

MEMORANDUM

June 5, 2014

TO: School Board Members

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

SUBJECT: **VISION PARTNERSHIP, 2012–2013**

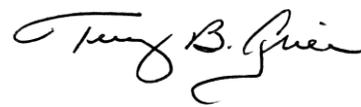
CONTACT: Carla Stevens, 713-556-6700

The Vision Partnership is an alliance between the Houston Independent School District (HISD) and One Sight Vision Partnership that began in 2007 to address the vision and vision-related health needs of students who cannot afford eye care services. Vision screenings, consultations, and fittings for corrective eyewear are provided at no cost to students or their families during special events that are held throughout the school year at multiple clinics in non-academic community locations. This may enable students to fully engage in the academic opportunities the district offers. The goal of the Vision Partnership is to enhance student achievement by ensuring that the basic vision and vision-related health needs of HISD students are met.

Key findings are as follows:

- From the 2009–2010 to the 2012–2013 school year, 14,078 HISD students have received services through the program. Participation more than doubled from 2,210 in 2009–2010 to 4,437 in 2012–2013, with an increase of 4.5 percent from 4,245 participants in 2011–2012 to 2012–2013.
- A total of 134 HISD schools had students who participated in the 2012–2013 Vision Partnership program, including 64.9 percent elementary, 20.9 percent middle, 9.7 percent high, and 4.5 combined schools. This constituted a 10.7 percent increase over the 121 schools that had students who participated in the Vision Partnership program in 2011–2012.
- At all grade levels except grade 3, Vision Partnership participants achieved higher attendance rates (0.1 to 3.0 percentage points higher) than students districtwide achieved.
- STAAR passing rates ranged from 49 to 78 percent for Vision Partnership participants and from 56 to 77 percent for HISD students districtwide. STAAR EOC passing rates ranged from 51 to 82 percent for Vision Partnership participants and from 42 to 75 percent for HISD students districtwide. TAKS passing rates ranged from 79 to 90 percent for Vision Partnership participants and from 87 to 92 percent for HISD students districtwide. These results are for descriptive purposes only and not to determine program effectiveness as matched comparison groups between treatment and non-treatment groups were not available.

Should you have any further questions, please contact my office or Carla Stevens in Research and Accountability at 713-556-6700.



TBG

Attachment

cc: Superintendent's Direct Reports
Michael Cardona

Chief School Officers
Philip Hickman

Gwendolyn Johnson



RESEARCH

Educational Program Report

VISION PARTNERSHIP
2012–2013

DEPARTMENT OF RESEARCH AND ACCOUNTABILITY
HOUSTON INDEPENDENT SCHOOL DISTRICT



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VISION PARTNERSHIP 2012–2013

EXECUTIVE SUMMARY

Program Description

The Vision Partnership is an alliance between the Houston Independent School District (HISD) and One Sight Vision Partnership that began in 2007 to address the vision and vision-related health needs of students who cannot afford eye care services. Vision screenings, consultations, and fittings for corrective eyewear are provided at no cost to students or their families during special events that are held throughout the school year at multiple clinics in non-academic community locations. Services are provided through the One Sight Vision Clinic, which is a part of an ongoing collaboration between One Sight, a Luxottica Group Foundation, See to Succeed, an initiative of VisionQuest 20/20; the Houston Department of Health and Human Services; various community organizations; and the district. The goal of the Vision Partnership is to enhance student achievement by ensuring that the basic vision and vision-related health needs of HISD students are met. This may enable students to fully engage in the academic opportunities the district offers. This report provides information on three aspects of the program: student participation, barriers to program participation, and the academic performance of students served by the program. Because of limitations to the student-level participation and vision-related outcome 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 performance in academic achievement.

The Vision Partnership program aligns with the latter part of the district's Strategic Direction Core Initiative 3, "Rigorous Instructional Standards and Supports." The district's budget for the 2012–2013 program was \$100,000 to coordinate follow-up examinations at Vision Partnership Clinics (after campus-based vision screenings), to provide transportation to Vision Partnership Clinics, and to provide corrective eyewear for eligible students (Research and Accountability, 2014a).

Highlights

- In the 2012–2013 school year, 4,437 HISD students received services through the Vision Partnership. From the 2009–2010 school year to the 2012–2013 school year, 14,078 HISD students have received services through the program. Student participation more than doubled (100.8 percent) from 2,210 in 2009–2010 to 4,437 in 2012–2013, with an increase of 4.5 percent from the 4,245 participants in 2011–2012 to 4,437 2012–2013.
- In 2012–2013, the largest groups of participants were 4th, 5th, 6th, and 8th grade students. The smallest groups were in pre-school and grades 10, 11, and 1.
- The population of Vision Partnership participants comprised notably larger proportions of female, African American, Hispanic/Latino, economically disadvantaged, and LEP students than the general population of HISD students. The proportions of male and White students were notably larger among HISD students districtwide.
- A total of 134 HISD schools had students who participated in the 2012–2013 Vision Partnership program, including 64.9 percent elementary, 20.9 percent middle, 9.7 percent high, and 4.5 combined schools. This constituted a 10.7 percent increase over the 121 schools that had students who participated in the Vision Partnership program in 2011–2012.

- Students participating in Vision Partnership Clinics received district-funded transportation to Vision Partnership Clinics from 92 schools (Research and Accountability, 2014a), 68.7 percent of the 134 participating schools, including 61 elementary, 20 middle, nine high, and two multilevel campuses.
- Opportunities for students to attend a Vision Partnership Clinic were provided during five of the nine months of the 2012–2013 school year. Eleven clinics in the fall semester and 15 clinics in the spring semester were provided to address students' vision related health needs.
- HISD students participated in a total of 183 visits to Vision Partnership Clinics in 2012–2013, including one to five clinic visits per school.
- Of the 4,437 students who were screened at their campuses and participated in Vision Partnership Clinic examinations during the 2012–2013 school year, Vision Partnership Clinic examinations confirmed that 86.8 percent (n=3,850) of them needed vision correction. This indicated a lower rate of confirmation when compared to 3,842 (or 90.5 percent of the 4,245) students for whom confirmations for vision correction were made at Vision Partnership Clinics in 2011–2012.
- Reliable data from the City of Houston and Chancery regarding the dispensation of corrective eyewear were not available for all students who needed corrective eyewear. Therefore, it was not possible to conduct comparative analyses of Vision Partnership Clinic participants who received vision correction and program participants who did not receive vision correction.
- At all grade levels with the exception of grade 3, Vision Partnership participants achieved higher attendance rates (0.1 to 3.0 percentage points higher) than were achieved by students districtwide.
- Lower percentages of Vision Partnership participants met the passing standard on all STAAR assessments (grades 3–8) than did HISD students districtwide, with the exception of students who took the 8th grade mathematics exam. The 8th grade passing rate included students who took the Algebra I End of Course (EOC) exam and this group of Vision Partnership participants had a higher passing rate than did HISD students districtwide. Passing rates ranged from 49 to 78 percent for Vision Partnership participants and from 56 to 77 percent for HISD students districtwide.
- Higher percentages of Vision Partnership participants passed the STAAR EOC English I - Writing and Algebra I exams than did HISD students, districtwide. However, a higher percentage of HISD students, districtwide passed the English I-Reading exam than did Vision Partnership participants. Passing rates ranged from 51 to 82 percent for Vision Partnership participants and from 42 to 75 percent for HISD students districtwide.
- Lower percentages of Vision Partnership participants met the TAKS passing standard in English language arts and mathematics than did HISD students, districtwide. Passing rates ranged from 79 to 90 percent for Vision Partnership participants and from 87 to 92 percent for HISD students districtwide.
- Overall, the greatest challenge to program participation in 2012–2013 involved the ongoing identification of and follow-up with students who may need vision correction to insure/ensure they receive the appropriate care and corrective eyewear in a timely manner to support their vision and educational needs.

Recommendations

- Explore strategies to facilitate the collection and reporting of valid and reliable data for all program participants and activities.
- Given the diverse case-management capacities among Nurse Coordinators, it is recommended that Nurse Coordinators with greater case-management skills (including coordination with clinics, follow-

up with campus educators, students and parents/guardians, timely recordkeeping, and higher proportions of successful follow-up with students be recognized and afforded opportunities to collaborate with Nurse Coordinators with lesser case-management skills.

