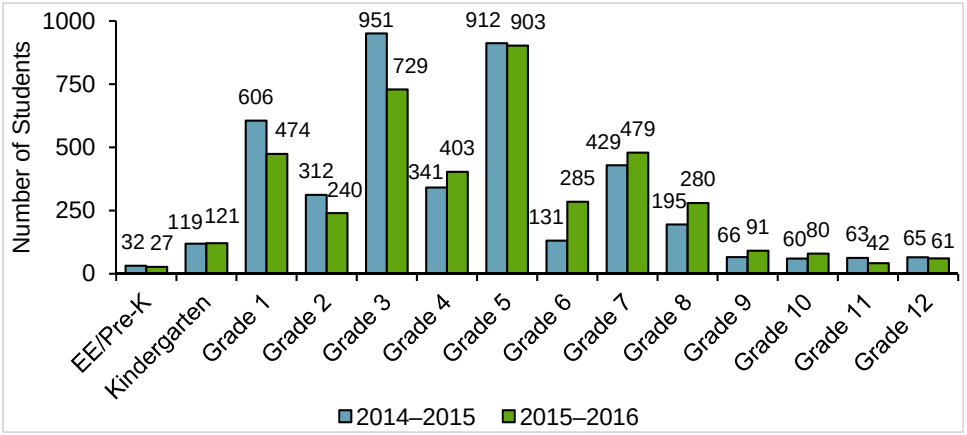
Figure 11. Demographic proportion comparison between HISD enrollment and Vision Partnership participation, 2015–2016



Source: Chancery Ad Hoc Files, September 8, 2016; HDHHS, 2015–2016
Note: The demographic information in the figure is listed in Table A–1. All percentages are rounded to the nearest whole number.

- **Figure 12** (p. 15) shows the number of identified Vision Partnership Clinic participants from 2014–2015 (n=4,282) to 2015–2016 (n=4,215) by grade level (see **Table A–2**, p. 23). The largest groups continue to be grade 3 and grade 5 students. The smallest participation groups were from the pre-kindergarten and high school grades. In 2015–2016, a total of 69 percent of participants were elementary (pre-kindergarten to grade 5), 25 percent were middle (grades 6–8), and 7 percent were high school (grades 9–12) students (percentages were rounded to nearest whole number).

Figure 12. Number of Vision Partnership participants by grade level, 2014–2015 to 2015–2016

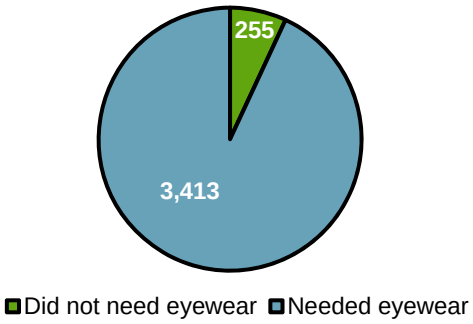


Source: HDHHS, 2014–2015; Chancery, July 27, 2015; HDHHS, 2015–2016; Cognos Chancery Ad Hoc files, September 8, 2016
Note: The demographic information in the figure is listed in Table A–2 (p.23).

How many Vision Partnership participants received corrective eyewear through the partnership in 2015–2016?

- Of the 4,215 students who were identified through vision screenings on their campuses as needing vision correction and who were examined at Vision Partnership Clinics during the 2015–2016 school year, close out letters from HDHHS were available for 3,668 students. According to the HDHHS records, 3,413 students (93 percent) needed corrective eyewear for some portion of the day (**Figure 13**). This rate is higher than 2014–2015, when 83 percent of students attending the clinics needed corrective eyewear, indicating an improvement in the initial campus-based screening process.
- Neither the district nor the service providers obtained documentation to confirm whether or not or when students who needed vision correction received corrective eyewear. Nurse surveys and the interview with the HISD Health and Medical Services team indicates a delay in eyewear delivery and an inconsistency of implementing the final fitting of the eyewear upon delivery by the Vision Partnership.

Figure 13. Number and percent of Vision Partnership participants who were examined and who needed and who did not need vision correction, 2015–2016



Source: HDHHS 2015–2016 Vision Partnership Clinic data

What were other sources of students' vision correction in 2015–2016?

- Nurse Survey respondents indicated Eye Care for Kids was the primary alternative to the Vision Partnership clinic. Several nurses added parents verbally communicated they would privately address their child's vision needs, however no documentation is available to track follow-through.

