

MEMORANDUM

March 28, 2012

TO: School Board Members

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

SUBJECT: **ONE SIGHT VISION PARTNERSHIP, 2010–2011**

CONTACT: Carla Stevens, 713-556-6700

Attached is the 2010–2011 One Sight Vision Partnership report. The report describes program participation, school program coordinator feedback, and the impact of the program on student attendance and performance on the reading/English Language Arts Texas Assessment of Knowledge and Skills (TAKS) examination. The One Sight Vision Partnership provides an opportunity for HISD students to receive eye care and correction at no cost. The district has participated in the partnership for five years.

Key findings are as follows:

- From 2009–2011, the One Sight Vision Clinic has provided 5,396 screenings and/or treatments to HISD students.
- School program coordinators commented favorably about the program. Several coordinators commented that the clinic has become more organized and proficient over the years of implementation.
- The differences in TAKS reading/ELA scale score improvement across eye care treatment groups indicated that students who were treated at the One Sight Vision Clinics outperformed their peers who needed but did not receive eye care treatment.

Administrative Response:

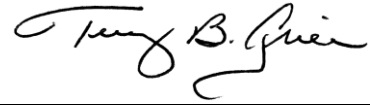
The importance of overcoming barriers to high school completion cannot be over-stated and begins with Early Education. Vision skills are critical to learning, with a preponderance of learning occurring through visual engagement. In short, good eye sight facilitates learning in school as well as in the development of social skills. 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.

State mandates which require school-based screening for vision and hearing deficits as early as pre-kindergarten support the connection between academic outcomes and sensory inputs. Once identified, however, ethical standards of care and state mandates require and monitor connectedness with resources for correction.

It is important that we continue district strategies such as One Sight, to support connectedness with community resources that provide a cost-effective and efficient way to remove vision deficits as a barrier to learning and that we remove cost and transportation as barriers to accessing these services. It is also important to maintain quality screening programs utilizing

certified screeners in our schools. This results in a high level of screening accuracy and follow-up. Staffing formulas that include a professional school nurse with the acumen for case management, engaging community resources, and intense parent support for follow-up can contribute to academic success.

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
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Chief School Officers
School Improvement Officers
Martha Salazar-Zamora
Gwendolyn Johnson

RESEARCH

Educational Program Report



One Sight Vision Partnership 2010–2011



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EXECUTIVE SUMMARY

ONE SIGHT VISION PARTNERSHIP 2010–2011

Program Description

The Houston Independent School District (HISD) frequently develops partnerships with local government and community organizations to ensure that the basic needs of its students are met so that they can take advantage of the rigorous instructional standards and supports the district offers. One type of partnership in which the district engages is collaborations for eye care service. At the beginning of each school year, students enrolled in HISD schools are screened for vision impairments. When the need for vision correction seems apparent, the district's health care professionals make referrals for specialist examinations and professional treatment. Students who do not have access to private eye care providers are offered eye care services through the partnerships in which the district engages with eye care providers. Parents are notified in English and Spanish. Among these eye care providers is the One Sight Vision Partnership, which offers the district's students service through the One Sight Vision Clinic.

The One Sight Vision Clinic is part of the on-going collaboration between One Sight—a Luxottica Group Foundation, the Houston Department of Health and Human Services, various community organizations, and the district. The clinic provides vision screenings and distributes corrective eyewear at a central non-academic community location. In addition to determining appropriate eyewear for students, clinicians may also determine that treatment in the One Sight Clinic is not a feasible option.¹ Schools are responsible for student transportation to the clinic site, student lunches while on-site, and student activities during the course of the day. All services are provided to students at no-cost to students, schools, or the district.

Key Findings

1. How many students participated in the One Sight Vision Clinic?
 - From 2009–2011, the One Sight Vision Clinic has provided 5,396 screenings and/or treatments to HISD students.
2. What were the perceptions of program coordinators at participating schools?
 - School program coordinators commented favorably about the program. Several coordinators commented that the clinic has become more organized and efficient over the years of implementation.
3. What were the barriers to program participation faced by schools and by students?
 - The most frequently reported barrier to program participation for students who were recommended for clinic participation was student absence on clinic day. The next most frequently reported barrier was students' failure to return consent forms.
4. What impact did participation in the One Sight Vision Clinic have on students' academic success?

¹ Vision impairment that requires surgery, is degenerative, or irreparable is not treated at the One Sight Vision Clinic.

- The differences in TAKS reading scale score improvement for students who passed the initial eye examination and those who failed the initial eye examination were statistically significant at the elementary and middle school levels. Students who were treated at the One Sight Vision Clinics outperformed their peers who needed but did not receive eye care treatment. Generally, high school TAKS scale score differences for students who passed and failed the initial eye examination were not statistically significant.
- The attendance rate for students who received treatment at the One Sight Vision Clinic improved at a greater rate over a two-year period in comparison to students who did not receive treatment. Over a three-year period, the attendance rate decreased at a lower level for students who received treatment at the One Sight Vision Clinic than for students who needed but did not receive eye care treatment. These findings suggest that One Sight treatment may enhance student engagement and curtail student disengagement with the elementary and middle school academic environments. At the high school level, attendance rates seemed to decrease for all students as they progressed to higher grade levels.

Recommendations

1. Continued participation in the One Sight Vision Partnership is recommended. Students who otherwise may not have been treated have received treatment from the One Sight Vision Clinic and benefitted, particularly in the elementary and middle school grades.
2. Steps should be taken to increase the return rate of parent consent forms. Program administrators should consider simplifying consent forms. In addition, they should consider increasing the timeframe between announcing the clinic dates and requiring school coordinators to return the appropriate forms to increase student participation.
3. Care should be taken to update treatment records in the Chancery system on a regular basis.

ONE SIGHT VISION PARTNERSHIP 2010–2011

Introduction

Program Description

The Houston Independent School District (HISD) frequently develops partnerships with local government and community organizations to ensure that the basic needs of its students are met so that they can take advantage of the rigorous instructional standards and supports the district offers. One type of partnership in which the district engages is collaborations for eye care service. At the beginning of each school year, students enrolled in HISD schools are screened for vision impairments. When the need for vision correction seems apparent, the district's health care professionals make referrals for specialist examinations and professional treatment. Students who do not have access to private eye care providers are offered eye care services through the partnerships in which the district engages with eye care providers. Parents are notified in English and Spanish. Among these eye care providers is the One Sight Vision Partnership, which offers the district's students service through the One Sight Vision Clinic.