- It also is critical that vision exams and the timing of eyewear delivery maximize the benefits of the program for students. To extend the benefit of the newly implemented process of identifying the 50 students of greatest need by the earliest date possible at each school, at a minimum, it is recommended that the school ensure that the files of the 50 identified students per campus be updated at least monthly. This may maximize the potential for serving high-need students and enhance program outcomes.
- Vision Clinic screening results should be entered into the Chancery database by school Nurse Coordinators as soon as possible, following the date of the clinic visit. This will improve the capacity of Nurse Coordinators and program administrators to utilize up-to-date student records to monitor the extent to which students' vision needs are resolved.
- To provide Nurse Coordinators and program administrators with more accessible data, program administrators could request electronic versions of all student information and exam results that have been provided by Vision Partnership Clinics on hardcopy after each clinic visit. The results may be made available on a weekly or monthly basis for all clinics held within the identified interval.
- It is recommended that campus Nurse Coordinators, campus educators, and students work together to develop systems to protect, maintain the upkeep of, and preserve students' new corrective eyewear.

Administrative Response

It is important that we continue district strategies such as the One Sight Vision Partnership, to support connectedness with community resources that provide a cost effective and efficient way to remove vision deficits as a barrier to learning and remove cost and transportation as barriers to accessing these services. Vision screening in HISD, as mandated by the Texas Special Senses and Communications Disorders Act, must continually engage with partners such as the City of Houston Health and Human Services, Eye Care for Kids and the University of Houston's School of Optometry to connect students with resources for care, regardless of socioeconomic status.

Having less-than optimal vision can contribute to students being fatigued and avoiding tasks that require good vision. In addition, behaviors such as turning the head to see, covering one eye, losing place while reading and avoidance of reading tasks can be demoralizing and may impact school attendance particularly as students get older and vision problems increase. The differences in school attendance rates noted in this report favored Vision Partnership participants when compared to students' rates districtwide and may be indicative of a secondary benefit that impacts student attendance as their self-esteem and self-confidence improve, after their eye care needs are met.

The Center for Health and Health Care in Schools' summary of vision research (2013) indicates some studies found that among five and six year-olds who fail vision screening, the average delay before examination by an eye care professional was four years. The lower percentages of Vision Partnership students in lower elementary grades who passed the state-mandated exams as compared to their peers, districtwide may, in some way, reflect the cumulative effect of delayed follow-up for a vision deficit. Improved data collection as recommended in the report could provide informative quantitative research on the impact of early identification and follow up in the school-aged child.

According to the American Optometric Association (2014), the ability to see clearly and comfortably at 10–13 inches, see clearly and comfortably beyond arm's reach, use both eyes together and aim the eyes

accurately and move them smoothly across a page and shift them quickly and accurately, from one object to another are important vision skills needed in schools. All of these skills can be detected through an effective screening program. Quality screening programs begin with certified screeners but end only, however, when students receive the vision supports necessary for academic success. Staffing formulas that include a professional school nurse with the acumen for case management and engaging community resources and intense parent support for follow-up contribute to program success.

The One Sight Vision Partnership is an example for other school districts as demonstrated in 2013 when HISD received the Magna Award as a result of the Partnership. The award recognizes districts across the country for outstanding programs that advance student learning and encourage community involvement in schools. Magna Award recipients are national models for school leaders.

While limitations of the report are noted, the recommendations included reflect reasonable expectations that can improve future program outcomes and analysis. Health and Medical Services appreciates the support of Department of Research and Accountability and we look forward to working collaboratively with the City of Houston to implement steps for improved data collection and program management.

Introduction

Healthy vision is a critical component of the foundation for academic achievement. Impaired vision reduces one's abilities to read, concentrate, and process information. Poor vision may impede academic success and lead to academic frustration and behavioral problems. The Center for Health and Health Care in Schools estimated that at least 20 percent of students have problems with their vision (Ferebee, 2004). Research on campus-based vision screening programs has found a substantial portion of 5 to 11 year-old children are affected by optical imperfections and vision-related learning difficulties (Basch, 2010). Visual impairment among 12 to 19 year-old children has been found to be significantly higher than among adults between the ages of 20–59, and data for campus-based vision screenings suggest a sizeable portion of students is affected by vision impairment (Basch, 2010). African American and Hispanic youth were found to be less likely than White students to have possession of corrective lenses (Kemper, Gurney, Eibschitz-Tsimhoni, & Del Monte, 2007). Further, numerous researchers have concluded that children from families with low income are disproportionately affected by vision impairments, with substantial evidence supporting causal linkages between academic performance and vision-related learning problems (Basch, 2010).

The Vision Partnership is an alliance between the Houston Independent School District (HISD) and One Sight Vision Partnership. The partnership began in 2007 to address 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 are provided at no cost to students or their families during special examinations that are held throughout the school year at multiple clinics in non-academic community locations. Services are provided through the One Sight Vision Clinic, which is a part of an ongoing collaboration between One Sight—a Luxottica Group Foundation, See to Succeed—an initiative of VisionQuest 20/20, the Houston Department of Health and Human Services, various community organizations, and the district. The goal of the Vision Partnership is to enhance student achievement by ensuring that the basic vision and vision-related health needs of its students are met. This enables students to fully engage in the academic opportunities the district offers.

Starting at the beginning of each school year, students enrolled in HISD schools are screened by HISD nurses for vision impairments. When the need for vision correction seems apparent, the district's health care professionals make student referrals for specialists' examinations, which are followed by professional treatment when needed. The Vision Partnership provides 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 student transportation to the clinic sites rather than requiring schools to do so out of their campus budgets, as previously required.

The Vision Partnership program aligns with the latter part of the district's Strategic Direction Core Initiative 3, "Rigorous Instructional Standards and Supports." The budget for the 2012–2013 program was \$100,000 to coordinate follow-up vision examinations, and to provide transportation to Vision Partnership Clinics, and to provide corrective eyewear for eligible students (Research and Accountability, 2014a). The purpose of this report is to provide information on student participation in the program, barriers to program participation, and the academic performance of students served by the program. Because of limitations to the 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 achievement.

Methods

Data Collection and Analysis

- Multiple sources of data were used in the evaluation of this program. Information on and results of students' campus-based vision screenings and related vision solutions were obtained from the Chancery Student Information System's Vision Screening database. The primary source of student data for One Sight and See to Succeed clinic utilization was the City of Houston. Demographic and academic outcome data were retrieved through the district's Public Education Information Management System (PEIMS), State of Texas Assessments of Academic Readiness (STAAR), STAAR End-of-Course (EOC), and Texas Assessment of Knowledge and Skills (TAKS) databases. School levels were obtained from HISD District and School Profiles 2012–2013. District and student attendance data were extracted from 2012–2013 PEIMS 400-Basic Attendance Record.
- Student performance indicators included Vision Partnership students' attendance rates and academic achievement. Average daily attendance (ADA) was calculated using the standard Student Attendance Formula with the 400 Record. Academic achievement was measured by the percentage of students in grades 3–8 who met the satisfactory, Phase-in 1 performance standards on the STAAR, English and Spanish versions of reading, math, and writing examinations and on the STAAR EOC English I-Reading, and English I-Writing exams in grades 9–10 and Algebra I examination in grades 8–10. Additionally, the percentage of students in grade 11 who met the performance standard on the Exit Level TAKS English Language Arts (ELA) and mathematics examinations was measured. Vision Partnership students' performance was compared with student performance districtwide.
- A series of interviews with the HISD Manager of Medical and Health Services yielded insights regarding impediments to and improvements supporting program participation based on the Manager's ongoing interactions with school-based Nurse Coordinators, students, parents/guardians, and Vision Partnership service providers.

