TO: Board Members

FROM: Terry B. Grier, Ed.D.

Superintendent of Schools

CONTACT: Carla Stevens, 713-556-6700

SUBJECT: APEX LEARNING ONLINE INSTRUCTION, 2011–2012 AND 2012–2013

Attached is the Apex Learning Online Instruction report for 2011–2012 and 2012–2013. Introduced in every HISD high school in January 2010, Apex Learning is the largest online provider of secondary curriculum in the district. The program was established to support seniors in credit recovery and has grown to offer students in grades 6–12 options for completing both credit recovery and original credit courses, including reviews for state-mandated exams and honors coursework through Advanced Placement courses. This report documents usage and academic achievement associated with courses completed through Apex Learning in 2011–2012 and 2012–2013.

#### Some of the highlights are as follows:

- In 2012–2013, 6,730 HISD students completed 12,872 online courses through Apex Learning, down from the 6,792 students who completed 14,073 online courses through Apex Learning in 2011–2012. Apex Learning was the provider for 66 percent of all online courses completed in HISD in 2011–2012 and 81 percent of all online courses completed in HISD in 2012–2013.
- In 2011–2012, HISD twelfth graders completed 40 percent of the Apex Learning courses and in 2012–2013, they completed 45 percent of the courses. HISD seventh-graders completed Apex Learning courses for the first time in 2012–2013.
- HISD students who took an Apex Learning course and a Texas Assessment of Knowledge and Skills (TAKS) test in the same year generally achieved comparable rates of meeting the TAKS standard but lower rates of being commended for their performance than did all other HISD students taking the test the same year.
- Students who took an Apex Learning course and a State of Texas Assessment of Academic Readiness/End of Course (STAAR/EOC) exam in the same subject the same year generally achieved a rating of satisfactory at similar or better rates than did all other HISD students taking the same test that year but they generally had lower percentages of achieving an advanced rating.
- In 2011–2012, 27 percent of HISD graduates took at least one Apex Learning course.
   Ninety-three percent of HISD twelfth graders who completed an Apex Learning course also graduated while 91 percent of all HISD twelfth graders graduated.
- HISD students completed 302 Advanced Placement (AP) courses through Apex Learning in 2011–2012 and 86 AP courses through Apex Learning in 2012–2013. In 2011–2012, 157 of the AP courses were associated with an AP exam, 80 exams were taken, and Apex students earned passing scores (scores of 3 or higher) on eight (10 percent) of them. In 2012–2013, 42 Apex Learning AP courses were associated with an AP exam, 18 AP tests were completed, and Apex Learning students earned passing scores on four (22 percent) of them.

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

They B. Grien
TBG

#### Attachment

cc: Superintendent's Direct Reports **Chief School Officers** Richard Cruz Jaime Castaneda Jeanine Wilson **School Support Officers** 



# RESEARCH

Educational Program Report

APEX LEARNING ONLINE INSTRUCTION, 2011–2012 AND 2012–2013



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# APEX LEARNING ONLINE INSTRUCTION, 2011–2012 AND 2012–2013

#### **Executive Summary**

#### **Evaluation Description**

Apex Learning is the largest provider of secondary digital curriculum in Houston Independent School District (HISD). Introduced in January 2010 through Graduation Laboratories (Grad Labs) located at each high school, the program has grown from providing seniors with opportunities to recover credits required for graduation to providing secondary students with options for completing both recovery and original credit courses in grades 6–12. This report continues the documentation of usage, graduation rates and academic performance associated with Apex Learning courses begun at its inception in 2010. It also addresses the completion of Apex Learning Texas Assessment of Knowledge and Skills (TAKS) and other providers' State of Texas Assessment of Academic Readiness (STAAR) review courses, courses offered only at schools that elect to fund the services to support students who need to retake statemandated tests. Finally, with the addition of Apex Learning Advanced Placement (AP) course options in HISD, this report provides information about program usage and student performance on the associated AP exams compared with the performance of all other students who took AP tests in the district.

#### **Highlights**

- In 2012–2013, 6,730 HISD students completed 12,872 online courses through Apex Learning, down from the 6,792 students who completed 14,073 online courses through Apex Learning in 2011–2012. Apex Learning courses comprised 66 percent of all online courses completed in HISD in 2011–2012 and 81 percent of all online courses completed in 2012–2013.
- The number of courses completed through Apex Learning increased as the grade level of students rose. In 2011–2012, twelfth graders took 40 percent of the completed Apex Learning courses and in 2012–2013, they completed 45 percent of the courses. Seventh-graders completed Apex Learning courses for the first time in 2012–2013.
- In 2012–2013, more Apex Learning courses were completed in Spanish than in any of the core academic areas. Of the core academic areas, the most courses were completed in social studies and the fewest were completed in mathematics.
- Students who took an Apex Learning course and a TAKS examination in the same subject the same year generally achieved comparable rates of meeting the TAKS standard but lower rates of being commended for their performance than did all other HISD students. In 2012–2013, there were no significant differences between the TAKS performance of Apex Learning students and the performance of all other HISD students in meeting the standard on any of the eleventh-grade tests or for being commended on performance on the science test, but significantly fewer Apex Learning students achieved commended status on the reading, mathematics, and social studies tests than did all other HISD students.

- In both 2011–2012 and 2012–2013, Apex Learning students who took an Apex Learning course and a State of Texas Assessment of Academic Readiness/End of Course (STAAR/EOC) examination in the same subject the same year had performances that either exceeded or did not differ significantly from the performance of all other HISD students in achieving satisfactory ratings on the tests. Apex Learning students had significantly higher rates than all other HISD students of achieving a satisfactory rating on the 2011–2012 English I-reading and world geography exams and on the 2012–2013 geometry test. On the STAAR/EOC exams the same years, they had lower percentages of achieving an advanced rating on all but one of the tests (2011–2012 world geography). The differences were significant for the 2011–2012 algebra I test and for the 2012–2013 English II-reading, geometry, chemistry, world geography, and world history tests.
- In 2011–2012, 93 percent of twelfth-grade students who took an Apex Learning course graduated while 91 percent of all HISD twelfth graders graduated the same year. Apex Learning students had lower rates of graduating through the recommended and distinguished graduation plans and a higher rate of graduating through the minimum/Individualized Education Plan (IEP) plans than did all students in HISD.
- One TAKS review course was completed through Apex Learning in 2011–2012 and three were completed in 2012–2013, too few to allow reports of student performance on the TAKS retests. No STAAR/EOC review courses were completed through Apex Learning in the same time period.
- HISD students completed 302 Advanced Placement (AP) courses through Apex Learning in 2011–2012, 77 percent of all online AP courses completed, and 86 courses in 2012–2013, 75 percent of all online AP courses completed in the district.
- HISD students earned credit in 157 Apex Learning AP courses associated with an AP exam and they took 80 associated AP exams in 2011–2012. In 2012–2013, students took 42 Apex Learning AP courses associated with an exam and 18 AP tests. Apex Learning students earned passing scores (a score of 3 or more) on 10 percent of the AP exams they took in 2011–2012 while all other HISD students passed 31 percent of the tests. In 2012–2013, Apex Learning students passed 22 percent of the AP exams they took in association with an Apex Learning AP test.

#### Recommendations

- Apex Learning offers a broad range of options for HISD students to complete coursework outside
  traditional school hours and spaces. The program is now well established in the district and provides
  a growing percentage of the courses completed online. It is recommended that the district continue
  to fully support this program in its efforts to provide students diverse options for completing
  graduation requirements.
- Though Apex Learning supports students in meeting passing standards on standardized tests, it is less successful in supporting commended or advanced ratings, including passing rates on Advanced Placement tests. It is recommended that the program be bolstered to better support high achievement on tests associated with the online courses.

#### **Administrative Response**

The implementation of Graduation Labs was instrumental in HISD's increased graduation rate. Evidence of this is the fact that 27% of HISD 2011–2012 graduating seniors completed at least one Apex Learning course in their senior year. Additionally, expanding the use of the APEX Learning courseware beyond credit recovery has resulted in positive outcomes for students in need of remediation and original credit.

The utilization of APEX Learning courseware as a remediation tool for students in need of passing state-mandated tests was introduced as an alternative to supporting students outside of the regular school day. Although the data was insufficient to determine the impact of the APEX TAKS review courses on student test performance, exposure to APEX courseware content has proven to be beneficial for students who took the Exit-Level TAKS and STAAR/EOC exams. Next steps for improving this program include the development of targeted courses designed to prepare students for select state-mandated tests.