- The nurses interviewed reported accessing Eye Care for Kids for an estimated 20 percent of their students' eye care needs.
- Due to the special needs of several children on the campus, one nurse indicated she was unable to leave the campus to take children to the Vision Partnership clinics and therefore, exclusively relies on Eye Care for Kids to provide corrective eye care for her students' vision needs. She indicated a desire to participate in Vision Partnership, but is currently restricted given the specialized needs on her campus. Alternatively, one campus nurse explained that she accesses Eye Care for Kids only if her students missed their Vision Partnership clinic visit.

What were the challenges for students to receive vision correction in 2015–2016?

Responses to the Nurse Survey regarding program improvements included:

- Continue to provide screeners to help nurses (particularly part-time nurses or campuses without nurses) conduct vision screenings in early fall to identify problems early in the school year,
- provide nurses or campus personnel with assistance entering data in the student information system prior to the Vision Partnership clinics and after,
- provide parents/guardians with consent forms written at a lower reading level,
- accept verbal parental consent for their child to participate in the program,
- provide assistance in contacting parents/guardians regarding the return of signed consent forms or to follow-up following a recommendation for further evaluation,
- ensure a shorter wait-time for eyewear delivery,
- ensure eyewear fitting at delivery through personal delivery rather than mailed eyewear,
- provide care instructions for the students and parents upon delivery,
- give a copy of the students' prescription to the nurse or campus personnel in case the family is in need later on in the year,
- put in place clear resources and procedures for handling students' broken or lost eyewear and have nurses distribute the procedures to parents/guardians,
- ensure the buses will be on time to pick up at the school to attend a clinic,
- assist in recruiting chaperones for the clinic visits,
- allow the parents who want to chaperone on the bus because they often do not have their own transportation,
- increase the number of clinic events provided during the year with more fall semester clinics, and
- provide at least one additional clinic event during the spring semester to address the needs of all students who remain without vision correction.

Positive comments made by Nurse Survey respondents regarding the program included:

- "I love Vision Partnership."
- The Special Projects staff member "…is very helpful. She assisted in so much of the organization and answered questions."
- "The packets are awesome. The forms are nice and neat."
- "Great program to get glasses."
- "The clinics are well organized with different people to help the flow."

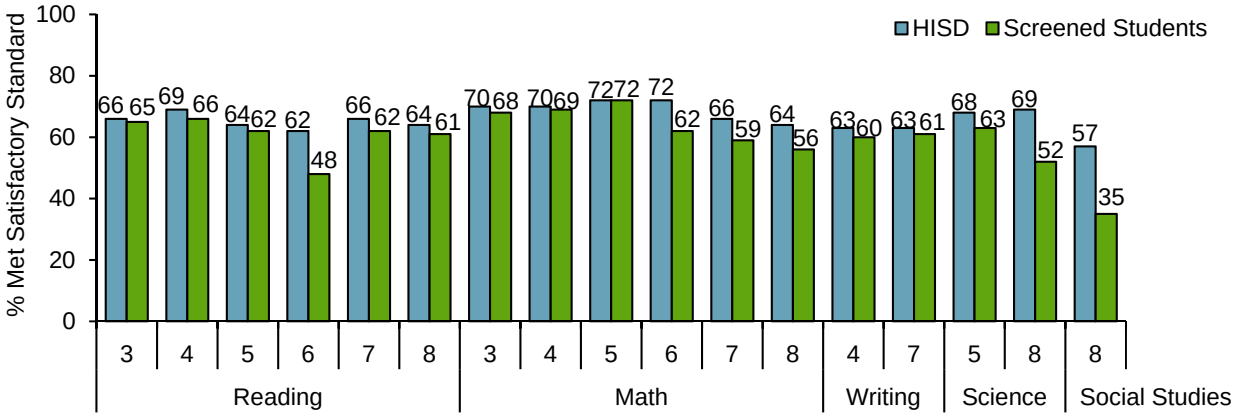
What was the 2015–2016 academic performance of HISD students who participated in campus-based vision screenings and received vision correction?