Data Limitations

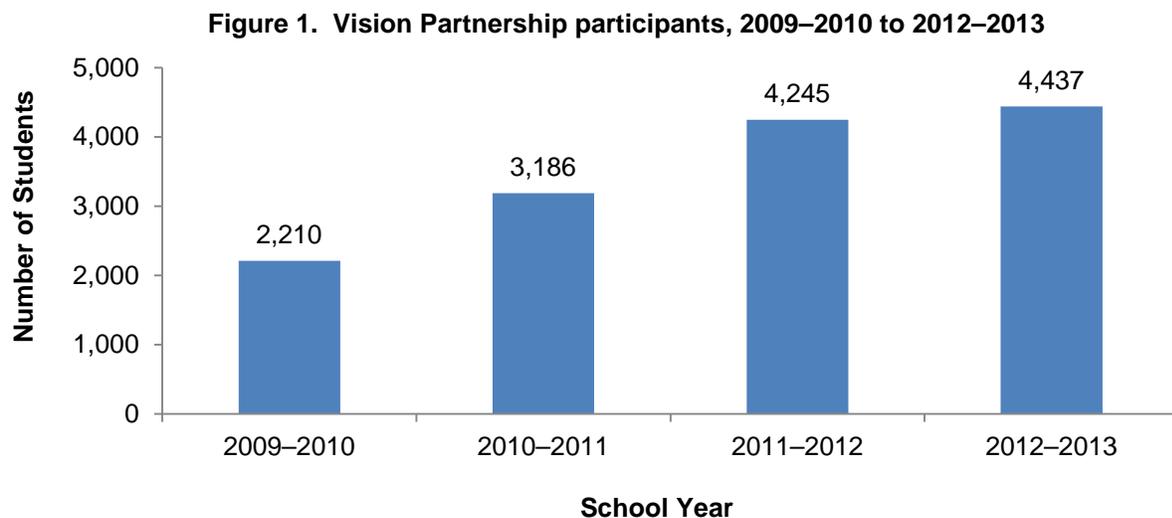
- A complete roster of students who participated in a Vision Partnership Clinic could not be confirmed due to variations in student data obtained through the HISD's Chancery Vision Screening database and the City of Houston. Specifically, some student records were not entered into Chancery for students who attended a Vision Partnership Clinic.
- Incorrect student identification numbers were provided to Vision Partnership Clinic personnel, and in turn, were incorrectly documented in data received from clinic administrators. Therefore, clinic data from the City of Houston for these students could not be linked with students' HISD demographic or performance files.
- Chancery data regarding student participation in the Vision Partnership and related outcomes were not reliable due to inconsistencies in the way school-based Nurse Coordinators used or did not use the related data-fields. This included data to ascertain whether or not students received corrective eyewear, as well as the source through which students received their eyewear. Therefore, these data were excluded from this analysis.

- In some cases, no visit date was provided with the screening results provided by the City of Houston. Therefore, data were not sufficient to determine accurate student counts by month or by clinic event.
- Reliable data from the City of Houston and Chancery regarding the dispensation of corrective eyewear were not available for all students who needed corrective eyewear. Therefore, it was not possible to conduct comparative analyses of Vision Partnership Clinic participants who received vision correction, program participants who did not receive vision correction, or those students who received corrective eyewear from a different source.

Results

How many students participated in a Vision Partnership Clinic?

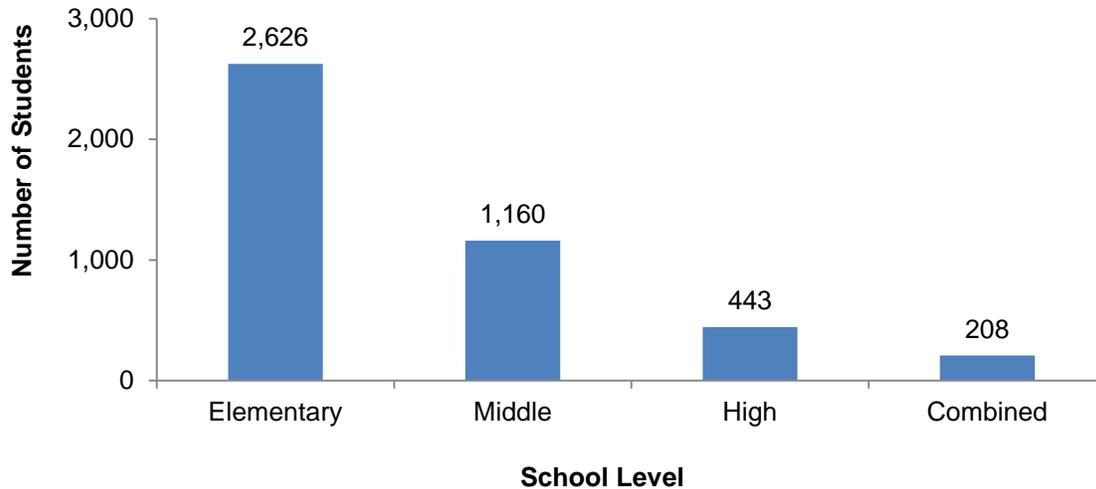
- Each participating school may refer up to 50 students to a Vision Partnership Clinic. From 2009–2010 to 2012–2013, Vision Partnership Clinics have provided screenings and/or treatments to 14,078 HISD students. Student participation more than doubled (100.8 percent) from 2,210 in 2009–2010 to 4,437 in 2012–2013, with an increase of 4.5 percent from 2011–2012 to 2012–2013 (**Figure 1.**)



Note: Participant refers to students who were screened at a Vision Partnership Clinic and who may or may not have received vision correcting eyewear through a Vision Partnership provider.

- **Figure 2** (page 8) shows the number of students (n=4,437) who participated in a Vision Partnership Clinic in 2012–2013 by school level. The number of students decreased as the school level increased. The smallest group attended combined level schools. (**Table 1**, pages 20–21.)

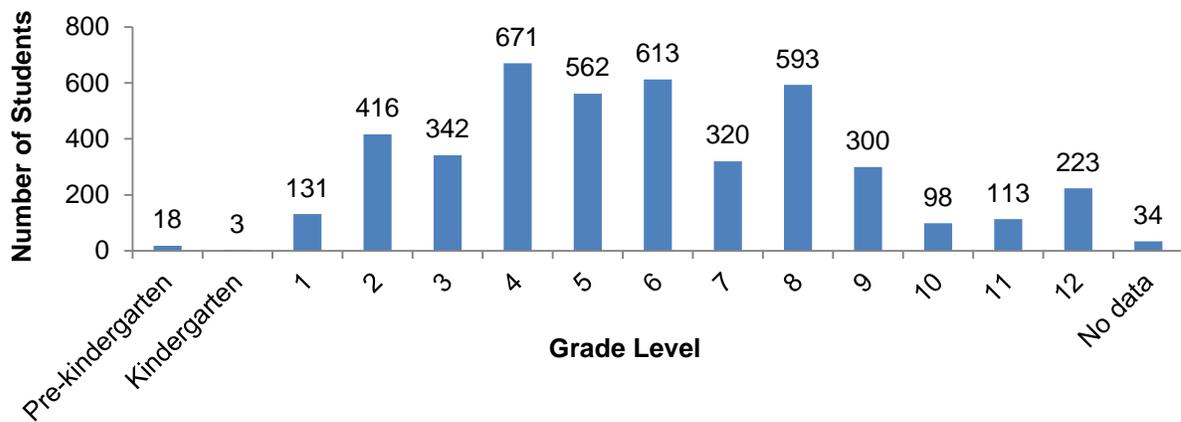
Figure 2. Vision Partnership participants by school level, 2012–2013



Source: HISD District and School Profiles 2012–2013.

- More specifically, **Figure 3** shows the number of students who participated in a Vision Partnership Clinic in 2012–2013 by grade level for the 4,403 (99.2 percent of the 4,437) students for whom grade level data were available. The largest groups were 4th, 5th, 6th, and 8th grade students. The smallest groups were in pre-school and grades 1, 10, and 11. A total of 48.4 percent of participants were in pre-kindergarten to grade 5, with 34.4 percent in grades 6–8 and 16.5 percent in grades 9–12. (See **Table 2**, page 22.)