The One Sight Vision Clinic is part of the on-going collaboration between One Sight—a Luxottica Group Foundation, the Houston Department of Health and Human Services, various community organizations, and the district. The clinic provides vision screenings and distributes corrective eyewear at a central non-academic community location. In addition to determining appropriate eyewear for students, clinicians may also determine that treatment in the One Sight Vision Clinic is not a feasible option.² Schools are responsible for student transportation to the clinic site, student lunches while on-site, and student activities during the course of the day. All services are provided to students at no-cost to students, schools, or the district.

Program History

HISD schools have participated in the One Sight Vision Partnership since 2007. Clinic locations have rotated throughout the city each year. In 2007, the clinic was held at the Acres Homes Multi-Service Center. In 2008, the clinic was held at the Denver Harbor Multi-Service Center. Fellowship of the Fountains was the site of the clinic in 2009, while the Fifth Ward and Third Ward Multi-Service Centers were the clinic sites in February and October 2010 (respectively). The February 2011 clinics were held at the Hiram Clark Multi-Service Center.

Purpose of the Evaluation Report

Healthy vision is a critical component of the foundation for academic achievement. Impaired vision reduces the abilities to read, concentrate, and process information. It may lead to academic frustration and behavior problems, and may stymie academic success. The district participates in the One Sight Vision Partnership to provide an avenue for students who are identified by HISD nurses as needing vision assistance to receive eye care free of charge. The purpose of this evaluation is to understand four aspects of the partnership: school and student participation in the program; barriers to program participation; and the academic impact of the program. The evaluation answers the following questions:

1. How many students participated in the One Sight Vision Clinic?
2. What were the perceptions of program coordinators at participating schools?
3. What were the barriers to program participation faced by schools and by students?

² Vision impairment that requires surgery, is degenerative, or irreparable is not treated at the One Sight Vision Clinic.

4. What impact did participation in the One Sight Vision Clinic have on students' academic success?

Methods

Data Collection

Multiple sources of data were used in the evaluation of this program. The primary source of data on program utilization was collected by the City of Houston which kept extensive files of student participation in One Sight Vision Clinics. Information on the implementation of the program at the school level was collected through an Internet-based survey of program coordinators. In addition, observation of the February 2011 One Sight Vision Clinic was conducted. Academic outcomes data were collected and archived through the Public Education Information Management System (PEIMS) and Texas Assessment of Knowledge and Skills (TAKS) data files. Information on student performance on eye examinations was captured from the Chancery Student Information System.

Data Analysis

To understand the impact of the One Sight Vision Partnership on student performance, the analysis compared performance indicators for the year prior to One Sight participation to performance the year of One Sight participation (referred to as a two-year comparison) and/or to performance the year following One Sight participation (referred to as a three-year comparison). Performance indicators used include school attendance rates and academic achievement (measured by the change in scale scores on the TAKS reading/English Language Arts (ELA) examination). At the elementary and middle school levels, the variable of interest was the magnitude of change in TAKS reading scale scores. At the high school level, the variable of interest was the average scale score on the TAKS ELA examination for each grade level.

Change in performance was measured in two steps. In the first step, basic comparison of means tests (e.g., ANOVAs) were conducted to determine if differences in outcomes for students who needed vision correction and those who did not need vision correction were statistically different. A statistically significant difference would indicate that experiencing a vision deficiency was correlated with performance. A second step used ANOVAs to compare the outcomes of One Sight participants to students who needed vision correction and were seen by other eye care professionals, and to students who needed vision correction and did not receive treatment. A statistically significant difference would indicate the extent to which treatment by the One Sight Vision Clinic would improve student performance in comparison to receiving no treatment or in comparison to receiving treatment from a different eye care provider.

Limitations

The present evaluation is limited in scope by the nature of the data collection process. Records on initial eye examination performance were inconsistent. This likely caused the under-identification of students who failed the initial eye examination and did not receive treatment and of students who failed the initial eye examination and received treatment from an eye care provider other than the One Sight Vision Clinic. The impact of the limitation is that the differences in performance indicators for students who passed and those who failed the initial eye examination may be larger than those reported. In addition, while HISD has participated in the One Sight Vision Partnership since 2007, participation lists are available only for 2009 and later. The counts of students served at each clinic are available. However, the One Sight Vision Clinic simultaneously serves students from Houston and surrounding school districts so it is not possible to identify the number of HISD students served in 2007 and 2008. It is also not possible to determine the impact of services provided in 2007 and 2008 on student outcomes.

Results

How many students participated in the One Sight Vision Clinic?

Each participating school may refer up to 50 students to the One Sight Vision Clinic. From 2009–2011, the One Sight Vision Clinic has provided 5,396 screenings and/or treatments to HISD students. In fall 2009, 1,228 HISD students participated in the One Sight Vision Partnership. One Sight served 982 HISD students in February 2010. Just over 900 HISD students were served by One Sight in October 2010 (n=917), and 2,009 were served in February 2011. A total of 260 HISD students received services at the One Sight Vision Clinic in March 2011 (**Figure 1**).

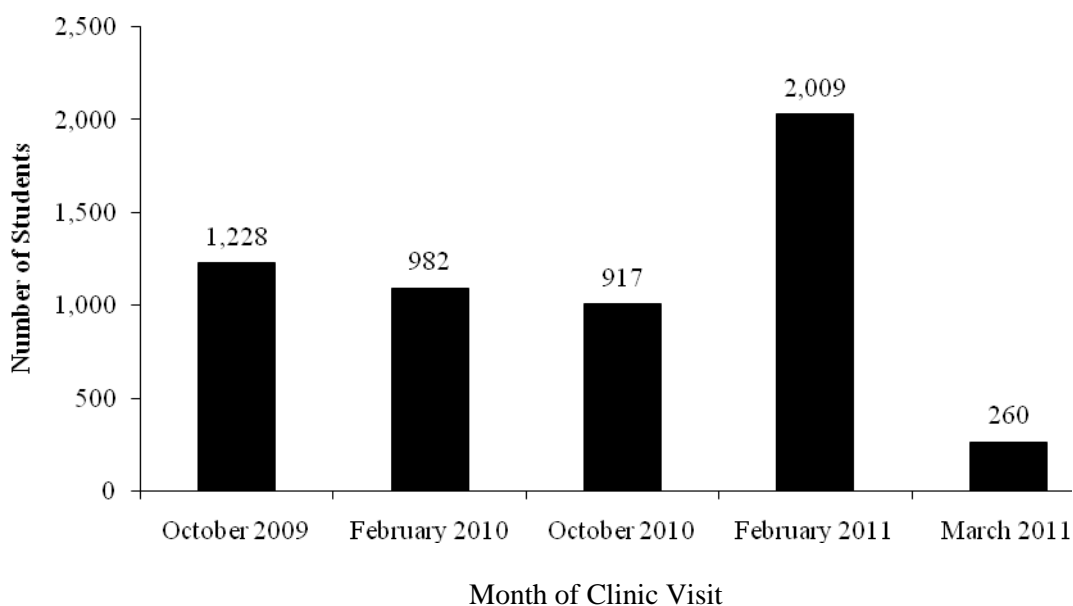


Figure 1. Number of students receiving services from the One Sight Vision Clinic.