The conclusion that APEX Learning students have had less success in demonstrating high achievement in content mastery can be attributed to the low reading levels among students who are assigned to the Graduation Labs. For many students, achieving basic mastery of assessment objectives is challenging and requires multiple approaches toward remediation. A similar situation exists among the students who took an AP course in APEX and scored significantly lower than the other HISD students who took the same exam. This can be attributed to the decreased exposure to rigorous course content prior to taking the AP course in APEX. Therefore, many of these students took the course and the exam without the requisite skills for success. Next steps for improving this program include collaboration with the Advanced Academics department to outline a hybrid approach toward using the APEX Learning courseware for AP courses.

The introduction of the STAAR/EOC exams and the subsequent decision of the Curriculum, Instruction, and Assessment department to limit the number of online courses taken for original credit can be attributed to the drop in usage of APEX Learning courses between 2011–2012 and 2012–2013. Because online learning options will remain as an avenue for students to successfully satisfy graduation requirements, increased efforts of departments working collaboratively (i.e. Curriculum, Advanced Academics, Virtual Schools, etc.) to increase advanced levels of student achievement is warranted.

#### Introduction

The Apex Learning program is a comprehensive set of digital courses designed to meet the needs of several groups of secondary students, specifically, those who struggle to meet academic requirements, those who are high-performing but not sufficiently challenged, and those whose circumstances prevent them from attending traditional classes regularly enough to complete them. According to literature from the company, "Apex Learning comprehensive courses enable schools to meet these challenges by making rigorous content accessible and engaging through the use of active learning strategies and opt-in scaffolding delivered at students' differing levels of academic readiness" (Apex Learning, 2013a, page 4).

Houston Independent School District (HISD) began using Apex Learning courses in January 2010 through its newly established Graduation Laboratories (Grad Labs) located at each high school. Courses were available for seniors seeking credit recovery to allow them to graduate from high school. Over time more of the resources available through Apex Learning were made available to HISD students. In the 2012–2013 academic year, students in grades 6–12 accessed courses designed for credit recovery and original credit, including Advanced Placement (AP courses). In addition, individual schools contracted for the option to provide Apex Learning courses that allowed their students to review before taking statemendated exams.

This report documents the prevalence of Apex Learning courses in HISD and indicators of academic achievement associated with them. Further, it indicates the prevalence of the students' use of Apex Learning courses and courses through other providers for reviews for state-mandated tests. And finally, it provides documentation of completion of AP Apex Learning courses and completers' scores on the associated AP exams, compared with the AP exam scores of HISD students who did not take the AP courses online.

#### **Methods**

#### **Data Collection and Analysis**

- Data for online courses were drawn from Chancery, using a "z" in the special explanations field. Courses with the provider HIL (Houston Instructor Led) and records associated with schools outside HISD were not included in the totals. Not all students who completed courses, including some who earned passing grades, earned credit, for example, some students received credit for the same courses through other providers. Results were reported for the number of courses completed and totals for courses in which students earned credit were reported separately.
- Numbers of courses were counted using local course names in order to capture information about original credit, credit recovery and review courses for state-mandated tests. Numbers of AP courses were counted using state numbers that began with "A."
- Chi Square Test of Independence analyses were used for the results of criterion referenced tests (the state-mandated exams), and independent samples *t*-test analyses were used for the results of norm-referenced tests (the Advanced Placement exams).

- Texas Assessment of Knowledge and Skills (TAKS) scores for Chi Square Test of Independence analyses were limited to students with scores on the standard version of the tests. For each test, HISD students who took the test were divided into two groups: those who had taken an Apex Learning course in the subject of the test in the same year and those who had not taken an Apex Learning course in the subject that year. Two Chi Square tests were run for each examination, one for the two groups of students meeting the state standard or not and the other for their achieving commended status on the test or not.
- State of Texas Assessment of Academic Readiness End of Course (STAAR EOC) scores for Chi
  Square Test of Independence analyses were limited to students in ninth-grade or lower in 2011–2012
  and students in tenth grade or lower in 2012–2013 with scores on the standard versions of the tests.
  Students who had taken an Apex Learning course associated with a STAAR exam the same year of
  the test were included and their results were compared with those of other HISD students in the same
  grades who had taken the same test the same year.
- Advanced Placement (AP) scores were provided by the College Board. The performance of students who had taken a course through Apex Learning that was associated with preparation for an Advanced Placement exam (i.e., the second semester of a full year AP course or completion of an AP course normally completed in a single semester) was compared with the performance of all other HISD students who had not taken the AP course online and who had taken the same test the same year. Independent samples t-tests were run to compare Apex Learning students' results with those of other students in HISD who took the same test only for examinations with a minimum of 30 scores in each group. Of all the AP tests taken in association with Apex Learning courses, only the AP Psychology exam in 2011–2012 had enough scores for the analysis.

#### **Data Limitations**

The data file for online records contains duplicate records in several ways. For example, some students received credit for original credit and credit recovery for the same course; some students were registered for the same course twice, with a different amount of credit for each registration; and some students received duplicate credit for a course entered more than once with slightly different names or numbers. Registrars at the individual schools are tasked with "cleaning" the records to assure that they indicate the correct number of credits that a student earned and the credits documented in the historical file were credited to students, so all courses, including those in duplicate records, were included in the data for this report. The numbers of students who took courses, however, are unduplicated.

An additional limitation is that, due to sample sizes, the AP analysis was conducted on scores for only one AP test, the 2011–2012 Psychology exam, so the results may not be generalizable.

#### Results

What were the 2012–2013 participation rates in the Apex Learning program and in other online curriculum options within HISD, and how do the rates compare with rates from 2011–2012?

• In 2012–2013, 8,055 HISD students completed 15,939 online courses. Of these students, 6,730 completed 12,872 courses through Apex Learning; 1,760 took 3,067 courses through other online

providers, and 435 of the students took courses through Apex Learning and through another online provider. Of the 2012–2013 students who completed courses online, 7,405 completed courses with a single provider, 618 finished courses with two providers, 31 took courses with three providers, and one completed courses with four providers.

• The number of completed HISD online courses increased from 13,024 to 21,247 (63 percent) from 2010–2011 to 2011–2012 and decreased to 15,939 (25 percent) in 2012–2013. Courses completed through Apex Learning increased from 8,716 to 14,073 (61 percent) and then decreased to 12,872 (nine percent) over the same years. The number of students completing courses through Apex Learning decreased from 6,792 in 2011–2012 to 6,730 in 2012–2013 (one percent). The number of courses completed through Apex Learning and through other online providers is depicted in Figure 1. Table 1 (page 19) provides an overview of HISD online courses from 2010–2011 through 2012–2013.

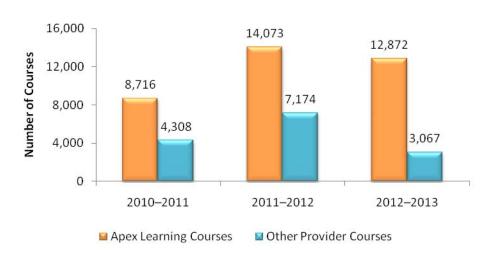
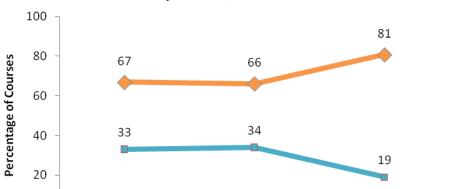


Figure 1. Number of online courses by provider, 2010–2011 through 2012–2013

 While the total number of online courses completed between 2011–2012 and 2012–2013 decreased by 25 percent, the percentage of Apex Learning (including APEXIS Apex Instructor Supplemented) courses increased from 66 percent of all completed online courses in 2011–2012 to 81 percent in 2012–2013. Numbers and percentages of online courses for all providers are illustrated in Figure 2 (page 7) and detailed in Table 2 (page 20).



2011-2012

Other Online Providers

2012-2013

Figure 2. Percentage of all online courses provided by Apex Learning and other online providers, 2010–2011 to 2012–2013

• The number of completed online courses designated as credit recovery, the original intent for selecting the Apex Learning program for HISD, is depicted in Figure 3. The number of credit recovery courses has increased each year, though, as seen in Table 1 (page 19), the percentage of completed online credit recovery courses declined between 2010–2011 and 2012–2013 as the options for available courses increased. Fifty-three (53) percent of Apex Learning courses and 20 percent of courses from other online providers were designated as credit recovery in 2010–2011 while in 2012–2013, 48 percent of Apex Learning courses and 12 percent of courses from other online providers were identified as credit recovery.