Figure 3. Number of Vision Partnership participants by grade level, 2012–2013

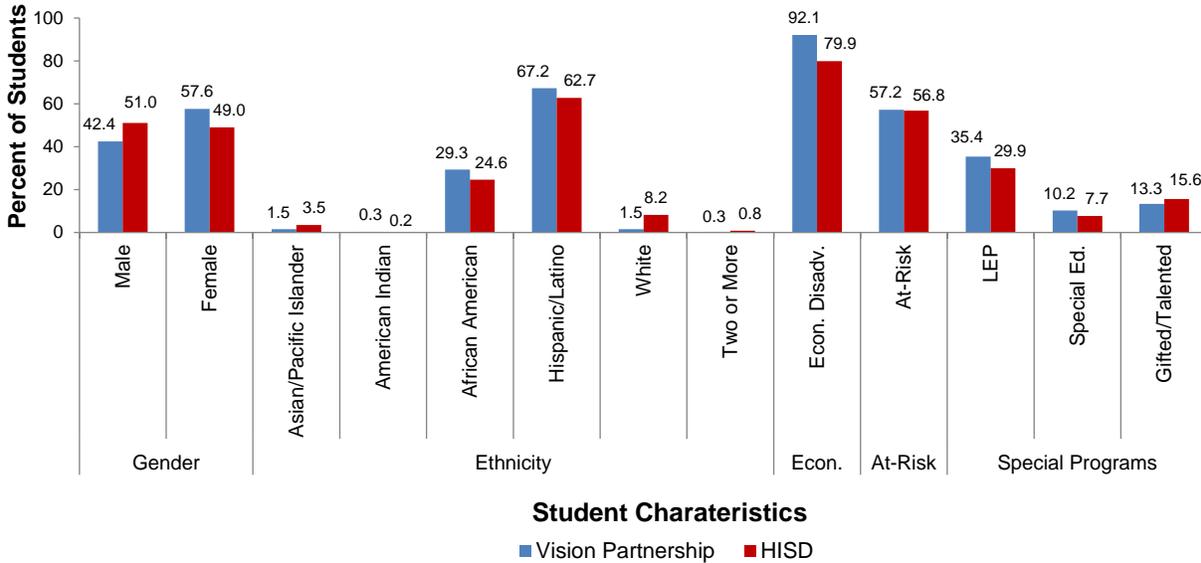


Note: Grade level data were not available for 34 students.

- The characteristics of students who participated in a Vision Partnership Clinic and the characteristics of all students across the district are presented in **Figure 4** (page 9). The population of Vision Partnership participants comprised notably larger proportions of female, African American, Hispanic/Latino, economically disadvantaged, and LEP students than the general population of HISD students; while proportions of male and White students were notably larger among HISD students districtwide.
- Proportions of Vision Partnership participants and their peers across the district were most comparable (i.e., equal to or less than 0.5 percentage point difference) regarding the following characteristics: American Indian, two or more races, and at-risk students. In addition, more

moderate differences in proportions between the groups included the following characteristics (from smallest to largest difference): Asian/Pacific Islander, gifted/talented, special education, and White students. (Table 3, page 22.)

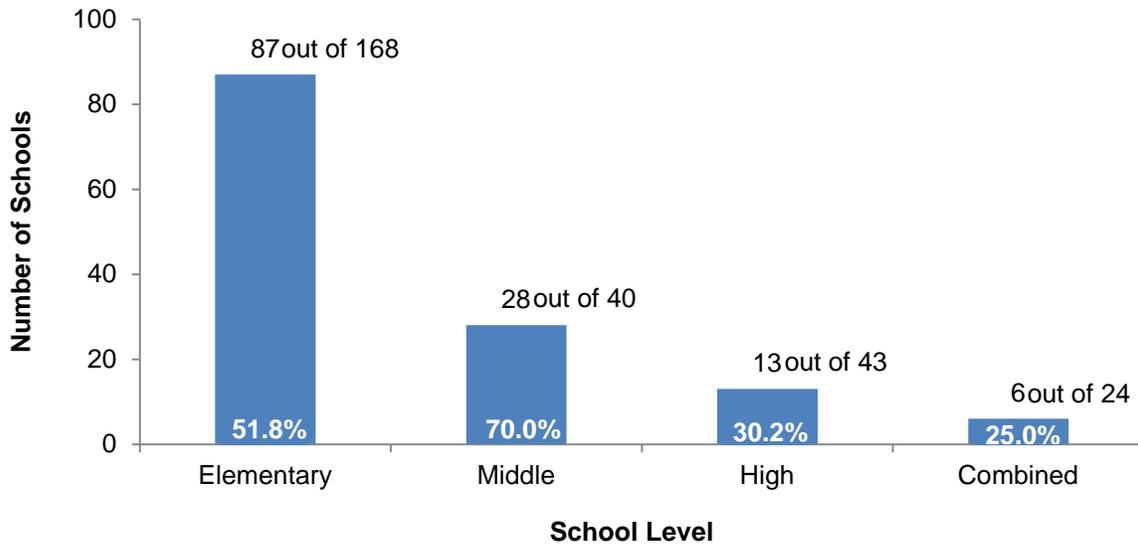
Figure 4. Demographic characteristics of Vision Partnership participants, 2012–2013



Source: Vision Partnership counts obtained from Chancery and PEIMS. District counts obtained from HISD District and School Profiles.

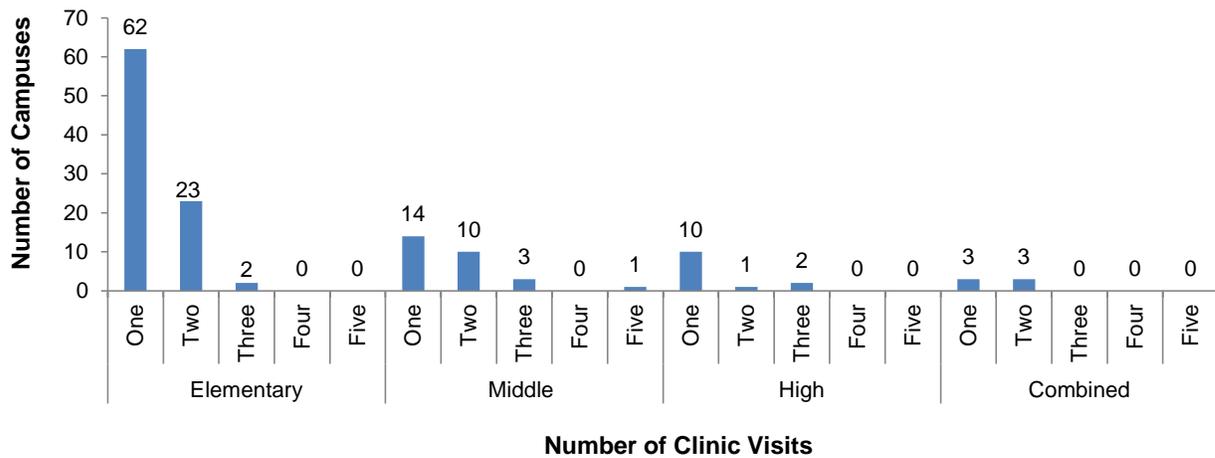
- Figure 5** (page 10) shows the school levels of the 134 HISD schools with students who participated in at least one 2012–2013 Vision Partnership Clinic. Consistent with the number of Vision Partnership participants by school level (Figure 2), the number of participating schools also decreased as the school level increased. However, school level participation rates revealed the highest rate was at the middle school level followed by the elementary and high school levels. Of the 168 elementary schools in the district, 87 or 51.8 percent participated in the program. In addition, 70.0 percent of HISD’s 40 middle schools, 30.2 percent of the district’s 43 high schools, and 25.0 percent of its 24 combined schools participated in the 2012–2013 program. Combined schools represented 4.5 percent of the schools with students participating. More than three times more elementary than middle schools had students who participated in the program and twice the number of middle schools than high schools had students who participated in the program. (Table 1, pages 20–21.) In 2011–2012, a total of 121 HISD schools had students who participated in the Vision Partnership program (Research and Accountability, 2013), indicating a 10.7 percent increase in 2012–2013.