The academic performance of the HISD students in grades 3–8 using 2016 STAAR data provides a context to consider the performance of program participants. Participating students were not matched to their districtwide peers because unidentified program participants were among the districtwide population. Therefore, the following performance results are not intended to be used to make causal inferences of the

program's effectiveness at improving student performance in academic achievement. **Table A–4** (p. 26) contains demographic information on the district's grades 3–8 students who had 2016 STAAR data (n=88,837), the students who received corrective eyewear from any source after they received and failed their campus-based screening (n=3,881), and students who failed their campus-based vision screening, participated in a Vision Partnership clinic, and received corrective eyewear (n=1,673).

- For students who received campus-based screenings and corrective eyewear, the proportions of Female, Hispanic, Economically Disadvantaged, At-risk, and LEP students were notably larger (i.e., equal to or greater than a 5 percentage-point difference) than the proportions of these students districtwide. Conversely, there was a notable lower proportion of Males and White students who were screened for vision deficiencies and provided corrective eyewear (Table A–4).
- **Figure 14** displays the percentages of 2015–2016 districtwide students and participants of campus-based screenings who received vision correction and who met the Level II Satisfactory 2016 progression standards on the STAAR Grades 3–8 reading, mathematics, writing, science, and social studies exams. In 2015–2016, the identified vision-screened students who received vision correction met the passing standards at lower rates than did districtwide students in all grade levels and subjects except grade 5 math where they met the satisfactory standard at the same achievement rate.

Figure 14. Grade-level percentages of students who met the Level II Satisfactory 2016 progression standards on the English and Spanish STAAR exams for identified students who received campus-based vision screenings, failed, and received vision correction through any source and all HISD students, 2015–2016

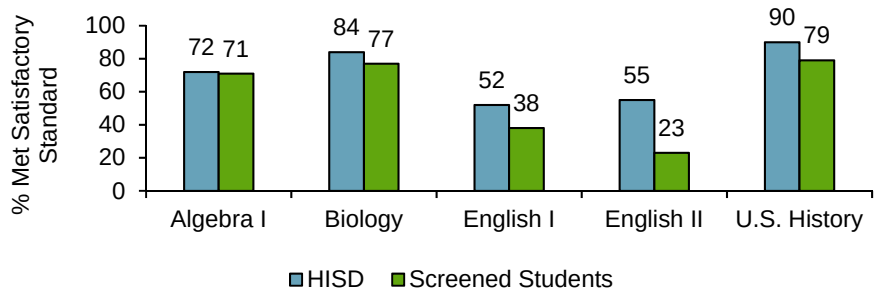


Source: Cognos Chancery Ad Hoc files, September 8, 2016; Cognos STAAR English and STAAR Spanish files, retrieved October 24, 2016
Note: 1st Administration, excludes STAAR A, Alt 2, and L. All percentages are rounded to the nearest whole number.

- **Table A–5** (p. 26) contains demographic information for HISD students (n=40,439) and a subset of screened students who received corrective eyewear (n=267). Students were included if they had taken at least one 2016 STAAR EOC exam. The proportions of African American, Economically Disadvantaged, At-risk, Special Education, and LEP students were notably larger (i.e., equal to or greater than a 5 percentage-point difference) among the screened students than among students districtwide. However, the proportions of Gifted and Talented and White students were notably larger (i.e., equal to or greater than a 5.0 percentage-point difference) among the districtwide student group than among the screened students who received vision correction.
- The performance percentages of 2015–2016 students districtwide and identified students who participated in campus-based screenings, received corrective eyewear, and who met the Level II Satisfactory 2016 student standards on the regular version of STAAR EOC Algebra I, Biology, English

I, English II, and U. S. History examinations are presented in **Figure 15**. In all EOC subjects, the vision-screened students who received corrective eyewear met the satisfactory standards on EOC assessments at lower rates than students districtwide.

Figure 15. Subject-specific rates of students who met the Level II Satisfactory 2016 student standards on STAAR EOC exams for identified students who received campus-based vision screenings, failed, and received vision correction through any source and all HISD students, 2015–2016