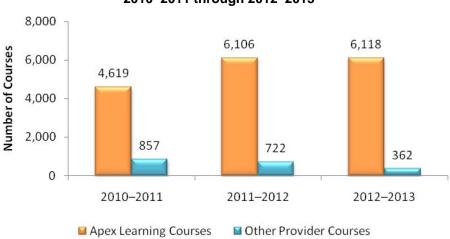


Figure 3. Number of online credit recovery courses by provider, 2010–2011 through 2012–2013

0

2010-2011

Apex Learning

As seen in Figure 4 and in Table 1 (page 19), HISD students earned credit in a large majority of the
courses that they completed online. Credit was awarded in 94 to 97 percent of completed Apex
Learning courses and in 92 to 94 percent of courses through all other providers. Overall, credit was
awarded in 96 percent of courses in 2010–2011, 94 percent of courses in 2011–2012, and 94 percent
of courses taken in 2012–2013.

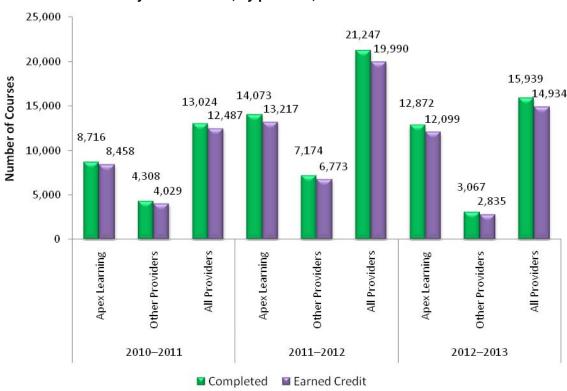
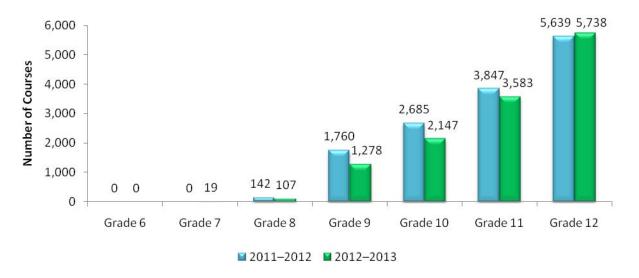


Figure 4. Number of online course which HISD students completed and in which they earned credit, by provider, 2010–2011 to 2012–2013

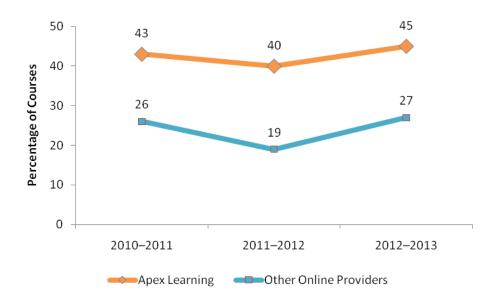
The number of courses completed through Apex Learning increased as the grade level of students rose. A comparison of the number of Apex Learning courses taken in 2011–2012 and 2012–2013, by grade level, can be seen in Figure 5 (page 9). More detail on courses completed at each grade level can be found in Table 3 (page 20). A similar comparison of the number of students completing online courses at each grade level is in Table 4 (page 21). While the overall number of students completing Apex Learning courses declined slightly from 2011–2012 to 2012–2013 (one percent), the number of eleventh-graders increased three percent, the number of twelfth-graders increased four percent, and in 2012–2013, seventh-graders appeared as Apex Learning online course completers for the first time.

Figure 5. Number of Apex Learning courses by grade level, 2011–2012 and 2012–2013



In 2011–2012, 40 percent of Apex Learning courses were taken by students in grade 12, the students originally served by the program, and in 2012–2013, students in grade 12 took 45 percent of the Apex Learning courses. As shown in Figure 6, the percentage of Apex Learning courses completed by twelfth-graders was consistently higher than the percentage of courses twelfth-graders took with other online providers.

Figure 6. Percentage of online courses completed by twelfth-graders, by provider, 2010–2011 to 2012–2013



- The average number of courses completed by students who took courses online in 2012–2013 was 1.9 courses through Apex Learning, 2.2 courses with other providers, and 2.0 courses with all providers. The average number of online courses that students who took online courses in each grade level completed can be found in Table 5 (page 21). The number of courses completed by students who took Apex Learning courses in 2012–2013 ranged from one to 22.
- In 2012–2013, 54 HISD schools (42 high schools, including North Forest High School, a school new to HISD in the summer of 2013, four middle schools, and eight combined level schools) recorded students' completion of online courses. Of the 54 schools, 47 reported courses completed through Apex Learning; those indicating that none of the online courses were through Apex Learning included two high schools (North Forest High School and Mt. Carmel Academy), two middle schools (Pershing Middle School and Pin Oak Middle School) and three combined level schools (Beechnut, Rogers, and Texas Connections Academy). The 2012–2013 online providers and the associated course completions at each school are listed in Table 6 (pages 22–24).
- At the schools reporting online courses, the percentage of Apex Learning courses ranged from zero percent to 100 percent in both 2011–2012 and 2012–2013. The number and percentage of online courses completed through Apex Learning at each school is shown in Table 7 (pages 25–27).
- Course names and number completed through Apex Learning in 2011–2012 and 2012–2013 appear in Table 8 (pages 28–30), and course names and number completed through each other online provider is given in Table 9 (pages 31–45). In 2012–2103, more courses, for both Apex Learning and all other online providers, were completed in Spanish than in any of the core academic areas. Of the core academic areas, the most courses were completed in social studies and the fewest were completed in mathematics. Figure 7 (page 11) depicts the number of courses completed in each subject; Spanish courses are separated from the grouping of other courses for the illustration.

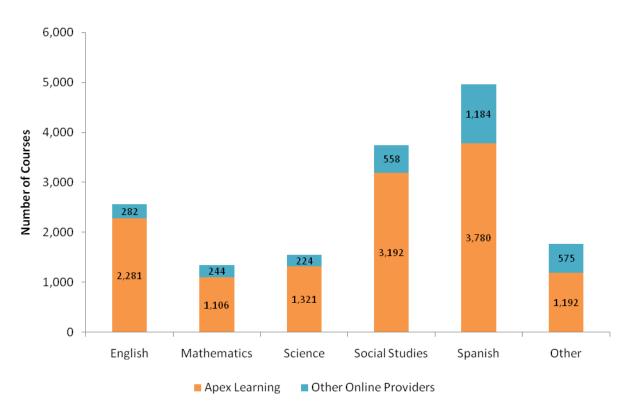
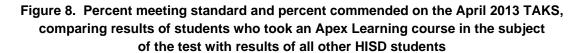
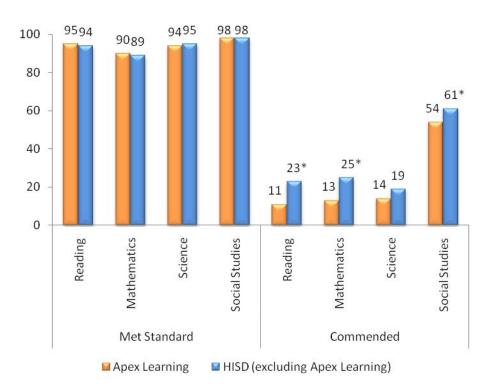


Figure 7. Number of online courses completed, by provider and subject, 2012–2013.

What were the 2012–2013 Texas Assessment of Knowledge and Skills (TAKS) and State of Texas Assessment of Academic Readiness/End of Course (STAAR/EOC) results of students utilitizing Apex Learning services compared with the results of all other students in the district and compared with results from 2011–2012?

• Texas Assessment of Knowledge and Skills (TAKS) results of Apex Learning students (students who took at least one Apex Learning course in the content tested) and all other HISD students are listed in Table 10 (page 46). Students who took an Apex Learning course and a TAKS examination in the same subject the same year generally achieved comparable rates of meeting the TAKS standard but lower rates of being commended for their performance. The comparison of achievement for students in grade 11 in 2012–2013 is shown in Figure 8 (page 12); the results for tenth- and eleventh-graders in 2011–2012 followed the same trends.