Figure 5. Campus participation in Vision Partnership Clinics and percent of HISD schools by school level, 2012–2013



- Students participating in Vision Partnership Clinics received district-funded transportation to Vision Partnership Clinics from 92 schools (Research and Accountability, 2014a). This comprised 68.7 percent of the 134 schools and included 61 elementary, 20 middle, nine high, and two multilevel campuses.
- HISD students participated in a total of 183 visits to Vision Partnership Clinics in 2012–2013, including one to five visits per school. The number of clinic visits from schools is shown by school level in **Figure 6**. Most of the 134 schools participated in one clinic (n=89 or 66.4 percent), with elementary schools comprising about 70 percent of those schools. A total of 37 schools (27.6 percent) participated in two clinics and more than 60 percent of those schools were also elementary schools. Seven schools (5.2 percent) participated in three clinics, with middle schools comprising 43 percent of these schools. One middle school (0.7 percent) participated in five clinics (Table 1, pages 20–21).

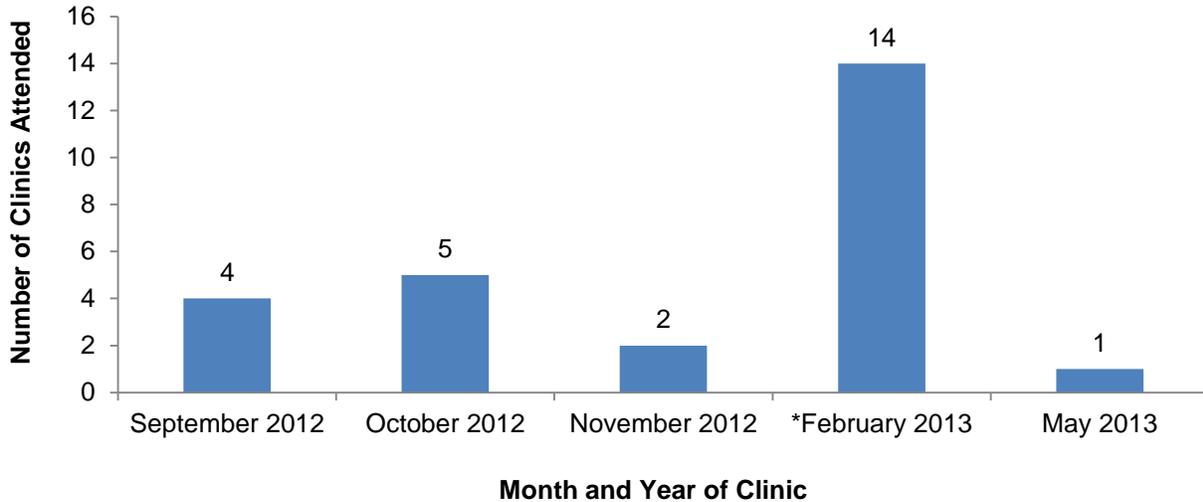
Figure 6. Frequency of Vision Clinic participation, 2012–2013



- Opportunities for students to attend a Vision Partnership Clinic were provided during five of the nine months of the 2012–2013 school year. **Figure 7** (page 11) shows the number of the Vision

Partnership Clinics by the month in which students participated to receive eye care and corrective eyewear. Eleven clinics were provided in the fall semester and 15 clinics in the spring to address students' vision-related health needs. The May clinic was organized to target students who had not yet used their vouchers to receive vision correction, very late in the school year. Data were not sufficient to provide accurate student counts by month or by clinic.

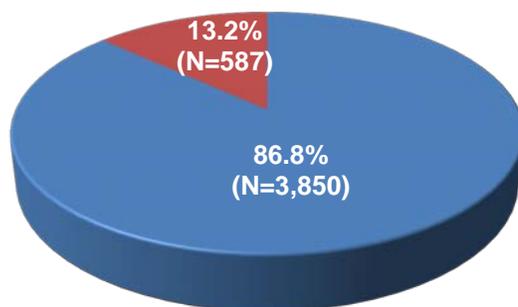
Figure 7. Number of Vision Partnership clinics provided by month and year, 2012–2013



Note: *The February 2013 count represents two clinics (one One Sight Vision clinic and one See to Succeed clinic) made available on four of 10 clinic dates.

- Of the 4,437 students who were identified as needing vision correction through vision screenings on their campuses and were examined at Vision Partnership Clinics during the 2012–2013 school year, 3,850 (or 86.8 percent) of them needed some form of vision correction (**Figure 8**, page 12). This indicated a lower rate of confirmation of need when compared to 3,842 (90.5 percent of the 4,245) students for whom confirmations of need for vision correction were made at Vision Partnership Clinics in 2011–2012. City of Houston Vision Partnership administrators reported corrective eyewear was dispensed by a Vision Partnership Clinic to all 2012–2013 participants who needed vision correction with the exception of a “few” unidentified students. However, data sufficient to determine the participants to whom corrective eyewear was dispensed and not dispensed through a Vision Partnership Clinic were not available. Nor were 2012–2013 data sufficient to determine why vision correction may not have been provided.

Figure 8. Number and percent of Vision Partnership participants who needed and who did not need vision correction, 2012–2013



- Vision Partnership participants who needed vision correction
- Vision Partnership participants who did not need vision correction

What were the challenges of program participation? How were previous barriers addressed?

- A series of interviews with the Manager of Medical and Health Services yielded the following insights regarding impediments to and improvements in supporting program participation based on the Manager's ongoing interactions with school-based Nurse Coordinators, students, parents/guardians, and Vision Partnership administrators and service providers.
- The timeliness of campus-based vision screenings and the coordination of follow-up visits to Vision Partnership Clinics (particularly in relation to other nursing demands, especially at the beginning of the school year) had been barriers that were improved this year by: adding nursing staff at district schools; utilizing the quarterly meeting structure with the partnering agency which increased the number of meetings to support successful program implementation and coordination; convening the School Nurse Advisory group which proved instrumental in helping nurses to fulfill their related responsibilities; and improving the previously cumbersome electronic file used by Nurse Coordinators to transmit data from district campuses to the City of Houston for coordinating clinic visits. However, the responsibilities and tasks of Nurse Coordinators are extensive and some Nurse Coordinators serve multiple campuses.
- The case-management skills among Nurse Coordinators were highly diverse. The range of their case-management skills and experience resulted in the use of diverse strategies for student and parent/guardian communication and outreach/follow-up to support program participation and related recordkeeping. Therefore, a variety of efforts were expended by Nurse Coordinators, which resulted in a variety of responses to their efforts.
- To inform campus-based nurses of the 2012–2013 Vision Partnership program criteria and activities and their related responsibilities, in August 2012, Nurse Coordinators were provided a clear, step-by-step guide for implementation and participation that included procedures, timelines, and lists of items to distribute, collect, and maintain for program follow-up, inclusion into students' cumulative health records, and/or release to parents/guardians. The guide was designed to facilitate the productive use of time between the scheduled Vision Partnership Clinic dates and parental/guardian consent form distribution and collection deadlines.
- Early identification of the 50 students with the greatest vision correction needs per campus was found to be an effective means to improve the timeliness of vision correction for students whose vision needs were more severe than the needs of their peers.