What were the perceptions of program coordinators at participating schools?

A survey of familiarity and experience with the One Sight Vision Partnership was distributed to all HISD school nurses by e-mail. Of the 244 HISD school nurses, 52.0 percent (n=127) responded to the survey. Of responding nurses, 88.2 percent (n=112) were familiar with the One Sight Vision Partnership. Over half of responding nurses (59.0 percent) reported participating in the program during the 2010–2011 school year. Seventy-eight respondents (61.4 percent) selected students to participate in the One Sight Vision Clinic. Thirty-six nurses reported that all of the students who were recommended for the clinic received treatment; fifty-five reported that some of the students for whom One Sight Vision Clinic treatment was recommended did not receive treatment.

Of 66 respondents to the question, 41 percent reported extreme satisfaction with the One Sight Vision Clinic. Several had participated in the program previously. They expressed noticeable improvement in the program implementation for the 2010–2011 school year and expressed appreciation for it. Several coordinators stated that it was the best One Sight Vision Clinic event to date. Many remarked positively on the level of organization at the clinic and the professionalism of the staff.

Suggested improvements to Clinic programming included scheduling school appointments further apart to reduce wait time and minimize the amount of time students missed from classroom instruction.

Coordinators who attended the Clinic events in both October and March reported that wait times were much shorter for the March Clinic than the October Clinic.

Coordinators also requested earlier notice about the program. Several coordinators reported needing to screen and rescreen students prior to selection. Completing all the necessary tasks within the allotted time frames was difficult for a single staff member.

What were the barriers to program participation faced by schools and by students?

Over 50 percent of the coordinators who participated in the One Sight Vision Partnership reported experiencing no challenges coordinating participation in the program. The most-cited challenges were difficulty obtaining parent consent and working within the timeframe allotted for completing paperwork, gathering consent forms, and scheduling clinic visits. Consent forms were described as too wordy and complex for parents to understand. Coordinators also expressed the need to have consent forms translated.

The most frequently reported barrier to program participation for students who were recommended for clinic participation was student absence on clinic day. The next most frequently reported barrier was students' failure to return consent forms. Some parents refused to sign consent forms because they did not want to accept charitable aid. Forms were not signed by some parents because parents explicitly refused participation. Transportation was a third barrier identified by program coordinators. Finally, several students were not able to attend the clinic because they were left behind on their home campuses. The most frequently offered reason for being left behind was student tardiness to campus on clinic day. In addition, some students were left behind because of behavioral problems.

Of the coordinators who reported not participating in the One Sight Vision Partnership in the 2010–2011 school year, most reported not doing so because they were partnered with a different eye care provider. Eye Care for Kids was the most frequently cited alternative eye care provider, followed by the University of Houston Mobile Unit. CCSC (Christian Community Service Center) was also cited, as were private providers, Sights for Students, and the Lions Club.

Coordinators also reported transportation costs and the logistics of coordination as barriers to participating in the One Sight Vision Partnership. Financing transportation was the primary transportation issue expressed. Financing transportation was sometimes listed in conjunction with reluctance to have students be absent from class for an entire school day. One coordinator indicated partnering with the University of Houston Mobile Unit in lieu of paying transportation costs. Other logistical problems were offered as frequently as transportation issues. Some coordinators expressed reluctance to expend the time and effort needed to organize the students and ensure that all of the criteria for participation had been met. Others cited the need for more time than allotted to screen students, complete paperwork, and receive consent forms before scheduling clinic visits.

One suggestion to increase the rate of return for consent forms was to make the form more comprehensible to parents. Coordinators suggested including a picture of eye wear on the form or in a flyer sent home with the forms so that parents will understand the purpose for the forms. Other coordinators suggested providing an option for consent over the telephone. The final suggestion for improving consent return rates was to extend the timeframe between the distribution of program materials and the due date for consent.

What impact did participation in the One Sight Vision Clinic have on students' academic success?

Complete records of 34,403 students enrolled in grades 1–8 were used to understand the impact of the One Sight Vision partnership on elementary and middle school students. The group included only students who were enrolled in the same school for 2008–2009 to 2009–2010. The vast majority of the group (89.2 percent) passed the initial eye examination and 10.8 percent of the group failed it. The

available documentation reported that more than half of those students in the group who failed the examination (n=1,889) did not receive treatment. Over 1,700 students (n=1,707) in the group received treatment through the One Sight Vision Partnership, and 125 students received treatment from a different eye care provider (see **Table 1** and **Figure 2**).

Table 1: Students' Eye Exam Results, Grades 1–8, 2008–2009 to 2010–2011		
	Number of Students	Percent
Passed Eye Exam	30,682	89.2
Failed Eye Exam*	3,721	10.8
Treatment by One Sight	1,707	5.0
Treatment by Another Eye Care Provider	125	0.4
No Treatment Documented	1,889	5.5
TOTAL	34,403	100.0

* Percentage of students failing the eye exam does not equal the sum of the providers due to rounding.