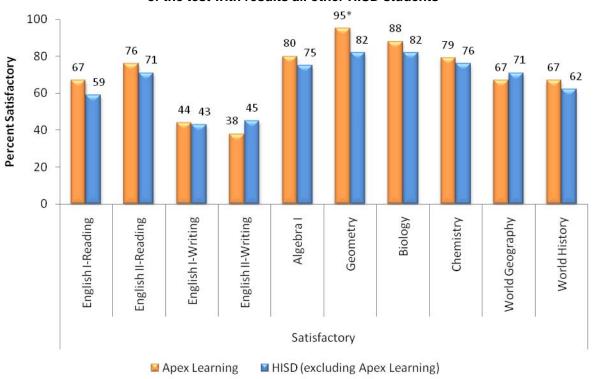


\* Differences were statistically significant.

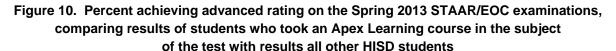
• Chi-square analyses of the comparisons between Apex Learning student performance and the performance of all other HISD students on the associated 2011–2012 and 2012–2013 TAKS tests are shown in Table 11 (page 47). In 2011–2012, there were no significant differences between Apex Learning students and all other HISD students in percent meeting the standard for tenth-graders in mathematics or for eleventh-graders in reading, science, or social studies. Significantly fewer tenth-grade Apex Learning students than other HISD students met the standard in reading, mathematics, and science and significantly fewer eleventh-grade Apex Learning students than other HISD students met the standard in mathematics. Significantly fewer Apex Learning students than all other HISD students achieved a commended performance in every subject for both grades. In 2012–2013, there were no significant differences between the TAKS performance of Apex Learning students and the performance of all other HISD students in meeting the standard on any of the eleventh-grade tests or for being commended on performance on the science test. Significantly fewer Apex Learning students achieved commended status on the reading, mathematics, and social studies tests than did all other HISD students. The effect sizes for the significant relationships were very small.

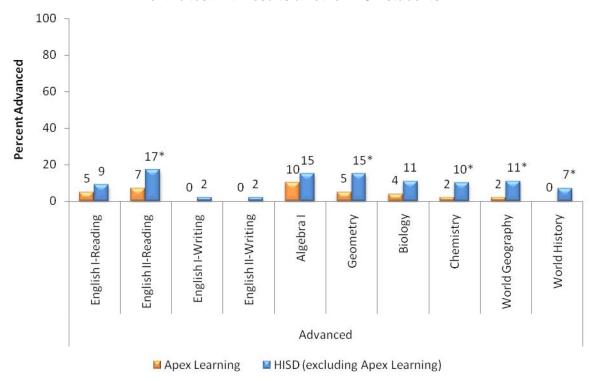
Figure 9 and Figure 10 (page 14), respectively, illustrate the percentage of satisfactory and advanced ratings achieved by Apex Learning students who took a course in the subject of a 2012–2013 STAAR/EOC examination compared with the performance of all other HISD students who took the same tests. STAAR/EOC test results for the two groups are detailed in Table 12 (pages 48–49). Apex Learning students had higher percentages of achieving satisfactory ratings than all other HISD students on all of the tests except two, English II-writing and world geography. The percentage of advanced ratings was low for all groups depicted, but Apex Learning students had lower percentages than all other HISD students had on each of the examinations.

Figure 9. Percent achieving satisfactory rating on the Spring 2013 STAAR/EOC examinations, comparing results of students who took an Apex Learning course in the subject of the test with results all other HISD students



<sup>\*</sup> Differences were statistically significant.





#### \* Differences were statistically significant.

• Chi square analyses of the differences in 2011–2012 and 2012–2013 STAAR/EOC performance, shown in Table 13 (page 50), indicated that Apex Learning students achieved a rating of satisfactory in percentages that either significantly exceeded or were not significantly different from the results of all other HISD students. Apex Learning students achieved significantly higher percentages of satisfactory ratings on the 2011–2012 English I-reading and world geography tests and on the 2012–2013 geometry exam. In achieving an advanced score, Apex Learning students had significantly lower or not significantly different percentages compared with all other HISD students. Apex Learning students had significantly lower percentages of achieving an advanced rating on the 2011–2012 algebra I test and the 2012–2013 English II-reading, geometry, chemistry, world geography, and world history tests. Effect sizes of all the significant relationships were very small.

#### What were graduation rates for HISD twelfth graders enrolled in Apex Learning courses?

• In 2011–2012, 2,615 of the 2,805 twelfth graders who took an Apex Learning course (93 percent) graduated from high school. For comparison, 91 percent of all HISD twelfth-graders graduated that year (the most recent year for which data are available). Graduation types for the Apex Learning students and for all HISD students are shown in Table 14 (page 51). HISD had a higher percentage of graduates through the recommended and distinguished plans (75 percent and six percent, respectively) than Apex Learning students did (67 percent and four percent respectively), and Apex Learning students had a higher percentage of graduates through the Minimum/Individualized

Education Plan (IEP) plan (29 percent) than HISD had (19 percent). Twenty-seven (27) percent of HISD 2011–2012 graduating seniors completed at least one Apex Learning course in their senior year.

How many TAKS and STAAR/EOC review courses were completed through licences purchased by individual HISD campuses in 2011–2012 and 2012–2013?

• A total of 14 review courses for state-mandated tests were completed online between 2011–2012 and 2012–2013. One TAKS review course was completed through Apex Learning in 2011–2012 and three were completed in 2012–2013. No STAAR/EOC review courses were completed through Apex Learning in the same time period. Other providers were associated with six TAKS courses and one STAAR/EOC course in 2011–2012 and three courses for STAAR/EOC in 2012–2013. More detail about the online courses completed for state-mandated tests can be found in Table 15 (page 51). Test results are not reported for fewer than five students.

How many and which Advanced Placement (AP) courses were completed through Apex Learning and through other online providers in HISD in 2011–2012 and 2012–2013?

- In 2011–2012, HISD students completed 392 Advanced Placement (AP) courses online; 302 of the courses (77 percent) were through Apex Learning. In 2012–2013, the number of AP courses completed online in HISD dropped to 115 (a 71 percent drop). The number of online AP courses completed through Apex Learning dropped to 86, a 72 percent drop, and the number completed through other providers dropped to 29, a 68 percent drop. Numbers of online AP courses and providers for 2011–2012 and 2012–2013 can be found in Table 16 (page 52). Information about online AP courses completed through Apex Learning by school and by course can be found in Table 17 (pages 52–56) and detail on online AP courses completed through other providers is in Table 18 (page 57).
- The number of AP courses completed online, by subject and provider, in 2011–2012 and 2012–2013 is illustrated in Figure 11 (page 16). More courses were completed in AP social studies than in other AP subjects both years, and Apex Learning provided the largest number of AP social studies courses. Apex Learning also provided the largest proportion of AP Spanish, AP science, and AP English courses each year. Though the numbers were small, other online providers were used more often than Apex Learning for AP mathematics and other AP courses (computer science and art history).

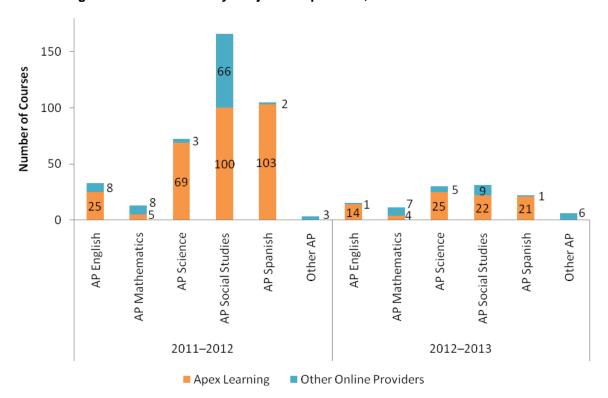


Figure 11. AP courses by subject and provider, 2011-2012 and 2012-2013

At what rates did HISD students who took an Apex Learning AP class pass the associated AP exam (with a score of three or higher) in 2011–2012 and 2012–2013, and how did those rates compare with rates of all other HISD students who took the same exam the same year?

- In 2011–2012, 153 students earned credit in 157 Apex Learning AP courses that are associated with an AP examination; 39 students earned credit in 42 of the courses in 2012–2013, a reduction of 73 percent in the number of Apex Learning courses associated with an AP test. See Table 17 (pages 52–56) for more detail on the AP courses that students took through Apex Learning.
- Students who completed 80 of the eligible 157 Apex Learning AP courses in 2011–2012 (51 percent) and those who completed 18 of the eligible 42 Apex Learning AP courses in 2012–2013 (42 percent) took the associated AP examination in the same year the course was completed. Of the students who took the associated examination, 10 percent passed (received a score of 3 or higher) in 2011–2012 and, though numbers were low, 22 percent passed in 2012–2013 (Table 19, page 58). For comparison, 31 percent of HISD students earned passing scores on their AP tests in 2011–2012 and 33 percent earned passing scores in 2012–2013.
- With the exception of performance on the AP Spanish language examination, Apex Learning students
  had uniformly low rates of passing the AP tests they took. A statistical analysis of performance on the
  2011–2012 AP psychology examination, the only test with enough scores for the analysis, indicated
  that Apex Learning students scored significantly lower than did all other students in HISD who took

the test the same year. The effect size on the relationship was very large. Complete results of the comparison are shown in Table 20 (page 59).