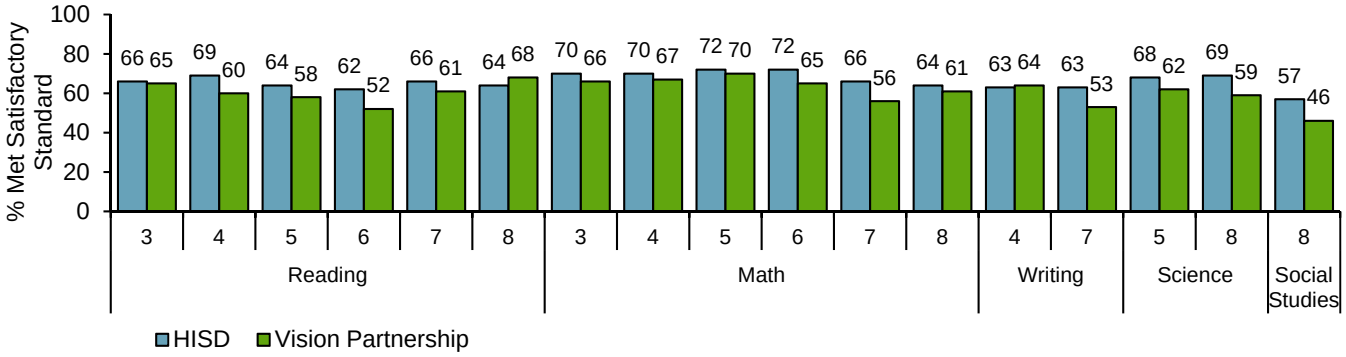
Source: Cognos Chancery Ad Hoc files, September 8, 2016; Cognos STAAR English and STAAR Spanish files, retrieved October 24, 2016

Notes: 1st Administration, includes re-testers, excludes STAAR A, Alt 2, and L. All percentages are rounded to the nearest whole number.

What was the 2015–2016 academic performance of HISD students who participated in the Vision Partnership and received vision correction?

- Table A–4 (p.26) contains demographic information on the district's students in grades 3–8 who had 2016 STAAR data (n=88,837) and a subset of HISD students who participated in the Vision Partnership, received vision correction, and who had 2016 STAAR data (n=1,673). For students who participated in Vision Partnership clinics and received corrective eyewear, the proportions of Female, Hispanic, Economically Disadvantaged, At-risk, and LEP students were notably larger (i.e., equal to or greater than a 5 percentage-point difference) than the proportions of students districtwide. Conversely, there was a notable lower proportion of Males and White students who were provided corrective eyewear after participating in a Vision Partnership clinic.
- **Figure 16** (p.19) shows the STAAR performance percentages of districtwide students and students who participated in the Vision Partnership program and received vision correction. The percent met the 2016 progression standards on the STAAR reading, mathematics, writing, science, and social studies exams for grades 3–8 are displayed for both groups of students. Performance results are not intended to be used to make causal inferences of the program's effectiveness at improving student performance in academic achievement. The identified Vision Partnership participants who received vision correction met the passing standards at lower rates than did districtwide students at all grade levels and in all subjects except grade 8 reading and grade 4 writing in 2015–2016.

Figure 16. Grade-level percentages of students who met the Level II Satisfactory 2016 progression standards on the English and Spanish STAAR exams for identified students who received examinations and services through the Vision Partnership, and received vision correction through any source and HISD students, 2015–2016

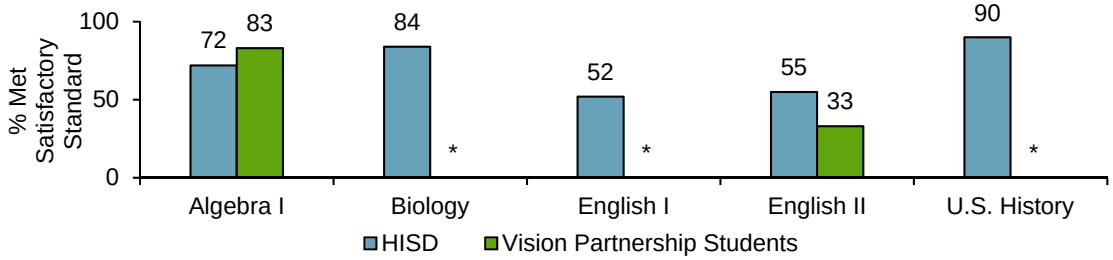


Source: Cognos Chancery Ad Hoc files, September 8, 2016; Cognos STAAR English and STAAR Spanish files, retrieved October 24, 2016

Note: 1st Administration, excludes STAAR A, Alt 2, and L. All percentages are rounded to the nearest whole number.