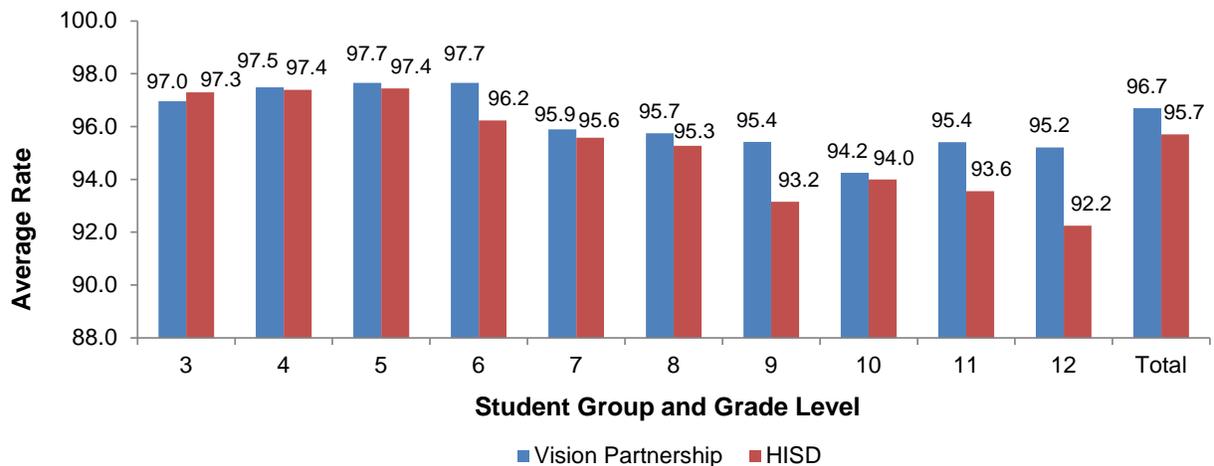
- To address students' vision needs as early in the school year as possible and as late in the school year as necessary to help students who were still in need, five week-long periods and one day were provided for Vision Partnership Clinic visits in 2012–2013. They began on September 24, 2012 and ended on May 18, 2013.
- To defray the costs of vision correction for students and their families, centralized district funding provided buses to take students to Vision Partnership Clinics.
- Though previously reported in very limited cases, delays between clinic participation and the delivery of eyeglasses sometimes took as long as three months. The City of Houston and the district Manager reported students who participated in a 2012–2013 Vision Partnership Clinic received corrective eyewear, typically, within four to six weeks of students' clinic visits. The longer periods between the clinic visits and dispensation of corrective eyewear were necessary when a referral was made through a Vision Partnership Clinic due to the students' special eye care needs.
- Some students who were referred to the Vision Partnership Clinics did not attend the clinic events because they did not return parental/guardian consent forms which were required to participate in the program. Some of the Nurse Coordinators conducted follow-up efforts such as repeated student contacts and voice messages for students' parents/guardians to inform them that their students had vision correction needs and to delineate options for resolution. The City of Houston also conducted telephone outreach to parents/guardians whose students returned signed consent forms but had not participated in a Vision Partnership Clinic.
- To address the unresolved vision needs of students who received a voucher for Vision Partnership Clinic participation but had not used their voucher, a Saturday Initiative was put in place. It reportedly achieved a rate of turn-out that was over 90 percent of the invited students. The initiative provided a viable alternative for many students, including students who had been absent from school on the day of the clinic event that they had been scheduled to attend. Transportation and lunches were provided.
- Students who had not used their vouchers for eye care near the end of the school year were targeted for a mid-May clinic visit on a Saturday. A total of 138 students from seven schools, including five elementary and two middle schools, participated.
- Some students received vision correction prior to the scheduled Vision Partnership Clinic events.
- Vision Partnership Clinics provided hardcopies of students' examination results to Nurse Coordinators as the students exited the clinics. These results were to be maintained for program follow-up, inclusion into students' cumulative health records, and/or release to parents/guardians.
- Nurse Coordinators maintained hardcopy records of student vision-related activities. When the Nurse Coordinators entered the records into the Chancery database, these files became a part of the students' cumulative vision screening records. However, Nurse Coordinators' lacked the ability to access the current school year's Chancery vision screening data solely, which made it difficult for them to readily identify which 2012–2013 students did not pass a vision screening (i.e., failed vision) in 2012–2013 and still needed program outreach/follow-up to ensure the students received a follow-up examination and/or corrective eyewear through a Vision Partnership Clinic, if needed.
- Corrective eyewear frame adjustments were made at the time of eyewear delivery to students. However, activities to address issues of wearing eyewear properly, frame adjustments after student use, and eyewear durability have not been identified. However, strategies to meet the vision care needs of students with lost or broken glasses were to be addressed in the School

Nurse Advisory group. Some students received a second pair of glasses through the Vision Partnership Clinic. Some kept the second pair of eyewear at their schools. Overall, however, campus-level outcomes regarding the protection, maintenance, and preservation of students' new corrective eyewear are unknown.

What was the academic performance of students who participated in the Vision Partnership Clinics?

- Student-level vision-related outcome data were not sufficient to conduct comparative analyses between Vision Partnership Clinic participants who experienced different program-related outcomes. Therefore, the analysis of students' academic performance provided here uses the performance of the districtwide student population as merely a context to consider the performance of Vision Partnership participants. The results are to be considered in light of the previously mentioned demographic differences between Vision Partnership participants and HISD students, districtwide.
- Average daily attendance (ADA) rates were used to examine Vision Partnership student engagement in comparison to the engagement of students districtwide. **Figure 9** presents 2012–2013 ADA rates for HISD students and Vision Partnership participants, overall and by the identified grade bands. At all grades levels with the exception of grade 3, Vision Partnership participants achieved higher average attendance rates (0.1 to 3.0 percentage points higher) than were achieved by students districtwide. Among Vision Partnership participants and students districtwide, elementary and middle school attendance rates were the highest, with the exception of districtwide grade 8 students' attendance rate. The largest differences between HISD students and Vision Partnership participants were found at the high school level for grade 12 (3.0 percentage points), grade 9 (2.2 percentage points), and grade 11 (1.8 percentage points), followed by the middle school for grade 6 (1.5 percentage points). The total districtwide rate of attendance was 95.7 percent, which was one percentage point lower than the total attendance rate for Vision Partnership participants, 96.7 percent.

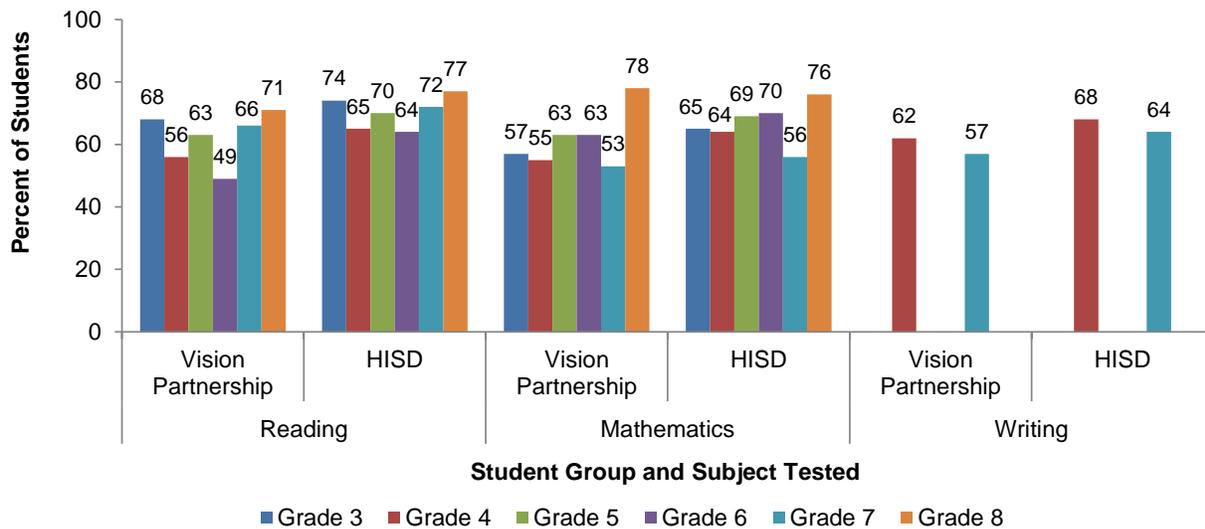
Figure 9. HISD students' and Vision Partnership participants' average daily attendance rates, by grade level and total, 2012–2013



Note: Rates were calculated from the 2012–2013 PEIMS 400 Attendance record. Attendance data were available for 4,378 (98.7 percent) of the 4,437 Vision Partnership participants and 216,081 HISD students.