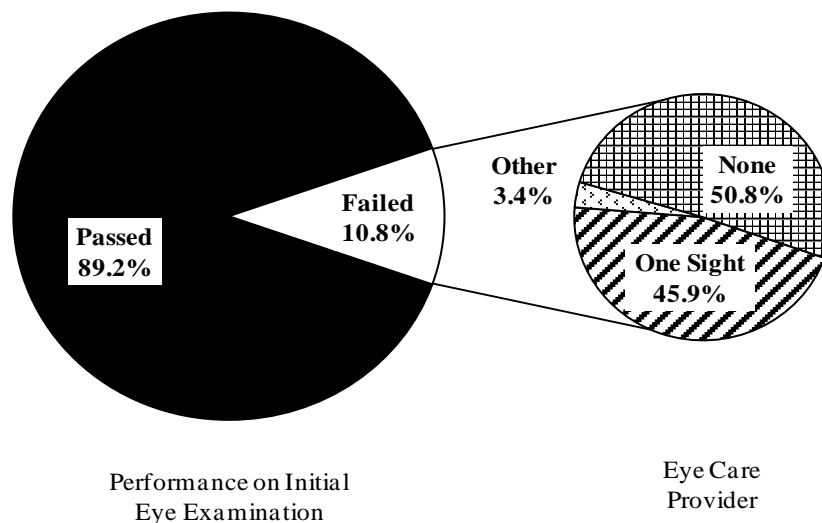


Figure 2. Elementary and middle school student performance on the initial eye examination and eye sight remedy.

* Percentage of students failing the eye exam does not equal the sum of the providers due to rounding.

For analysis of program impact on elementary and middle school students, the change in TAKS reading scale scores and attendance rates were examined. The change in TAKS reading scale scores was calculated based on TAKS scores from the test administration prior to program implementation in the district, the spring 2009 administration, and the most recent administration available for the student. Because three years of scores are not available for all students, separate analyses were conducted for students with test scores for two years and those with test scores for three years. Changes in attendance rates were also examined to measure the impact of the One Sight Vision Program.

Reading Scale Score Changes of One Sight Participants and Non-Participants, Grades 3–8

To understand the impact of the One Sight Vision Clinic on TAKS examination performance in grades 3–8, the change in reading scale scores were examined. A first step compared the score differences between students who needed vision correction and those who did not need vision correction. The score changes were statistically significant ($p=0.016$), indicating that students who did not need vision correction outperformed those who did.

A second step compared the scores of One Sight participants to students who needed vision correction and were seen by other eye care professionals and to students who needed vision correction and did not receive treatment. On average, the TAKS reading scale score for One Sight students increased 42.27 points over two years. This score increase was significantly larger than that of students who failed the initial eye examination and did not receive treatment (mean score change=41.94 points, $p=0.000$). Although not statistically significant ($p=0.190$), TAKS reading scale scores increased by 46.58 points on average for students who received treatment from a different eye care provider (see **Table 2** and **Figure 3**, page 9).

The score patterns were similar for three-year score changes on the TAKS reading examination. The differences in score changes for students who needed vision correction and those who did not need vision correction were statistically significant ($p=0.028$). Students who were treated at the One Sight Vision Clinic had smaller score changes than students who were treated by another eye care provider and students who passed the initial eye examination. However, these differences were not statistically significant. On average, TAKS reading scale scores increased by 88.79 points for students who were treated by One Sight. In comparison, TAKS reading scale scores increased by 84.90 points on average over the three-year period for students who failed the initial eye examination but did not receive treatment. Scores increased by 103.16 points for students who were treated by another eye care provider, and they increased by 92.77 points for students who passed the initial eye examination (see **Table 3**, page 9). It is important to note the small number of students who received treatment from another eye care provider.

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	<i>p</i>
Passed Eye Exam	10,773	46.91	75.59	Failed Eye Examination	1,774	42.25	76.55	0.016
				Failed Eye Exam				
One Sight	728	42.27	78.97	No Treatment	979	41.94	75.12	0.000
One Sight	728	42.27	78.97	Other Eye Care Provider	67	46.58	71.21	0.190
Other Eye Care Provider	67	46.58	71.21	No Treatment	979	41.94	75.12	0.560

Table 3: Comparison of Mean TAKS Reading Scale Score Change Over Three Years, Grades 3–8

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	<i>p</i>
Passed Eye Exam	6,749	92.77	78.66	Failed Eye Examination	1,028	86.95	82.56	0.028
Failed Eye Exam								
One Sight	391	88.79	89.04	No Treatment	605	84.90	78.55	0.469
One Sight	391	88.79	89.04	Other Eye Care Provider	32	103.16	73.82	0.375
Other Eye Care Provider	32	103.16	73.82	No Treatment	605	84.90	78.55	0.199

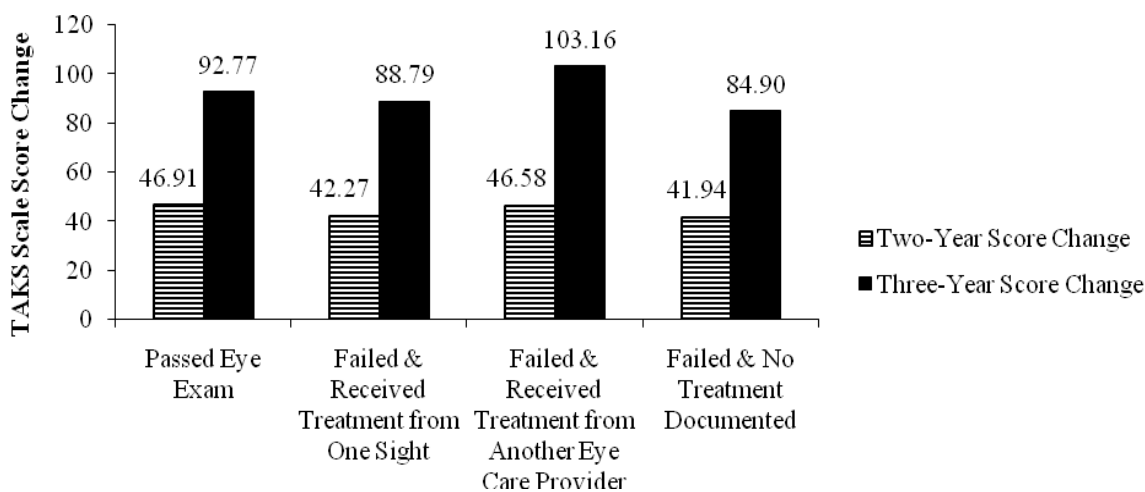


Figure 3. Two-year and three-year scale score changes on TAKS reading examination by vision need and correction, grades 3–8: 2009 to 2011.