- **Table A–5** (p. 26) contains demographic information for the district's high school students (n=40,439) and a subset of district students who attended Vision Partnership clinics, and received corrective eyewear (n=12). Students included in both groups had taken at least one 2016 EOC STAAR exam. The proportions of Female, Hispanic, Economically Disadvantaged, and LEP students among the Vision Partnership participants were notably larger (i.e., equal to or greater than a 5 percentage-point difference) than the proportions of students districtwide. However, the proportions of Male, Asian/Pacific Islander, African American, and White students were notably larger (i.e., equal to or greater than a 5 percentage-point difference) among the districtwide student group than among Vision Partnership participants who received vision correction.
- **Figure 17** compares Vision Partnership participants who received vision correction with HISD students according to meeting the satisfactory standards on the EOC exams in 2015–2016. The twelve Vision Partnership participants took a total of 17 EOC exams. Three subjects had less than five Vision Partnership participants take the exam, thus the results could not be displayed: Biology, English I, and U.S. History. In Algebra I, Vision Partnership participants scored 11 percentage-points higher than districtwide students. In English II, Vision Partnership participants scored 22 percentage-points lower than students districtwide.

Figure 17. Subject-specific rates of students who met the Level II Satisfactory 2016 student performance standards on STAAR EOC exams for identified students who received examinations and services through the Vision Partnership and who received corrective eyewear, and HISD students, 2015–2016



Source: Cognos Chancery Ad Hoc files, September 8, 2016; Cognos STAAR English and STAAR Spanish files, retrieved October 24, 2016

Note: 1st Administration, excludes STAAR Acc, Alt 2, and L.

* denotes there were fewer than five students who took the exam and the results cannot be displayed. All percentages are rounded to the nearest whole number.

Discussion

For most students, good vision is vital to their daily and long-term academic success. However, research on campus-based vision screening programs has found that a substantial portion of children experience vision-related problems and learning difficulties (Basch, 2010). Campus-based vision screening for school-aged learners is a crucial investment of time, energy, and money because children require an array of visual abilities to navigate and achieve excellence in school (American Optometric Association, 2014).

HISD's campus-based vision screenings and services provided through the Vision Partnership have provided important opportunities for students who needed eye care and vision correction to receive them at no cost to students and their families. The district's report to the Texas Department of State Health Services (TDSHS) Child Health Reporting System states that nearly 92,500 district students in 2014–2015 and almost 93,000 district students in 2015–2016 received campus-based vision screenings. Compared to research findings of 20 percent of students experiencing vision problems (Ferebee, 2004), the percentages of HISD's students who participated in campus-based vision screenings and failed their screenings due to vision problems have been lower over the last two years (i.e., 11 percent in 2014–2015 and 12 percent in 2015–2016 according to the campus-level TDSHS vision screening report data). These percentages are slightly less than half of what may be reasonably expected. Over the last two years, school-level TDSHS data also indicated that roughly 6 percent of the examined students from 2014–2015 to 2015–2016 were examined by a vision specialist and were found to have no vision problem, which may bode well for the accuracy of campus-based screenings in determining students' need for care by a vision specialist.

As noted in the data limitations section of this report, poor data quality posed serious problems for effectively assessing HISD students' vision screening participation and outcomes, their utilization of vision care services, and performance outcomes. However, the value of the program to students whose families may otherwise be unable to meet their students' vision care needs is unquestionable. Nurses' comments and recommendations regarding the program support this conclusion.

In the last six school years, at least 25,574 HISD students have been served at Vision Partnership Clinics. Student participation decreased by nearly 2 percent from 4,282 participants in 2014–2015 to 4,215 participants in 2015–2016. However, the decrease could be attributed to fewer Vision Partnership clinics during the school year. In fact, the number of students per visit increased by six students per trip from 22 in 2014–2015 to 28 in 2015–2016. The larger number of students per clinic visit indicates a greater efficiency in using HISD program resources and a marked interest in accessing Vision Partnership clinics. In 2015–2016, 48 percent of HISD's schools had students as documented participants in the Vision Partnership program, a decrease from 50 percent in 2014–2015. There were 21 clinic dates in 2015–2016 as compared to 23 clinic dates in 2014–2015, a decrease of 9 percent.