#### **Discussion**

Apex Learning is the largest provider of online courses in HISD, and the percentage of online courses that HISD students are completing through Apex Learning is increasing. Twenty-seven (27) percent of HISD 2011–2012 graduating seniors completed at least one Apex Learning course in their senior year and 93 percent of twelfth-graders who took an Apex Learning course graduated (compared with a 91 percent graduation rate for all of HISD), testament to how broadly the resource is used and contributes to HISD students graduating.

Passing rates on state-mandated tests are also well supported through the program. Too few TAKS review courses were completed through Apex Learning to impact an overall pass rate, however, sufficient numbers of students took Apex Learning content-based courses that were tested through the state examinations. In 2012–2013, eleventh-grade Apex Learning students (those who took an Apex Learning course in a subject tested the same year) generally performed about the same as all HISD students in meeting the standard on all TAKS exams for eleventh grade. On STAAR/EOC, 2012–2013 Apex Learning students achieved satisfactory scores on all but one test of ninth- and tenth-grade content at generally the same rates that all other HISD students did, and on the one exception, geometry, they had significantly higher rates of achieving a satisfactory rating.

On the other hand, Apex Learning students have had less success in demonstrating high achievement in content mastery. For TAKS, eleventh-grade students in 2012–2013 achieved a commended rating at about the same rate as other students in HISD on the science test, but they had significantly lower rates of being commended in reading, mathematics or social studies. For the 2012–2013 STAAR/EOC tests, Apex Learning students earned a lower percentage of advanced ratings on every test and the differences were significant for English II-reading, geometry, chemistry, world geography, and world history. On AP examinations, with the exception of the Spanish language test, Apex Learning students had lower rates of achieving a passing score (a score of 3 or higher) than did other HISD students who took the same test. For the 2011–2012 psychology exam, the AP exam with the largest number of Apex Learning student scores, Apex Learning students scored significantly lower than the other HISD students who took the same exam did, and this relationship yielded the only high effect size of all the relationships included in this report.

Online course usage dropped between 2011–2012 and 2012–2013, by nine percent for Apex Learning courses and by 58 percent for all other providers. The drop was smaller for Apex Learning, perhaps due to its availability and success in supporting students meeting graduation requirements. Online usage dropped precipitously for online AP courses, by 72 percent for Apex Learning and by 68 percent for all other online providers, perhaps as a result of the low rates of student scores that could be awarded college credit. These results suggest that the Apex Learning program could explore ways to better support students who have the motivation to achieve at high levels as the program continues providing all HISD students access to effective alternate ways to meet graduation requirements.

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Table 1. Number and Percentage of HISD Online Course Completions, 2010–2011 to 2012–2013 2012-2013 2010-2011 2011-2012 Number Number Percent Number **Percent** Percent **Apex Learning Courses** 8,716 66.9 14,073 66.2 12,872 8.08 Credit Recovery 4,619 6,106 43.4 53.0 6,118 47.5 47.2 51.9 Original Credit 1,912 21.9 6,648 6,678 **Dual Credit** 1 2 0.0 0.0 0.0 0 Advanced Placement (AP) 99 1.1 302 2.1 86 1.0 STAAR Review NA 0.0 0.0 NA 0 0 **TAKS Review** 0.0 2 0.0 1 0.0 3 Courses for which Credit Was Awarded 8,458 97.0 13,217 93.9 12,099 94.0 **Other Online Provider Courses** 4,308 33.1 7,174 33.8 3,067 19.2 Credit Recovery 857 722 10.1 11.8 19.9 362 Original Credit 17 0.4 86 1.2 61 2.0 **Dual Credit** 50 1.2 212 3.0 97 3.2 Advanced Placement (AP) 51 1.2 90 1.3 29 1.0 STAAR Review NA NA 1 0.0 3 0.1 **TAKS Review** 0.0 6 0.1 3 0.1 Courses for which Credit Was Awarded 4,029 93.5 94.4 2,835 92.4 6,773 21,247 **TOTAL HISD Online Course Completions** 13,024 100.0 100.0 100.0 15,939

Source: Chancery online courses files, 2010–2011 through 2012–2013

Table 2. HISD Online Course Providers and Number and Percentage of Completed Courses, 2010-2011 to 2012-2013

	2010-	-2011	2011-	-2012	2012-	2013
	Number	Percent	Number	Percent	Number	Percent
Apex Learning Courses (including APEXIS)	8,716	66.9	14,073	66.2	12,872	80.8
API (American Preparatory Institute)	38	0.3	21	0.1	6	0.0
Aventa			2	0.0	4	0.0
HCC (Houston Community College)	1,082	8.3	2,093	9.9	867	5.4
HVS	163	1.3	110	0.5	69	0.4
Nova Net	437	3.4	378	1.8	210	1.3
Other Provider	574	4.4	2,285	10.8	516	3.2
Penn Foster			5	0.0		
Plato	122	0.9	40	0.2	62	0.4
SSCSP	13	0.1	6	0.0	1	0.0
Texas TechD (Texas Tech Distance Learning Program)	189	1.5	351	1.7	175	1.1
TxVSN StU (Texas Virtual School Network)	382	2.9	105	0.5	119	0.7
UT DL (University of Texas)	1,308	10.0	1,778	8.4	1,038	6.5
TOTAL HISD Online Course Completions	13,024	100.0	21,247	100.0	15,939	100.0

Table 3. I	HISD Onli	ne Course	s Completed	l, by Prov	ider and (	Grade Level	, 2011–20	12 and 201	2–2013
	P	pex Learni	ng	Ot	her Provid	ers		All Provider	s
Grade	2011– 2012	2012– 2013	Differ- ence	2011– 2012	2012– 2013	Differ- ence	2011– 2012	2012– 2013	Differ- ence
6	0	0	0	0	0	0	0	0	0
7	0	19	19	2	0	-2	2	19	17
8	142	107	-35	408	3	-405	550	110	-440
9	1,760	1,278	-482	2,035	671	-1,364	3,795	1,949	-1,846
10	2,685	2,147	-538	1,396	647	-749	4,081	2,794	-1,287
11	3,847	3,583	-264	1,987	925	-1,062	5,834	4,508	-1,326
12	5,639	5,738	99	1,346	821	-525	6,985	6,559	-426
TOTAL	14,073	12,872	-1,201	7,179	3,067	-4,112	21,247	15,939	-5,308

Table 4. HISD Students Completing Online Courses, by Provider and Grade Level, 2011–2012 and 2012–2013

	Α	pex Learni	ng	Ot	her Provid	ers	,	All Provider	s
Grade	2011– 2012	2012– 2013	Differ- ence	2011– 2012	2012– 2013	Differ- ence	2011– 2012	2012– 2013	Differ- ence
6	0	0	0	0	0	0	0	0	0
7	0	15	15	1	0	-1	1	15	14
8	81	59	-22	125	3	-122	206	62	-144
9	847	718	-129	640	328	-312	1,442	1,021	-421
10	1,296	1,208	-88	518	324	-194	1,747	1,469	-278
11	1,763	1,809	46	852	512	-340	2,462	2,206	-256
12	2,805	2,921	116	761	593	-168	3,304	3,282	-22
TOTAL	6,792	6,730	-62	2,897	1,760	-1,137	9,162	8,055	-1,107

Note: Some students completed online courses through both Apex Learning and Other Providers.

Table 5. Average Number of Online Courses Per HISD Student Who Took at Least One Online Course, by Provider and Grade Level, 2011–2012 and 2012–2013

		Apex Learni	ng		ther Provid			All Provider	'S
Grade	2011– 2012	2012– 2013	Differ- ence	2011– 2012	2012– 2013	Differ- ence	2011– 2012	2012– 2013	Differ- ence
6	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	NA	1.3	NA	2.0	NA	NA	2.0	1.3	-0.7
8	1.8	1.8	0.0	3.3	1.0	-2.3	2.7	1.8	-0.9
9	2.1	1.8	-0.3	3.2	2.2	-1.0	2.7	1.9	-0.8
10	2.0	1.8	-0.2	2.7	2.4	-0.3	2.3	1.9	-0.4
11	2.2	2.0	-0.2	2.3	2.3	0.0	2.3	2.0	-0.3
12	2.0	2.0	0.0	1.8	2.1	0.3	2.1	2.0	-0.1
TOTAL	2.1	1.9	-0.2	2.5	2.2	-0.3	2.3	2.0	-0.3

Note: Some students completed online courses through both Apex Learning and Other Providers.