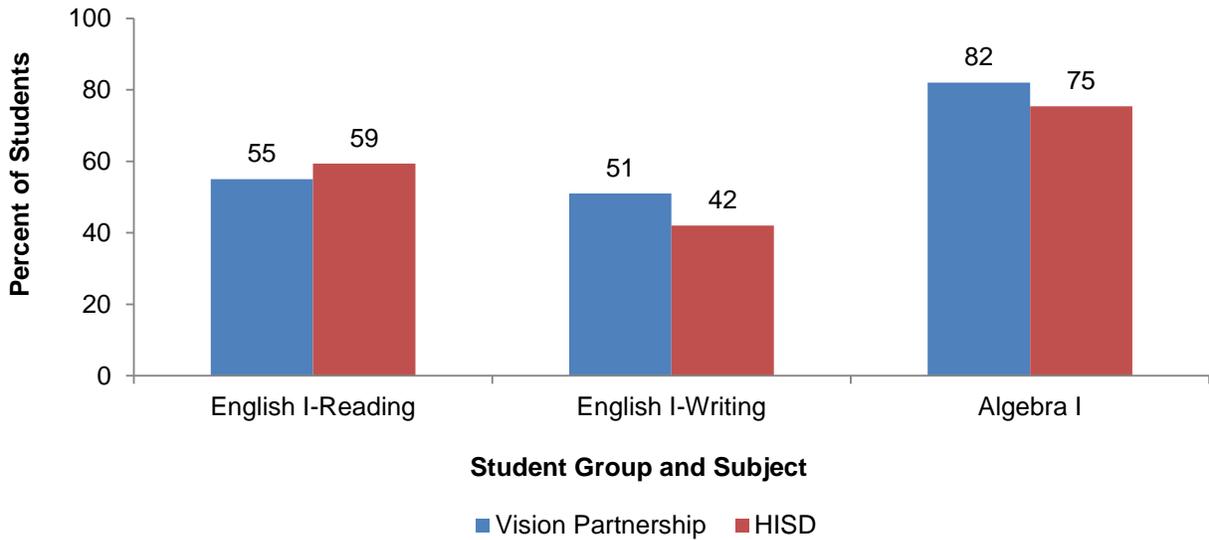
- Figure 10** shows the percentage of grades 3–8 Vision Partnership participants and HISD students, who met the performance standards on the STAAR reading, math, and writing exams (Phase-in 1 standards). Lower percentages of Vision Partnership participants met the passing standard on all STAAR assessments (grades 3–8) than did HISD students districtwide, with the exception of students who took the 8th grade mathematics exam. The 8th grade passing rate included students who took the Algebra I End of Course (EOC) exam and this group of Vision Partnership participants had a higher passing rate than did HISD students districtwide. Passing rates ranged from 49 to 78 percent for Vision Partnership participants and from 56 to 77 percent for HISD students districtwide. Because matched comparison groups were not available, these data should not be used to determine program effectiveness but rather as descriptive information.

Figure 10. Percentage of Vision Partnership participants and HISD students who passed the State of Texas Assessment of Academic Readiness (STAAR) exams, English and Spanish, 2012–2013



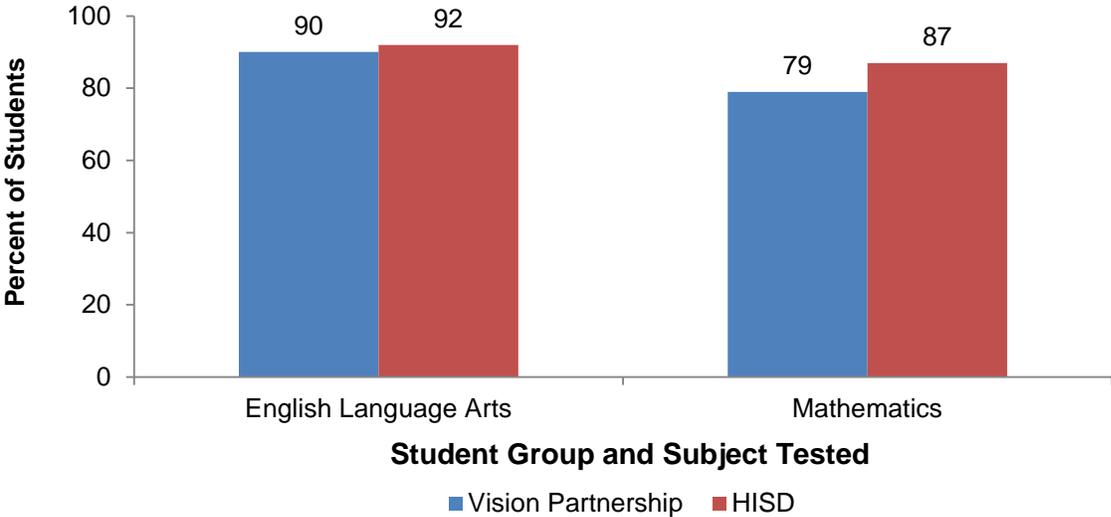
- The percentage of Vision Partnership participants and HISD students who passed the STAAR EOC English-Reading I, English-Writing I, and Algebra I exams (Phase-in 1 standards) are presented in **Figure 11** (page 16). Higher percentages of Vision Partnership participants met the performance standards on the English I-Writing and Algebra I exams than did HISD students districtwide. However, a higher percentage of HISD students districtwide met the performance standards on the English I-Reading exam than did Vision Partnership participants. Passing rates ranged from 51 to 82 percent for Vision Partnership participants and from 42 to 75 percent for HISD students districtwide. Again, these rates are merely for descriptive purposes.

Figure 11. Percentage of Vision Partnership participants and HISD students who passed the State of Texas Assessment of Academic Readiness End of Course (STAAR EOC) exams, 2012–2013



- Figure 12** reveals lower percentages of Vision Partnership participants met the TAKS performance standard in English language arts and mathematics than did HISD students, districtwide. Passing rates ranged from 79 to 90 percent for Vision Partnership participants and from 87 to 92 percent for HISD students districtwide.

Figure 12. Percentage of Vision Partnership participants and HISD students who passed the State of Texas Assessment of Knowledge and Skills (TAKS) Exit Level English language arts and mathematics exams, 2012–2013



- Overall, figures 9–12 reveal that aside from the generally higher average daily attendance rates for Vision Partnership participants than the rates achieved by HISD students districtwide, the following student performance results are varied and are not conclusive of program effectiveness.

Discussion

The Vision Partnership provides an important opportunity for HISD students who need eye care and vision correction to receive them at no cost to students and their families. The district has participated in the partnership since 2007. In the last four school years, from 2009–2010 to 2012–2013, examinations, consultations, and/or corrective eyewear have been provided to 14,078 HISD students at the Vision Partnership Clinics. Student-participation more than doubled (100.8 percent) from 2,210 participants in 2009–2010 to 4,437 participants in 2012–2013. There was a 4.5 percent increase in participation from 4,245 participants in 2011–2012 to 4,437 2012–2013.

Programmatic endeavors by HISD and the City of Houston program administrators and by school Nurse Coordinators to improve the effectiveness of the program included: adding nursing staff at district schools; providing district-funding to coordinate follow-up vision examinations, providing transportation to Vision Partnership Clinics, and providing corrective eyewear for eligible students; and disseminating a step-by-step guide of program activities and procedures (including deadlines, clinic dates and locations, documents necessary for program participation, follow-up, and documentation for students' files). Additional efforts included: identifying the 50 students with the greatest vision needs at each school early in the school year; utilizing the quarterly meeting structure with the partnering agency to support successful program coordination; convening the School Nurse Advisory group to help nurses to fulfill their related responsibilities; and improving the previously cumbersome electronic file used by Nurse Coordinators to transmit data from district campuses to the City of Houston for coordinating clinic visits.

Program administrators indicated that many students who were screened in 2012–2013, as well as in prior years, continued to be in need of vision correction, according to district-level vision-related documentation for these students. Perhaps, Nurse Coordinators could extend the benefit of identifying the 50 students with the greatest need by ensuring that the vision-related files of the 50 identified students per campus are updated at least monthly to maximize the potential for serving these high-need students. In addition, it may prove fruitful to encourage and support Nurse Coordinators to enter Vision Clinic screening results into the Chancery database as soon as possible following students' clinic visits. Also, it may be possible to obtain an electronic version of the screening results that are provided to Nurse Coordinators after each clinic visit. This will improve the capacity of Nurse Coordinators and program administrators to utilize up-to-date student records to monitor the extent to which students' vision needs have been resolved.