Attendance Rate Changes of One Sight Participants and Non-Participants, Grades 1–8

Changes in attendance rates were used to examine the impact of the One Sight Vision Partnership on student engagement. The attendance rates of students who failed the initial eye examination increased 0.16 percentage points over two years while the rates increased 0.44 percentage points for students without vision deficiencies ($p=0.000$). See **Table 4**, page 10 and **Figure 4**, page 10.

The analysis suggested that vision correction through the One Sight Vision Clinic was related to increased levels of student attendance. The change in attendance rate for students treated by One Sight increased 0.49 percentage point. Contrastingly, students who received no treatment experienced a decrease in attendance rate of 0.14 percentage point. The difference in these rate changes was statistically significant ($p=0.000$).

Table 4: Comparison of Mean Attendance Rate Changes Over Two Years, Grades 1–8

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	<i>p</i>
Passed Eye Exam	28,381	0.44	3.96	Failed Eye Examination	3,909	0.16	4.10	0.000
Failed Eye Exam								
One Sight	1,789	0.49	3.23	No Treatment	1,990	-0.14	4.77	0.000
One Sight	1,789	0.49	3.23	Other Eye Care Provider	130	0.11	3.36	0.190
Other Eye Care Provider	130	0.11	3.36	No Treatment	1,990	-0.14	4.77	0.560

Student attendance appeared to decrease over the three-year period for all groups of students. However, it decreased less for students who were treated by One Sight than for other students who experienced a vision deficiency (see **Table 5**, page 11). The differences were 0.19 percentage point (in comparison to students who received no treatment) and 0.73 percentage point (in comparison to students who received treatment from another source). However, they were not statistically significant ($p=0.420$ and $p=0.183$, respectively). Notably, the difference in the attendance rate for students treated by One Sight was only 0.09 percentage point lower than that of students who did not need vision correction (-0.66 vs. -0.57).

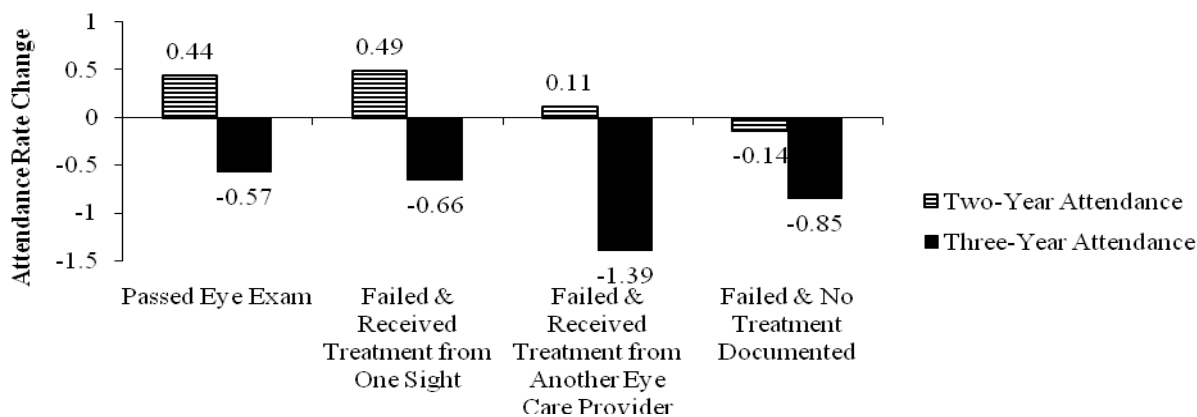


Figure 4. Two-year and three-year change in attendance rates by vision need and correction, grades 1–8: 2009 to 2011.

Table 5: Comparison of Mean Attendance Rate Changes Over Three Years, Grades 1–8

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	<i>p</i>
Passed Eye Exam	8,585	-0.57	6.92	Failed Eye Examination	1,308	-0.79	4.13	0.048
Failed Eye Exam								
One Sight	530	-0.66	3.41	No Treatment	733	-0.85	4.55	0.420
One Sight	530	-0.66	3.41	Other Eye Care Provider	45	-1.39	4.65	0.183
Other Eye Care Provider	45	-1.39	4.65	No Treatment	733	-0.85	4.55	0.441

The high school group included 2,575 students. The vast majority of them (77.7 percent) passed the initial eye examination and 22.3 percent of the group failed it. The available documentation reported that more than 70 percent of the students in the group who failed the examination (n=412) did not receive treatment. One hundred forty-four students in the group received treatment through the One Sight Vision Partnership, and 17 students received treatment from a different eye care provider (see **Table 6** and **Figure 5**, page 12).

Table 6: Students' Eye Exam Results, Grades 9–11, 2008–2009 to 2010–2011

	Number of Students	Percent
Passed Eye Exam	2,002	77.7
Failed Eye Exam	573	22.3
Treatment by One Sight	144	5.6
Treatment by Another Eye Care Provider	17	0.7
No Treatment Documented	412	16.0
TOTAL	2,575	100.0

Reading/ELA Scale Score Changes of One Sight Participants and Non-Participants, Grades 9–11

For spring 2009 and spring 2010, differences in mean scale scores on the TAKS reading examination were not statistically significant when comparing the scores of grade 9 students who needed vision correction and those who did not ($p=0.394$ for spring 2009; $p=0.458$ for spring 2010; see **Table 7**, page 13).

In spring 2009, students who were treated by One Sight had a higher TAKS average than students who received no treatment (2223 vs. 2214) and students who passed the initial eye examination (2223 vs. 2207). However, the differences in scores for these groups of students were not statistically significant. In spring 2010, students who were treated by One Sight had a higher average score than students who did not receive treatment (2218 vs. 2214), but a lower score than students who received treatment from another eye care provider (2218 vs. 2300) and students without a vision deficiency (2218 vs. 2230).

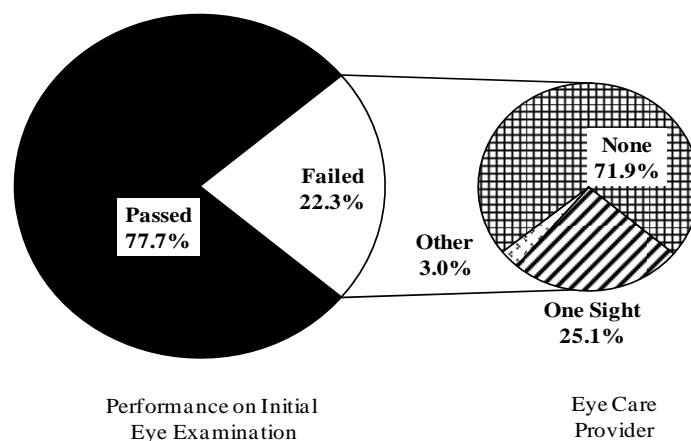


Figure 5. High school student performance on the initial eye examination and eye sight remedy.