Table 6. Numl	ber of HIS	D On	line (	Cour	ses b	v Pro	ovide	r and	Sch	ool. 2	2012-	2013		
	Apex Lrng.	APEXIS	API	Aventa	нсс	нуѕ	Nova Net	Other Prov.	Plato	SSCSP	TexasTechD	TxVSN StU	UT DL	TOTAL
HIGH SCHOOLS														
Advanced Virtual Academy	936	43				4								983
Austin High					0								05	454
School Bellaire High	327	54			8								65	
School	649	6			24	13		203			52	2	15	964
Carnegie Vanguard HS	21											1		22
Challenge High	421		4		78						2	4		509
School Chavez High			7									7		200
School	348				2								10	360
Davis High School	414	2						2	62					480
DeBakey HSHP	78	3			58			2				2	10	153
East Early College High School	99				153									252
Eastwood Academy for Academic Achievement	74				65							5	73	217
Empowerment College Prep High School	18	1			16	5						9		49
Energized for STEM HS SE	42													42
Energized for STEM HS SW	59													59
Furr High School	359													359
Hope Academy	22							1						23
Houston Academy for International Studies	152	2		1	98			1				3		257
Houston Math, Science & Tech. Center	884	214			26			59				13	687	1,883
HSLECJ	306	16			1	1						14		338
HSPVA	22					9		16			15			62
Jones High School	192													192
Jordan High School for Careers	28	1			7	2						3	_	41

Table 6 (contin	nued). I	Number	of H	IISD	Onlin	e Co	urses	by P	rovi	der a	nd So	chool	, 2012–	2013
	Apex Lrng.	APEXIS	API	Aventa	НСС	HVS	Nova Net	Other Prov.	Plato	SSCSP	TexasTechD	TxVSN StU	UT DL	ТОТАL
HIGH SCHOOLS (continued)														
Kashmere High School	45													45
Lamar High School	853	32									78		1	964
Lee High School	572	5		1	5			85					71	739
Liberty High School	68			1	6						2		4	81
Madison High School	273	2	2		10			13					87	387
Milby High School	603	6		1	4	1		44				3	1	663
Mount Carmel Academy		15			5		69						1	90
North Forest High School					3									3
North Houston Early College High School	219				33									252
REACH Charter High School	31													31
Reagan High School	398	10			1	1	29	8						447
Scarborough High School	629	29			56	12								726
Sharpstown High School	597				58	2		9						666
Sterling High School	266							4			1	25		296
Waltrip High School	159	12			6	2				1	7		4	191
Washington High School	174	20			3			1				12		210
Westbury High School	191	11			28						1		6	237
Westside High School	524	19			107	10		2			12	23	3	700
Wheatley High School	135	11			2		112							260
Worthing High School	412													412
Yates High School	332	1			4			11						348

Table 6 (contin	nued). Nu	ımber	of H	IISD	Onlin	e Co	urses	by P	rovi	der a	nd So	chool	, 2012–	2013
	Apex Lrng.	APEXIS	API	Aventa	НСС	HVS	Nova Net	Other Prov.	Plato	SSCSP	TexasTechD	TxVSN StU	UT DL	TOTAL
MIDDLE SCHOOLS														
Holland Middle School	7													7
Pershing Middle School											1			1
Pin Oak Middle School											1			1
Project Chrysalis Middle School	88													88
COMBINED LEVEL SCHOOLS														
Beechnut								19						19
JJAEP	1	2						31						34
Long Academy	96													96
Rogers, T. H.											1			1
Sharpstown International School	141													141
SOAR Center	7													7
Texas Connections Academy						7		5						12
Young Women's College Prep.	83										2			85
DISTRICT TOTAL	12,355	517	6	4	867	69	210	516	62	1	175	119	1,038	15,939

Table 7. HISD Apex Learning On	line Cour	ses by S	chool, 201	1–2012 a	nd 2012-	-2013	
		2011–201	2		2012–201	3	Difference in Number of Apex
	Number of Apex Learning Courses	Number of All Online Courses	Percentage of Apex Learning Courses	Number of Apex Learning Courses	Number of All Online Courses	Percentage of Apex Learning Courses	Learning Courses, 2011–2012 to 2012– 2013
HIGH SCHOOLS							
Advanced Virtual Academy	590	592	99.7	936	983	95.2	346
Austin High School	287	362	79.3	327	454	72.0	40
Bellaire High School	452	2,165	20.9	649	964	67.3	197
Carnegie Vanguard HS	17	19	89.5	21	22	95.5	4
Challenge High School	648	955	67.9	421	509	82.7	-227
Chavez High School	653	1,457	44.8	348	360	96.7	-305
Davis High School	449	506	88.7	414	480	86.3	-35
DeBakey HSHP (026)	74	274	27.0	78	153	51.0	4
DeVry/Contemporary Learning Center High School (not an HISD 2012–2013 school)	27	27	100.0				NA
East Early College High School	32	98	32.7	99	252	39.3	67
Eastwood Academy for Academic Achievement	126	192	65.6	74	217	34.1	-52
Empowerment College Prep High School	7	30	23.3	18	49	36.7	11
Energized for STEM HS SE	133	133	100.0	42	42	100.0	-91
Energized for STEM HS SW			NA	59	59	100.0	59
Furr High School	617	619	99.7	359	359	100.0	-258
Hope Academy	25	25	100.0	22	23	95.7	-3
Houston Academy for International Studies	128	131	97.7	152	257	59.1	24
Houston Math, Science & Tech. Center	698	1,324	52.7	884	1883	46.9	186
HSLECJ	256	261	98.1	306	338	90.5	50
HSPVA	142	188	75.5	22	62	35.5	-120
Jones High School	188	188	100.0	192	192	100.0	4
Jordan High School for Careers	20	37	54.1	28	41	68.3	8

Table 7 (continued). HISD Apex I	_earning	Online C	ourses by	School,	2011–20 <sup>-</sup>	12 and 201	2–2013
		2011–201	2		2012–201	3	Difference in Number of Apex
	Number of Apex Learning Courses	Number of All Online Courses	Percentage of Apex Learning Courses	Number of Apex Learning Courses	Number of All Online Courses	Percentage of Apex Learning Courses	Learning Courses, 2011–2012 to 2012– 2013
HIGH SCHOOLS (continued)							
Kashmere High School	43	44	97.7	45	45	100.0	2
Lamar High School	826	1,119	73.8	853	964	88.5	27
Lee High School	466	1,365	34.1	572	739	77.4	106
Liberty High School	94	162	58.0	68	81	84.0	-26
Madison High School	333	415	80.2	273	387	70.5	-60
Milby High School	565	587	96.3	603	663	91.0	38
Mount Carmel Academy	0	162	0.0	0	90	0.0	0
New Aspirations (not an HISD 2012–2013 school)	1,166	1,166	100.0				NA
North Forest High School (not an HISD school until July 1, 2013)				0	3	0.0	NA
North Houston Early College High School	58	779	7.4	219	252	86.9	161
REACH Charter High School	150	150	100.0	31	31	100.0	-119
Reagan High School	369	500	73.8	398	447	89.0	29
Scarborough High School	408	424	96.2	629	726	86.6	221
Sharpstown High School	986	1,087	90.7	597	666	89.6	-389
Sterling High School	163	167	97.6	266	296	89.9	103
Waltrip High School	398	609	65.4	159	191	83.2	-239
Washington High School	365	418	87.3	174	210	82.9	-191
Westbury High School	489	518	94.4	191	237	80.6	-298
Westside High School	582	698	83.4	524	700	74.9	-58
Wheatley High School	192	344	55.8	135	260	51.9	-57
Worthing High School	420	421	99.8	412	412	100.0	-8
Yates High School	261	276	94.6	332	348	95.4	71