Various sources used in this report confirmed that a notable degree of non-adherence to vision screening and vision examination recommendations exists among students across the district. Despite the concerted efforts made by campus nurses, the Manager of Medical and Health Services, and the HDHHS to better provide vision screenings, vision consultations, follow-up and subsequent eye examinations, and corrective eyewear for students who were in need of them, un-served students and students' unresolved vision needs remain important, ongoing challenges. Unfortunately, school-level TDSHS data have also indicated that each year more than 25 percent of students who were screened, identified as needing vision care, and referred to a specialist for treatment did not receive the services.

In recent years, the primary obstacles to students receiving vision correction that have been identified by the Manager of Medical and Health Services and campus nurses have remained fairly constant. The obstacles identified include nurses not having enough time to coordinate vision care activities in a timely manner, nurses having difficulty in readily identifying students with unresolved vision needs (due to data

entry problems and other limitations of the Chancery Vision Screening data), intricate logistics, parents/guardians not returning signed parental/guardian consent forms, and students' absences on the days of the clinics. Other reported obstacles to vision correction for students included non-receipt of corrective eyewear, eyewear delivered late in the school year, and no avenues for expedient, high-quality eyewear repair or replacement. Heightened communication among school nurses, health services administration, and parents/guardians to share pertinent information and to explore best practices is likely to help ensure more students receive the prompt vision care they need.

Barriers may contribute to the non-adherence (Chu, et. al. 2015), including printed information about vision that may be written at inappropriate literacy levels (Muir and Lee, 2010). It may prove helpful to consider a review of the vision-related materials that are sent to parents/guardians as well as to consider the language used when speaking with parents/guardians. This is important in light of the ongoing problems with obtaining signed parent/guardian consent forms and nurses' suggestions regarding the addition of communications with parents/guardians about vision care clinics and the care of students' corrective eyewear.

The district may want to develop systems that improve communication among campus administrators, counselors, teachers, nurses and parents/guardians regarding high-priority strategies that ensure students' vision health needs are resolved early in the school year (e.g. maintaining a list of students with unresolved vision needs). Finally, it is imperative that the quality of HISD's and the Vision Partnership's vision-related data is improved to allow the data that are collected to be used effectively to inform program delivery and to assess student outcomes.

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Appendix A

Table A-1. Demographic characteristics of HISD students, campus-based screened students, and Vision Partnership Participants, 2015–2016

	HISD (N=214,891)		Screened Students (N=70,971)		Vision Partnership (N=4,215)	
	N	%	N	%	N	%
Gender						
Male	105,879	49	36,802	52	1,856	44
Female	109,012	51	34,169	48	2,359	56
Race and Ethnicity						
African American	52,605	24	16,299	23	1,240	29
American Indian	419	<1	101	<1	11	0
Asian/Pacific Islander	8205	4	2,657	4	65	2
Hispanic/Latino	133,499	62	45,545	64	2,825	67
White	18,044	8	5,582	8	57	1
Two or more	2,119	1	787	1	17	0
Student Demographics						
Economic Disadvantaged	164,412	77	57,107	80	3,765	89
At-Risk	137,926	64	46,230	65	3,046	72
Special Education	15,545	7	6,371	9	380	9
LEP	65,216	30	27,955	39	1,563	37
Gifted/Talented	32,200	15	10,132	14	446	11

Source: Cognos Chancery Ad Hoc files, September 8, 2016; Houston Department of Health and Human Services Vision Partnership Participation Data; PEIMS Fall Snapshot 2015–2016

Note: Percentages may not total 100 due to rounding to the nearest whole number.

Table A-2. Grade level enrollment of HISD, campus-based screened students, and Vision Partnership participants, 2015–2016

	HISD (N=214,891)		Screened Students (N=70,971)		Vision Partnership (N=4,215)	
Grade Level	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**
EE/Pre-K	15,078	7	9,171	13	27	1
Kindergarten	17,114	8	11,596	16	121	3
Grade 1	18,967	9	13,119	18	474	11
Grade 2	18,319	9	1,651	2	240	6
Grade 3	18,496	9	12,130	17	729	17
Grade 4	17,130	8	1,430	2	403	10
Grade 5	16,594	8	10,626	15	903	21
Grade 6	13578	6	1,072	2	285	7
Grade 7	13,644	6	7,411	10	479	11
Grade 8	13,427	6	495	1	280	7
Grade 9	16,461	8	1,220	2	91	2
Grade 10	13,327	6	449	1	80	2
Grade 11	11,860	6	309	<1	42	1
Grade 12	10,896	5	292	<1	61	1

Source: Cognos Chancery Ad Hoc files, September 8, 2016; Houston Department of Health and Human Services Vision Partnership Participation Data; PEIMS Fall Snapshot 2015–2016

Note: Percentages may not total 100 due to rounding to the nearest whole number.