Score differences between grade 9 students who needed vision correction and those who did not need vision correction were statistically significant in spring 2011 ($p=0.000$). Students who participated in the One Sight Vision Clinic had the lowest TAKS ELA scale score on average, 2180 points. While it was not statistically different from the scores of students who did not receive treatment ($p=0.370$), those students had an average scale score of 2209 points. Students who passed the initial eye examination had the highest average scale score of the groups, 2260 points. This score pattern suggested that One Sight Treatment was not particularly beneficial to TAKS reading performance for grade 9 students and potentially indicated that factors not included in this analysis were more important correlates of test performance.

The score differences on the spring 2010 TAKS ELA examination for grade 10 students who needed vision correction and those who did not need vision correction were not statistically significant ($p=0.094$). The average TAKS ELA scale score for students who were treated at the One Sight Vision Clinic was 2248 points. This was 30 points higher than the average scale score for students who failed the initial eye examination and received no treatment and 44 points higher than the average score of students who passed the initial eye examination. However, these differences were not statistically significant (see **Table 8**, page 14). For spring 2011, the score differences between grade 10 students who needed vision correction and those who did not need vision correction were not statistically significant ($p=0.260$). Students who were treated by One Sight scored an average of 2203 points, and students who failed the initial examination and received no treatment had an average scale score of 2194 points. The score difference was not statistically significant ($p=0.657$). Students who failed the initial eye examination and received treatment by providers other than One Sight had the highest average scale score: 2269 points. Students who passed the initial eye examination had an average scale score of 2218 points.

TAKS ELA score differences for grade 11 students who needed vision correction and those who did not need vision correction were not statistically significant ($p=0.104$ for spring 2011; see **Table 9**, page 15). In spring 2011, students who were treated at the One Sight Vision Clinic scored 2252 points on average, while students who failed the initial examination and did not receive treatment scored 2254 points on average. The difference between these scores, however, was not statistically significant ($p=0.948$). Students who failed the initial eye examination and were treated by eye care providers who were not affiliated with the One Sight Vision Clinic had the highest average TAKS ELA scale score, 2325 points, and students who passed the initial eye examination had the lowest average score, 2235 points.

Table 7: Comparison of Mean TAKS Reading Scale Scores for Grade 9 Students: 2009 to 2011

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	<i>p</i>
Spring 2009								
Passed Eye Exam	297	2207	173.5	Failed Eye Examination	129	2222	143.2	0.395
Failed Eye Exam								
One Sight	31	2223	108.1	No Treatment	93	2214	150.9	0.759
One Sight	31	2223	108.1	Other Eye Care Provider	5	2364	131.9	0.012
Other Eye Care Provider	5	2364	131.9	No Treatment	93	2214	150.9	0.032
Spring 2010								
Passed Eye Exam	302	2230	150.8	Failed Eye Examination	134	2219	138.5	0.458
Failed Eye Exam								
One Sight	56	2218	170.3	No Treatment	72	2214	111.4	0.875
One Sight	56	2218	170.3	Other Eye Care Provider	6	2300	83.1	0.250
Other Eye Care Provider	6	2300	83.1	No Treatment	72	2214	111.4	0.068
Spring 2011								
Passed Eye Exam	1,199	2260	207.8	Failed Eye Examination	250	2206	171.4	0.000
Failed Eye Exam								
One Sight	32	2180	169.1	No Treatment	214	2209	172.9	0.370
One Sight	32	2180	169.1	Other Eye Care Provider	4	*		
Other Eye Care Provider	4	*		No Treatment	214	2209	172.9	

* Score averages for fewer than 5 students are not reported

Table 8: Comparison of Mean TAKS Reading Scale Scores for Grade 10 Students: 2009 to 2011

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	<i>p</i>
Spring 2009								
Passed Eye Exam	2	*		Failed Eye Examination	1	*		
				Failed Eye Exam				
One Sight	1	*		No Treatment	0	–		
One Sight	1	*		Other Eye Care Provider	0	–		
Other Eye Care Provider	0	–		No Treatment	0	–		
Spring 2010								
Passed Eye Exam	292	2204	125.8	Failed Eye Examination	121	2227	127.1	0.094
				Failed Eye Exam				
One Sight	29	2248	139	No Treatment	88	2218	122.2	0.260
One Sight	29	2248	139	Other Eye Care Provider	4	*		
Other Eye Care Provider	4	*		No Treatment	88	2218	122.2	
Spring 2011								
Passed Eye Exam	300	2218	146.2	Failed Eye Examination	123	2203	113.3	0.260
				Failed Eye Exam				
One Sight	53	2203	121.5	No Treatment	64	2194	109.7	0.657
One Sight	53	2203	121.5	Other Eye Care Provider	6	2269	41.28	0.199
Other Eye Care Provider	6	2269	41.28	No Treatment	64	2194	109.7	0.103

* Score averages for fewer than 5 students are not reported

Table 9: Comparison of Mean TAKS Reading Scale Scores for Grade 11 Students: 2009 to 2011

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	<i>p</i>
Spring 2009								
Passed Eye Exam	0	–		Failed Eye Examination	0	–		
Failed Eye Exam								
One Sight	0	–		No Treatment	0	–		
One Sight	0	–		Other Eye Care Provider	0	–		
Other Eye Care Provider	0	–		No Treatment	0	–		
Spring 2010								
Passed Eye Exam	5	2034	57.8	Failed Eye Examination	2	*		
Failed Eye Exam								
One Sight	1	*		No Treatment	1	*		
Other Eye Care Provider	1	*		Other Eye Care Provider	0	*		
One Sight	0	*		No Treatment	1	*		
Spring 2011								
Passed Eye Exam	297	2235	122.6	Failed Eye Examination	133	2256	134.1	0.104
Failed Eye Exam								
One Sight	32	2252	135.6	No Treatment	96	2254	136.3	0.948
One Sight	32	2252	135.6	Other Eye Care Provider	5	2325	63.9	0.251
Other Eye Care Provider	5	2325	63.9	No Treatment	96	2254	136.3	0.252

* Score averages for fewer than 5 students are not reported

Attendance Rate Changes of One Sight Participants and Non-Participants, Grades 9–11

The changes in attendance rates for students in grades 9–11 who needed vision correction and those who did not need vision correction were not statistically different ($p=0.997$ for two-year change; $p=0.493$ for three-year change), indicating that experiencing a vision deficit was not correlated with student attendance at the 9–11 level. For most students, attendance decreased over the two-year period. However, students who were treated by One Sight had lower decreases than students who needed vision correction and did not receive treatment (rate change of -0.40 percentage point vs. -1.52 percentage points; $p=0.062$). See **Table 10**, page 16 and **Figure 6**, page 16.