The responsibilities and tasks of Nurse Coordinators are extensive and this is exacerbated by the fact that some of them serve multiple campuses. Moreover, the case-management skills among Nurse Coordinators are highly diverse, which results in a variety of types and frequencies of the efforts they expend. This diversity, in turn, results in an array of types and frequencies of responses from students and parents/guardians to the efforts of Nurse Coordinators, particularly regarding students' and parents'/guardians' responses to Nurse Coordinators' outreach/follow-up activities (or the lack of activities) to obtain parental/guardian consent for program participation and to get students to utilize their vouchers for clinic participation. It may prove beneficial to identify and reward Nurse Coordinators with greater case-management skills and higher proportions of successful follow-up with students and to concurrently afford Nurse Coordinators with lesser case-management skills (and lower proportions of successful follow-up with students) opportunities to collaborate with their peers who possess greater skills. However, Nurse Coordinators will still need to transfer these data to Chancery.

The student-level vision-related outcome data were not sufficient to determine program service outcomes for all participants and, therefore, to conduct comparative analyses of the potential academic performance differential between the Vision Partnership Clinic participants. For this reason, the analysis of student academic performance provided in this report used the performance of the districtwide student population

as merely a context to consider the performance of Vision Partnership participants, particularly in light of the notable differences between the demographic make-up of Vision Partnership participants and students across the district. Performance results are provided for descriptive purposes and are not intended to be used to make causal inferences of the program's effectiveness at improving student performance in academic achievement.

Overall, aside from the generally higher average attendance rates for Vision Partnership participants than the average attendance rates achieved by students districtwide, the student performance results were varied. Largely, HISD students districtwide met the performance standards on STAAR and TAKS assessments at higher rates than did Vision Partnership participants. However, Vision Partnership participants achieved higher passing rates than HISD students districtwide on two of the three STAAR EOC exams included in this analysis.

In general, an array of significant efforts were made in 2012–2013 to better provide vision screenings, follow-up and subsequent eye examinations, vision consultations, and corrective eyewear for students who were in need of them. HISD's and the City of Houston's program managers reported the successful implementation of strategies to better resolve students' vision-related health needs. However, additional efforts are needed to provide vision correction to students who have been identified and continue to need vision correction. In addition, the quality of the program data must improve if all Vision Partnership participants are to be identified and if reliable service-related outcome data are to be made available for each participant. This will greatly enhance the capacity to determine the extent to which resolutions to students' vision-related health needs are achieved (particularly through the dispensation of corrective eyewear) and potential connections between students' participation in Vision Partnership services and their academic performance.

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Table 1. Vision Partnership Participants by School, 2012–2013

Elementary Schools (N=87)					
School	Students	# Clinic Visits	School	Students	# Clinic Visits
Anderson	40	2	Henderson	41	1
Askew	27	1	Issacs	7	1
Atherton	12	1	Jefferson	12	1
Barrick	46	1	Kashmere Gardens	6	1
Bell	8	1	Kelso	13	1
Berry	36	2	Ketelsen	46	2
Blackshear	42	2	Law	50	2
Bonner	38	1	Lewis	52	2
Braeburn	39	1	Looscan	2	1
Brookline	28	1	Lyons	62	1
Bruce	13	1	Mading	12	1
Burbank	39	2	McNamara	69	2
Burnet	37	1	Memorial	12	1
Cage	55	2	Milne	5	1
Carrillo	51	2	Mitchell	22	2
Codwell	43	1	Moreno	53	2
Coop	23	3	Northline	8	1
Crespo	82	3	Oak Forest	10	1
Crockett	6	1	Osborne	10	1
Davila	46	2	Paige	12	1
DeAnda	15	1	Park Place	30	1
DeChaumes	52	2	Patterson	71	2
Dodson Montessori	10	1	Peck	43	2
Dogan	15	1	Petersen	22	2
Durkee	28	1	Pleasantville	24	1
Eliot	13	1	Pugh	30	1
Emerson	16	1	Robinson	3	1
Field	38	1	Rodriguez	27	1
Fondren	32	1	Roosevelt	23	1
Franklin	20	1	Ross	28	1
Frost	13	1	Rucker	9	1
Gallegos	35	1	Sanchez	14	1
Garcia	30	1	Scarborough	53	2
Garden Villas	64	1	Scroggins	118	2
Grissom	32	1	Seguin	11	1
Gross	35	1	Sherman	14	1
Harris, J. R.	33	1	Sinclair	34	1
Hartsfield	47	2	Southmayd	20	1
Helms	17	1	St. George Place	17	1
Elementary Participants (N=2,626)	1,256	52		1,095	50

Table 1. Continued - Vision Partnership Participants by School, 2012–2013

Elementary Schools - continued					
School	Students	# Clinic Visits	School	Students	# Clinic Visits
Tijerina	89	2	Wesley	35	2
Tinsley	28	1	White	20	1
Valley West	37	2	Whittier	9	1
Wainwright	26	1	Young	17	1
Walnut Bend	14	1			
Elementary Participants (n=2,626)	194	7	Elementary Clinic Visits (n=114)	81	5
Middle Schools (n=28)					
Attucks	16	1	Johnston	43	1
Black	29	2	Key	19	2
Burbank	40	2	Las Americas	39	1
Clifton	32	2	Long	49	2
Deady	121	2	Marshall	24	1
Dowling	127	5	McReynolds	38	1
Edison	15	1	Ortiz	142	2
Fleming	28	1	Pershing	48	3
Fondren	13	3	Ryan	39	2
Grady	29	1	Stevenson	58	3
Hartman	5	1	Sugar Grove Academy	19	1
Henry	54	2	Thomas	65	2
Hogg	9	1	West Briar	14	1
Holland	27	1	Williams	18	1
Middle School Participants (n=1,160)	545	25	Middle Clinic Visits (n=48)	615	23
High Schools (n=13)			Combined Schools (n=6)		
Barbara Jordan	1	1	Gregory-Lincoln Education Center	81	2
Challenge Early College	73	2	Pilgrim Academy	23	1
East Early College	78	1	Rusk School	1	1
Empowerment College Prep	41	3	Woodrow Wilson Montessori	8	1
Hope Academy	9	1	Woodson K-8	85	2
Jones	15	1	Young Men's College Preparatory Academy	10	2
Kashmere	61	3			
Milby	43	1			
Sharpstown	23	1			
Washington	51	1			
Westbury	7	1			
Wheatley	25	1			
Yates	16	1			
High School Participants/Clinic Visits	443	18	Combined School Participants/Clinic Visits	208	9
Total Vision Partnership Schools (N=134)					
Total Vision Partnership Participants (N=4,437)			Total Vision Partnership Clinic Visits (N=183)		

Table 2. Vision Partnership Program Participation by Grade Level, 2012–2013

Grade Level	Number	Percent
Kindergarten	3	0.1
Pre-kindergarten	18	0.4
1	131	3.0
2	416	9.4
3	342	7.7
4	671	15.1
5	562	12.7
6	613	13.8
7	320	7.2
8	593	13.4
9	300	6.8
10	98	2.2
11	113	2.5
12	223	5.0
No data	34	0.8
Total Students	4,437	100.0

Table 3. Characteristics of VP Participants and HISD Students, 2012–2013

	Vision Partnership		HISD	
	(N=4,437)		(N=202,586)	
	N	%	N	%
Gender				
Male	1868	42.4	103,341	51.0
Female	2535	57.6	99,245	49.0
Total	4403*	100	202,586	
Race/Ethnicity				
Asian/Pacific Islander	63	1.5	7,117	3.5
American Indian	12	0.3	428	0.2
African American	1272	29.3	49,781	24.6
Hispanic/Latino	2,915	67.2	127,091	62.7
White	64	1.5	16,517	8.2
Two or more	15	0.3	1,652	0.8
Total	4,341**	100.0		
Economic Disadv.	4,054	92.1	161,834	79.9
At-Risk	2,481	57.2**	114,993	56.8
Special Ed.	445	10.2***	15,604	7.7
LEP	1535	35.4**	60,501	29.9
Gifted/Talented	577	13.3**	31,689	15.6

Note: *Data on gender were not available for 34 students. Percentage was calculated using 4,403. **Data on ethnicity were not available for 96 students. Percentages were calculated using 4,341 students. ***Data on Special Education were not available for 87 students. Percentage was calculated using 4,350 students.