Table A–3: Vision Partnership participation and clinic trips by campus and school level, 2015–2016					
Elementary Schools (N=91)					
School Name	**Student Attendance**	**Clinic Visits**	**School Name**	**Student Attendance**	**Clinic Visits**
	N=2830	**N=98**			
Alcott Elementary	44	1	Jefferson Elementary	31	1
Anderson Elementary	50	1	Kashmere Gardens Elementary	33	1
Ashford Elementary	7	1	Ketelsen Elementary	38	1
Askew Elementary	23	1	Lewis Elementary	9	1
Bastian Elementary	9	1	Looscan Elementary	18	1
Bell Elementary	21	1	Lovett Elementary	15	1
Benavidez Elementary	31	2	Lyons Elementary	54	2
Berry Elementary	19	1	MacGregor Elementary	173	1
Bonner Elementary	75	1	Mandarin Immersion Magnet	1	1
Browning Elementary	13	1	Martinez, C. Elementary	8	1
Bruce Elementary	36	1	McGowen Elementary	29	1
Burbank Elementary	42	1	Milne Elementary	8	1
Burnet Elementary	19	1	Mitchell Elementary	12	1
Burrus Elementary	25	1	Moreno Elementary	39	1
Cage Elementary	77	1	Oates Elementary	9	1
Carrillo Elementary	43	1	Osborne Elementary	9	1
Codwell Elementary	58	1	Park Place Elementary	36	1
Coop Elementary	1	1	Patterson Elementary	49	2
Cornelius Elementary	13	1	Peck Elementary	58	1
Crespo Elementary	49	1	Peterson Elementary	15	1
Crockett Elementary	13	1	Poe Elementary	23	1
Davila Elementary	29	1	Pugh Elementary	44	1
DeAnda Elementary	3	1	River Oaks Elementary	2	0
DeChaumes Elementary	75	1	Robinson Elementary	17	1
Dogan Elementary	49	1	Rodriguez Elementary	30	1
Durham Elementary	7	1	Roosevelt Elementary	113	1
Durkee Elementary	33	1	Rucker Elementary	25	1
Eliot Elementary	14	1	Scarborough Elementary	27	1
Elmore Elementary	30	1	School at St. George Place	8	1
Elrod Elementary	6	2	Scroggins Elementary	1	0
Emerson Elementary	36	1	Shadydale Elementary	5	1
Field Elementary	13	1	Sherman Elementary	14	1
Fleming Middle	19	1	Sinclair Elementary	14	1
Frost Elementary	12	1	Smith Elementary	105	1
Gallegos Elementary	20	1	Southmayd Elementary	47	1
Garden Villas Elementary	62	1	Thompson Elementary	19	4
Gregg Elementary	19	2	Tijerina Elementary	45	1
Harris, J.R. Elementary	15	1	Tinsley Elementary	86	1
Harris, R.P. Elementary	29	1	Valley West Elementary	25	1
Hartsfield Elementary	36	1	Wainwright Elementary	13	1
Henderson Elementary	0	1	Walnut Bend Elementary	111	1
Henderson Elementary	20	1	Wesley Elementary	30	1
Highland Heights Elementary	54	1	White Elementary	7	1
Hines-Caldwell Elementary	17	2	Whittier Elementary	18	1
Hobby Elementary	41	1	Young Elementary	7	1
Isaacs Elementary	43	1			