Table 7 (continued). HISD Ape	x Learnin	g Online	Courses b	y School	, 2011–20	012 and 20	12–2013
		2011–2012	2		2012–2013	3	Difference in
	Number of Apex Learning Courses	Number of All Online Courses	Percentage of Apex Learning Courses	Number of Apex Learning Courses	Number of All Online Courses	Percentage of Apex Learning Courses	Number of Apex Learning Courses, 2011–2012 to 2012–2013
MIDDLE SCHOOLS							
Clifton Middle School	0	4	0.0				0
Hamilton Middle School	0	1	0.0				0
Holland Middle School				7	7	100.0	7
Johnston Middle School	0	8	0.0				0
Lanier Middle School	0	31	0.0				0
Ortíz Middle School	17	17	100.0				-17
Pershing Middle School	0	6	0.0	0	1	0.0	0
Pin Oak Middle School	0	12	0.0	0	1	0.0	0
Project Chrysalis Middle School	116	116	100.0	88	88	100.0	-28
Stevenson Middle School	2	2	100.0				-2
COMBINED LEVEL SCHOOLS							
Beechnut	2	3	66.7	0	19	0.0	-2
JJAEP				1	34	2.9	1
Long Academy				96	96	100.0	96
Rogers, T. H.	0	16	0.0	0	1	0.0	0
Sharpstown International School	15	17	88.2	141	141	100.0	126
SOAR Center				7	7	100.0	7
Texas Connections Academy				0	12	0.0	0
Young Women's College Prep.	18	18	100.0	83	85	97.6	65
DISTRICT TOTAL	14,068	21,247	66.2	12,355	15,939	77.5	-1,713

Table 8. HIS	D Apex Learning Courses Completed,		and 2012–20 –2012	2012–2013			
Subject	Course	Number	Percent	Number	Percent		
English							
	AP English Language & Composition	18	0.1	5	0.0		
	AP English Literature & Composition	7	0.0	9	0.1		
	Creative Writing	1	0.0				
	English I	525	3.7	392	3.0		
	English II	708	5.0	580	4.5		
	English III	617	4.4	618	4.8		
	English IV	738	5.2	661	5.1		
	Fundamental English			1	0.0		
	Practical Writing Skills	16	0.1	7	0.1		
	Reading Application & Study Skills	15	0.1	8	0.1		
	Reading I	3	0.0				
Mathematics							
	Advanced Quantitative Reasoning	2	0.0				
	Algebra I For Virtual School Use Only	386	2.7	270	2.1		
	Algebra II	430	3.1	347	2.7		
	Algebra II, STAAR Modified			1	0.0		
	AP Calculus AB	4	0.0				
	AP Statistics	1	0.0	4	0.0		
	Early Colleges/Math1316	190	1.4	130	1.0		
	Earth and Space Mod			2	0.0		
	Economics FES Mod			1	0.0		
	Geometry	546	3.9	330	2.6		
	Health Education Alt			1	0.0		
	Life NRT Alt			1	0.0		
	Local Credit: Math 0312			1	0.0		
	Mathematical Models with Applications	28	0.2	18	0.1		

Table 8 (conti	nued). HISD Apex Learning Courses	Completed,	2011–2012	and 2012–2	013
Subject	Course	2011-	-2012	2012-	
-	Course	Number	Percent	Number	Percent
Science					
	AP Biology	50	0.4		
	AP Chemistry	2	0.0	16	0.1
	AP Physics B	17	0.1	9	0.1
	Biology	499	3.5	404	3.1
	Chemistry	249	1.8	377	2.9
	Earth And Space Science	4	0.0	3	0.0
	Environmental Systems	1	0.0	3	0.0
	IPC	188	1.3	144	1.1
	Physics	39	0.3	233	1.8
	Scientific Research and Design	163	1.2	132	1.0
	Science Research & Design I	2	0.0		
Social Studies					
	AP Comparative Government & Politics	14	0.1	4	0.0
	AP Macro Economics	3	0.0	1	0.0
	AP Psychology	72	0.5	4	0.0
	AP United States History	11	0.1	11	0.1
	Economics - Econ2301 Macro	698	5.0	675	5.2
	Government	967	6.9	752	5.8
	Micro Economics			2	0.0
	Psychology	187	1.3	94	0.7
	Sociology	1	0.0	41	0.3
	U.S. History	549	3.9	535	4.2
	World History	649	4.6	560	4.4
	World Geography	560	4.0	513	4.0

Table 8 (cont	inued). HISD Apex Learning Courses	ses Completed, 2011–2012 and 2012–2013					
Subject	Course	2011–2012		2012–2013			
-	Course	Number	Percent	Number	Percent		
Other							
	Adventure/Outdoor Education			2	0.0		
	AP Spanish	103	0.7	21	0.2		
	Applied Music I			2	0.0		
	Arabic	1	0.0				
	Arabic I	1	0.0				
	Art I	4	0.0	9	0.1		
	Business Information Management II	1	0.0				
	Communication Applications	33	0.2	74	0.6		
	Foundations Of Personal Fitness	19	0.1	5	0.0		
	French I	68	0.5	59	0.5		
	French II	146	1.0	142	1.1		
	Health Education	849	6.0	850	6.6		
	Independent Study In Journalism I	1	0.0				
	Individual Sports	1	0.0	4	0.0		
	Music I History	74	0.5				
	Music Theory I			13	0.1		
	PE Substitution, Athletics 3			1	0.0		
	PE Substitution Non-District Program I	1	0.0				
	Physical Education IA	1	0.0				
	Principles Of Human Services	2	0.0				
	Principles Of Information Technology	6	0.0	7	0.1		
	Spanish I	1,698	12.1	1,739	13.5		
	Spanish II	1,897	13.5	1,698	13.2		
	Spanish III	6	0.0	343	2.7		
	TAKS Review	1	0.0	3	0.0		
TOTAL	73 Courses	14,073	100.0	12,872	100.0		

Note: Percentages may not total 100 percent due to rounding.

Table 9. Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011-2012 and 2012-2013 2011-2012 2012-2013 Provider and Course **Subjects** Number Percent Number Percent **Apex Learning TOTAL** 73 Courses 14,073 66.2 12,872 80.8 API English AP English Literature & Composition 1 0.0 Other Business Information Management I 0.0 2 **Communication Applications** 13 0.1 Spanish I 2 0.0 Spanish III 3 0.0 0.0 Spanish III for Spanish Speakers 2 0.0 **TOTAL** 6 Courses 21 0.1 6 0.0 **Aventa** Science Astronomy 0.0 **Social Studies** 2 0.0 **Economics** 0.0 Special Topics – Social Studies Other Introduction to Cosmetology 1 0.0 Spanish II 1 0.0 **TOTAL 5 Courses** 2 0.0 4 0.0 HCC English English I 5 0.0 8 0.1 0.0 English II 8 0.0 5 English III 39 0.2 25 0.2 English IV 419 2.0 95 0.6 Humanities 23 0.1 0.0 Journalism 10 0.0 4

13

0.1

Literary Genres

0.0

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and Subjects	Course	2011–2012		2012–2013	
		Number	Percent	Number	Percent
нсс					
(continued)					
Mathematics					
	Algebra I	13	0.1	7	0.0
	Algebra II	48	0.2	44	0.3
	Geometry	24	0.1	8	0.1
	Independent Study			2	0.0
	Local Credit Only – Math 0312	39	0.2		
	Local Credit Only – Math 1314	15	0.1		
	Mathematical Models	24	0.1	8	0.1
	Pre-Calculus	37	0.2	11	0.1
Science					
	Anatomy and Physiology	3	0.0		
	Astronomy	93	0.4	9	0.1
	Biology	11	0.1	4	0.0
	Chemistry	17	0.1	13	0.1
	Environmental Systems	29	0.1	31	0.2
	IPC	8	0.0	5	0.0
	Physics	21	0.1	8	0.1
	Science Research and Design I	59	0.3	11	0.1
	Scientific Research & Design II	9	0.0	6	0.0
	Scientific Research & Design III			3	0.0
Social Studies					
	Economics – Macroeconomics	199	0.9	110	0.7
	Psychology	46	0.2	23	0.1
	Sociology	55	0.3	16	0.1
	Special Topic	72	0.3	40	0.3
	US Government	274	1.3	125	0.8
	US History	140	0.7	45	0.3
	World Geography	15	0.1	5	0.0
	World History	13	0.1	13	0.1
Other					
	Accounting			1	0.0
	Art I	37	0.2	11	0.1
	Audio Video Production			1	0.0
	Business Computer Info Systems	2	0.0	1	0.0
	Business Info Management I	7	0.0	3	0.0
	Business Info Management II	75	0.4		