The difference in three-year change in attendance rate for students who needed vision correction and those who did not need vision correction also was not statistically significant ($p=0.493$). Though statistically insignificant ($p=0.749$), the change in attendance rate decreased less (0.27 percentage point) for students treated by One Sight than it did for students who experienced a deficiency but did not receive treatment (see **Table 11**, page 16).

Table 10: Comparison of Mean Attendance Rate Changes Over Two Years, Grades 9–11

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	p
Passed Eye Exam	1,940	-1.15	5.55	Failed Eye Examination	553	-1.15	6.08	0.997
Failed Eye Exam								
One Sight	142	-0.40	5.17	No Treatment	395	-1.52	6.42	0.062
One Sight	142	-0.40	5.17	Other Eye Care Provider	16	1.12	3.42	0.253
Other Eye Care Provider	16	1.12	3.42	No Treatment	395	-1.52	6.42	0.103

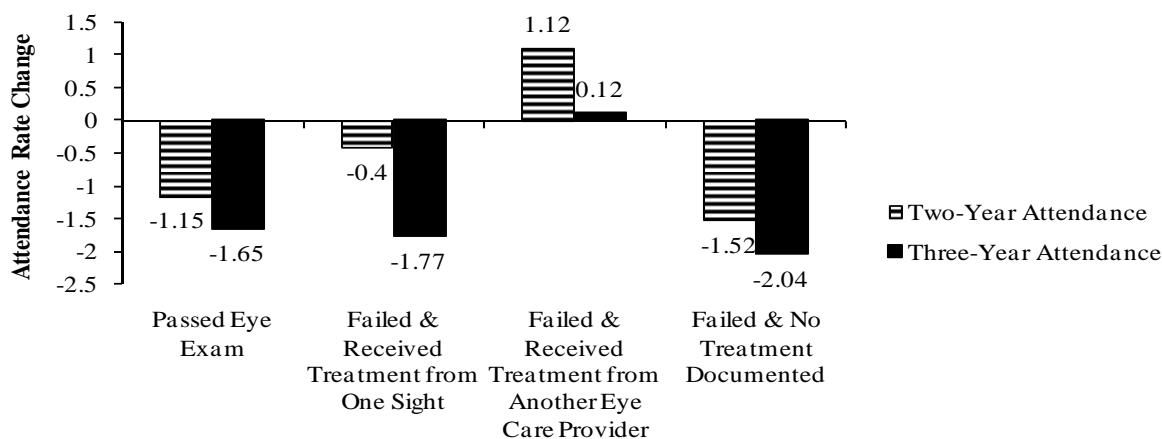


Figure 6. Two-year and three-year change in attendance rates by vision need and correction, grades 9–11: 2009 to 2011.

Table 11: Comparison of Mean Attendance Rate Changes Over Three Years, Grades 9–11

Main Group	N	Mean	Std. Dev.	Comparison Group	N	Mean	Std. Dev.	p
Passed Eye Exam	2,112	-1.65	7.55	Failed Eye Examination	556	-1.91	8.05	0.493
Failed Eye Exam								
One Sight	138	-1.77	6.00	No Treatment	403	-2.04	8.77	0.749
One Sight	138	-1.77	6.00	Other Eye Care Provider	15	0.12	3.85	0.235
Other Eye Care Provider	15	0.12	3.85	No Treatment	403	-2.04	8.77	0.344

Discussion

The One Sight Vision Partnership provides an opportunity for HISD students to receive eye care and correction at no cost. The district has participated in the partnership for five years. In the last three years, 2009–2011, 5,617 screenings and/or treatments were distributed to HISD students at the One Sight Vision Clinic. In general, program coordinators commented favorably about the One Sight Vision Partnership and the One Sight Vision Clinic. Their most frequent comment of discontentment about the program was that more students were not served. Coordinators suggested altering the parent consent process and increasing the timeframe for organizing activities to increase the number of student participants.

Analysis of a group of students who attended schools that participated in the One Sight Vision Clinic from 2009–2010 to 2010–2011 suggested a positive relationship between treatment at the One Sight Vision Clinic and student outcomes. For elementary and middle school students, the average TAKS reading scale scores increased more for students who received treatment from the One Sight Vision Clinic than for students who needed but did not receive treatment. Their scores increased less, however, than the scores of students who passed the initial eye examination and those who were treated by other eye care providers. The difference may reflect the differences in the student populations who received different types of treatment and/or the timing of treatment. Students who received treatment from a different provider likely received treatment earlier in the school year than their peers who received treatment at the One Sight Vision Clinic. This would have allowed the correction to impact more of the school-year learning process and likely would have resulted in higher test scores. In addition, students whose families were able to afford treatment from private eye care providers were also likely to have higher test scores than students whose families cannot afford private eye care.

The analysis suggested that vision correction through the One Sight Vision Clinic was related to improved student attendance at the elementary and middle school levels. Attendance rates improved more for students who were treated by One Sight than for students who needed treatment but did not receive it. Even when attendance rates seemed to decrease for all groups of students, the decrease in attendance rates for students who received treatment from One Sight was less than the decrease in attendance rates for students who needed treatment but did not receive it.

At the high school level, the differences in student outcomes for students who passed the initial eye examination and students who failed the initial examination frequently were not statistically significant. This meant that, on average, TAKS reading/ELA scale scores were about the same for students who passed and those who failed the initial eye examination. In addition, performance differences between students who were treated at a One Sight Clinic and other students who failed the initial eye examination were not statistically different. These findings suggested that experiencing a vision deficiency was not necessarily a correlate of academic achievement at this level.