Table A–3 (Continued): Vision Partnership participation and clinic trips by campus and school level, 2015–2016					
Middle Schools (N=26)					
School Name	**Student Attendance**	**Clinic Visits**	**School Name**	**Student Attendance**	**Clinic Visits**
	N=762	**N=29**			
Attucks Middle School	38	1	Las Americas Middle School	25	1
Black Middle School	47	2	Lawson Middle School	62	2
Burbank Middle School	1	0	Marshall Middle School	1	0
Clifton Middle School	16	1	McReynolds Middle School	45	1
Deady Middle School	64	2	Meyerland PVA	24	1
Fleming Middle School	29	1	Ortiz Middle School	101	1
Fonville Middle School	8	1	Pershing Middle School	12	1
Forest Brook Middle School	18	1	Stevenson Middle School	24	1
Hartman Middle School	27	1	Tanglewood Middle School	10	1
Henry Middle School	20	1	Thomas Middle School	28	1
Hogg Middle School	9	1	Welch Middle School	19	1
Holland Middle School	13	1	West Briar Middle School	23	1
Key Middle School	77	3	Williams Middle School	21	1
High School (N=13)					
School Name	**Student Attendance**	**Clinic Visits**	**School Name**	**Student Attendance**	**Clinic Visits**
	N=215	**N=12**			
Bellaire High School	12	1	Sharpstown High School	29	1
Chavez High School	1	0	South Early College High School	9	1
Houston Academy for Internationl Studies	1	0	Sterling High School	33	2
Jones Futures Academy	12	2	Washington High School	13	1
Middle College High School at HCC Felix Fraga	39	1	Wheatley High School	20	1
Milby High School	24	1	Young Women's College Preparatory Academy	2	0
North Forest High School	20	1			
Combination Schools (N=6)					
School Name	**Student Attendance**	**Clinic Visits**	**School Name**	**Student Attendance**	**Clinic Visits**
	N=408	**N=9**			
Gregory-Lincoln Education Center	29	1	The Rusk School	51	2
Long Academy	268	3	Wharton Dual Language Academy	4	1
Pilgrim Academy	45	1	Wilson Montessori	11	1
District School Count					
Total Schools: 136	**Student**			**Clinic Visits: 148**	

Source: HISD Health and Medical Services Vision Partnership Attendance Report, 2015–2016

Note: Average Trip Attendance is rounded to the nearest whole number. The attendance recorded by HISD does not match the data from the data from the Houston Department of Health and Human Services (HDHHS). This table uses the HDHHS data for campus level participation. Clinic visit data came from the HISD Health and Medical Services department given inconsistent or missing. TDHHS data data.

Table A–4. Percentages of Grades 3–8 STAAR student characteristics by HISD, campus-based vision screening students, and Vision Partnership participants, 2015–2016			
	HISD Students	Screened Students who received corrective eyewear	Vision Partnership Participants who received corrective eyewear
	(N=88,837)	(N=3,881)	(N=1,673)
Gender			
Male	50	45	42
Female	50	55	58
Race/Ethnicity			
Asian/Pacific Islander	4	2	1
American Indian	<1	<1	<1
African American	24	22	22
Hispanic/Latino	63	72	76
White	8	3	1
Two or more	1	1	<1
Selected Student Demographics			
Economically Disadvantaged	78	88	90
At-Risk	56	67	73
Special Education	6	8	9
LEP	31	40	46
Gifted/Talented	20	19	16

Source: Cognos STAAR files, retrieved October 26, 2016; Cognos, Cognos Chancery files, September 8, 2016; Houston Department of Health and Human Services Vision Partnership Participation Data; PEIMS 2015–2016

Note: Vision Partnership participants are a subset of HISD students. Some students may not have STAAR data available. STAAR excludes Acc, Alt 2, and L exams. Percentages may not total 100 due to rounding.

Table A–5. Percentages of STAAR EOC student characteristics by HISD, campus-based vision screening students, and Vision Partnership participants, 2015–2016			
	HISD Students	Screened Students who received corrective eyewear	Vision Partnership Participants who received corrective eyewear
	(N=38,862)	(N=267)	(N=12)
Gender			
Male	49	49	42
Female	51	51	58
Race/Ethnicity			
Asian/Pacific Islander	5	3	0
American Indian	<1	0	0
African American	24	30	8
Hispanic/Latino	60	63	92
White	10	4	0
Two or more	1	0	0
Selected Student Demographics			
Economically Disadvantaged	70	87	92
At-Risk	60	81	58
Special Education	4	16	8
LEP	12	27	42
Gifted/Talented	20	9	17

Source: Cognos STAAR files, retrieved October 26, 2016; Cognos Chancery files, September 8, 2016; Houston Department of Health and Human Services Vision Partnership Participation Data; PEIMS 2015–2016

Notes: Vision Partnership participants are a subset of HISD students. Some students may not have STAAR data available EOC results are from the Spring administration and includes retesters but exlcudes STAAR Acc, Alt 2, and L. Percentages may not total 100 due to rounding.