Attendance rates at the high school level seemed to decrease for all students as they progressed to higher grade levels. The one exception to this trend was students who failed the initial eye examination and received treatment from a provider other than One Sight. However, the differences in attendance rates across groups of students who passed and failed the initial eye examination and across the groups of students who failed the eye examination and received different treatment plans generally were not statistically significant. Differences in magnitude between the attendance rate changes for students treated by One Sight and those who received no treatment (though statistically insignificant) suggested that treatment from One Sight may provide an opportunity to curtail decreases in attendance from school for students who require a vision correction.

Overall, the impacts on student outcomes of the One Sight Vision Partnership were positive for students, specifically at the elementary and middle school levels.

Recommendations

1. Continued participation in the One Sight Vision Partnership is recommended. Students who otherwise may not have been treated have received treatment from the One Sight Vision Clinic and benefitted, particularly in the elementary and middle school grades.
2. Steps should be taken to increase the return rate of parent consent forms. Program administrators should consider simplifying consent forms. In addition, they should consider increasing the timeframe between announcing the clinic dates and requiring school coordinators to return the appropriate forms to increase student participation.
3. Care should be taken to update treatment records in the Chancery system on a regular basis.

APPENDIX A
Number of Students Participating in One Sight Vision Clinic, Fall 2009

Campus	Number of Students	Campus	Number of Students
Almeda ES	57	Jones ES	102
Atherton ES	55	Lockhart ES	26
Blackshear ES	31	Long MS	33
Bruce ES	65	Milne ES	64
Burrus ES	44	Moreno ES	14
Cage/Project Chrysalis*	30	New Aspirations Academy	28
Carter Career Center	18	Park Place ES	20
Cullen MS	22	Petersen ES	39
Dogan ES	19	Smith Education Center*	49
East Early College HS	75	Tijerina ES	106
Field ES	22	Welch MS	27
Fondren MS	32	Wesley ES	41
Gross ES	19	White ES	51
Henderson ES	39	Woodson K-8*	72
Highland Heights ES	28		

Source: City of Houston

*Reported participation was combined

APPENDIX B
Number of Students Participating in One Sight Vision Clinic, February 2010

Campus	Number of Students	Campus	Number of Students
Atherton ES	35	Martinez, R. ES	47
Barrick ES	49	Milne ES	1
Bonner ES	50	Moreno ES	25
Burbank ES	44	Ortiz MS	18
Carter Career Center	13	Rusk ES	34
Cook ES	16	Scarborough ES	25
Crawford ES	34	Sharpstown MS	37
Crespo ES	42	Smith Education Center*	16
Cullen MS	23	Stevens ES	23
Dodson ES	39	Washington H.S.	48
East Early College HS	52	Wesley ES	29
Gross ES	36	Wheatley HS	24
Henry MS	1	White ES	49
Johnson ES	17	Woodson K-8*	29
Kashmere HS	33	Yates HS	3
Lyons ES	50	Young Scholars	40

Source: City of Houston

*Reported participation was combined

APPENDIX C
Number of Students Participating in One Sight Vision Clinic, October 2010

Campus	Number of Students	Campus	Number of Students
Atherton ES	42	Johnston MS	26
Blackshear ES	36	Kashmere HS	34
Brookline ES	22	Lamar HS	21
Bruce ES	44	Marshall MS	20
Burbank ES	48	Milne ES	37
Burrus ES	38	Henderson, N.Q. ES	37
Challenge Early College HS	3	Ortiz MS	42
Crespo ES	36	Park Place ES	36
Cullen MS	7	Henry MS	26
Daily ES	19	Peterson ES	35
Deady MS	44	Rogers MS	42
DeZavala ES	40	Rusk School	17
East Early College HS	23	Tijerina ES	36
Fondren MS	18	Whidby ES	21
Law ES	19	Woodson K-8*	48

Source: City of Houston

* Reported participation was combined

APPENDIX D
Number of Students Participating in One Sight Vision Clinic, February 2011

Campus	Number of Students	Campus	Number of Students
Almeda ES	41	High School Ahead Academy	17
Atherton ES	59	Highland Heights ES	17
Austin HS	17	Holland MS	14
Barrick ES	13	Ross ES	35
Berry ES	13	Isaacs ES	12
Black MS	12	Jane Long MS	24
Bonner ES	44	Jefferson ES	9
Braeburn ES	33	Johnston MS	7
Burbank ES	36	Kashmere HS	39
Burrus ES	12	Kelso ES	11
Cage ES /Project Chrysalis MS*	40	Kennedy ES	26
Codwell ES	28	Lantrip ES	21
Cook Jr., ES	25	Law ES	20
Crespo ES	34	Lyons ES	32
Crockett ES	5	Marshall MS	15
Deady MS	50	Milby HS	33
DeZavala ES	38	Moreno ES	45
Dogan ES	13	Ortiz MS	28
Dowling MS	37	Osborne ES	19
Durham ES	14	Peck ES	39
Durkee ES	11	Petersen ES	23
East Early College HS	35	Pilgrim Academy	34
Edison MS	23	Pleasantville ES	33
Field ES	24	Pro-Vision	31
Foerster ES	34	Pugh ES	15
Fondren MS	15	Martinez, R.C. ES	19
Gallegos ES	28	Reynolds ES	18
Grady MS	14	Rucker ES	13
Grissom ES	32	Rusk School	19
Harper Alternative	3	Scarborough ES	18
Harris, J.R. ES	24	Sharpstown International HS	16
Henry MS	28	Rhodes ES	29

Source: City of Houston

*Reported participation was combined

APPENDIX D (continued)
Number of Students Participating in One Sight Vision Clinic, February 2011

Campus	Number of Students	Campus	Number of Students
Rodriguez ES	31	Sugar Grove MS	34
Rogers*	46	Thomas ES	39
School at St. George Place ES	7	Thompson ES	17
Sharpstown MS	35	Tinsley ES	29
Sinclair ES	26	Wainwright ES	31
Smith Education Center*	31	Wesley ES	21
Stevens ES	27	Wheatley HS	35
Stevenson ES	19	Young ES	15

Source: City of Houston

*Reported participation was combined

APPENDIX E
Number of Students Participating in One Sight Vision Clinic, March 2011

Campus	Number of Students	Campus	Number of Students
Challenge Early College HS	44	Las Americas /Kaleidoscope MS*	33
Johnston MS	18	New Aspirations Academy	15
Robinson ES	24	Contemporary Learning Center*	18
Kashmere HS	19	Tijerina ES	67
Key MS	22		

Source: City of Houston

* Reported participation was combined