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011-2012 and 2012-2013 2011-2012 2012-2013 Provider and Course Subjects Number Percent Number Percent **HCC** (continued) Other (continued) 22 **Communication Applications** 74 0.3 0.1 **Computer Programming** 2 0.0 Computer Science 2 0.0 0.0 Cosmetology II 1 Foundations of Personal Fitness 1 0.0 French I 0.0 Health Education 30 0.1 13 0.1 Law Enforcement 1 0.0 Local Credit Only - College Connect 53 0.2 13 0.1 Local Credit Only - Mathematics **Medical Terminology** 11 0.1 1 0.0 Music - Instrumental Ensemble 3 0.0 0.0 7 Music Theory 0.0 Prin of Arts, Audio Visual Tech, & Comm 1 0.0 Prin. of Business 12 0.1 Prin of Info Tech 1 0.0 Spanish I 5 0.0 31 0.2 Spanish II 5 0.0 32 0.2 Spanish III 2 0.0 11 0.1 Telecommunications & Networking 4 0.0 Theatre 11 0.1 2 0.0 **TOTAL 60 Courses** 2,093 9.9 867 5.4 HVS English AP English Literature 1 0.0 2 English I 0.0 0.0 English II 2 0.0 English III 1 0.0 English IV 0.0 1 Mathematics 0.0 Algebra I 1 0.0 1 Algebra II 3 0.0 **AP Statistics** 5 0.0 2 0.0 Geometry 0.0 Mathematical Models with Appls 1 0.0 1 0.0

1

0.0

5

Pre-Calculus

0.0

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and	and Course, 2011–2012 and 20		-2012	2012-	-2013
Subjects	Course	Number	Percent	Number	Percent
HVS (continued)					
Science					
	Biology	1	0.0	1	0.0
	Chemistry	1	0.0	1	0.0
	Environmental Systems			4	0.0
	IPC			1	0.0
	Physics	1	0.0	1	0.0
Social Studies					
	AP Macroeconomics	3	0.0		
	AP Psychology	2	0.0	3	0.0
	AP US Government	14	0.1		
	AP US History	4	0.0		
	Economics – Macroeconomics	1	0.0		
	Government	1	0.0		
	US Government			3	0.0
	World Geography	3	0.0	1	0.0
	World History	1	0.0		
Other					
	Art I			3	0.0
	Communication Applications	22	0.1	16	0.1
	Health Education	40	0.2	2	0.0
	Music I History			2	0.0
	PE Team Sports			1	0.0
	Principles of Info Tech	2	0.0	4	0.0
	Psychology			1	0.0
	Reading Appls and Study Skills	2	0.0		
	Sociology			1	0.0
	Spanish I	3	0.0		
TOTAL	Touch Systems Data	110	٥٢	69	0.0
	36 Courses	110	0.5	69	0.4
Nova Net					
English			0.4		0.0
	English I	11	0.1	3	0.0
	English II	16	0.1	7	0.0
	English III	32	0.2	14	0.1
Mach	English IV	71	0.3	19	0.1
Mathematics	Algebra	7	0.0	4.4	0.4
	Algebra I	7	0.0	14	0.1
	Algebra II	11	0.1	7	0.0
	Geometry	13	0.1	13	0.1
	Mathematical Models with Applications	7	0.0	4	0.0
	Pre-Calculus	1	0.0	1	0.0

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and	0	2011-	-2012	2012-	-2013
Subjects	Course	Number	Percent	Number	Percent
Nova Net					
(continued)					
Science					
	Biology	38	0.2	10	0.1
	Chemistry	14	0.1	10	0.1
	Earth and Space Science	7	0.0		
	Environmental Systems	8	0.0	4	0.0
	IPC	9	0.0	4	0.0
	Physics	3	0.0		
Social Studies					
	Economics	11	0.1	4	0.0
	US Government	8	0.0	3	0.0
	US History	7	0.0	4	0.0
	World Geography	18	0.1	5	0.0
	World History	7	0.0	10	0.1
Other					
	Anatomy and Physiology	1	0.0		
	Art I	2	0.0	2	0.0
	Business Information Management	1	0.0		
	Communication Applications	68	0.3	71	0.4
	French	2	0.0		
	Health Education	3	0.0	1	0.0
	Medical Terminology	1	0.0		
	PE Substitution	1	0.0		
TOTAL	28 Courses	378	1.8	210	1.3
Other Provider					
English					
	AP English Language and Composition	6	0.0		
	AP English Literature and Composition	1	0.0		
	Creative Writing	1	0.0		
	English I	68	0.3	20	0.1
	English I for Speakers of Other	7	0.0	_	0.0
	Languages	7	0.0	2	0.0
	English II	42	0.2	8	0.1
	English II for Speakers of Other Languages	12	0.1		
	English III	32	0.2	10	0.1
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Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011-2012 and 2012-2013 2011-2012 2012-2013 Provider and Course Subjects Number Percent Number Percent **Other Provider** (continued) **English** (continued) 9 7 English IV 0.0 0.0 0.0 Journalism 2 0.0 Journalism II: Newspaper 2 0.0 2 0.0 Literary Genres Media Literacy: Speech 2 0.0 Public Speaking I 1 0.0 Reading I 17 0.1 Reading II 1 0.0 0.0 2 1 0.0 Reading III 0.0 Reading Applications and Study Skills 0.0 **Technical Writing** 1 0.0 Mathematics 187 0.9 0.1 Algebra I 21 Algebra II 83 0.4 27 0.2 AP Calculus AB 3 0.0 0.0 **AP Statistics** 4 0.0 1 Fundamentals of Math 1 0.0 Geometry 106 0.5 11 0.1 2 Independent Study Math 0.0 1 0.0 Mathematical Models with Applications 21 0.1 7 0.0 Pre-Calculus 29 0.1 2 0.0 Science AP Biology 1 0.0 1 0.0 0.0 AP Chemistry 0.0 AP Physics B 1 0.0 0.1 Biology 108 0.5 21 61 10 0.1 Chemistry 0.3 Earth and Space Science 8 0.0 0.0 **Environmental Systems** 33 0.2 9 0.1 IPC 101 0.5 6 0.0 **Physics** 49 0.2 6 0.0 Scientific Research and Design 5 0.0 **Social Studies** 0.0 AP Human Geography 1 AP Macroeconomics 0.0

AP Psychology

AP US Government

0.0

0.0

0.0

0.0

1

3

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and	and Course, 2011–2012 and 20	1	-2012	2012–2013		
Subjects	Course	Number	Percent	Number	Percent	
Other Provider						
(continued)						
Social Studies						
(continued)						
	AP US History	6	0.0	1	0.0	
	AP World History	10	0.0			
	Economics	18	0.1	2	0.0	
	Psychology	4	0.0	2	0.0	
	Sociology	7	0.0			
	Special Topic Social Studies	55	0.3	31	0.2	
	US Government	19	0.1	5	0.0	
	US History	41	0.2	8	0.1	
	World Geography	37	0.2	17	0.1	
	World History	61	0.3	4	0.0	
Other						
	Accounting I		0.0	1	0.0	
	Adventure/Outdoor Education	6	0.0			
	Aerobic Activities	7	0.0			
	Agric Mechanics & Metal Technologies	2	0.0			
	American Sign Language	1	0.0			
	AP Computer Science	1	0.0	5	0.0	
	AP History of Art	2	0.0	1	0.0	
	AP Spanish Language	1	0.0	1	0.0	
	Apparel	1	0.0			
	Applied Music I	5	0.0	2	0.0	
	Approved Sponsor: AVID IA	3	0.0	1	0.0	
	Approved Sponsor: Peer Asst IA	1	0.0			
	Arabic I	69	0.3	1	0.0	
	Arabic II	64	0.3	1	0.0	
	Arabic III	61	0.3			
	Arabic IV	1	0.0			
	Art I	43	0.2	9	0.1	
	Art II Drawing	2	0.0	2	0.0	
	Art II Photography	4	0.0			
	Art III Art History	2	0.0			
	Art IV Painting	1	0.0			
	Banking and Financial Services	1	0.0			
	Business Computer Information Systems	1	0.0			
	Business Information Management	12	0.1	5	0.0	
	Business Management	2	0.0			
	Career Connections	2	0.0	1	0.0	

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011-2012 and 2012-2013 2011-2012 2012-2013 **Provider and** Course Subjects Number Percent Number Percent **Other Provider** (continued) Other (continued) Career Studies 0.0 Child Development 0.0 Child Development 0.0 14 0.1 Chinese I Chinese II 8 0.0 Chinese III 6 0.0 Chinese IV 1 0.0 0.0 **Choral Music** College Skills 3 0.0 42 0.2 34 0.2 **Communication Applications Computer Applications** 11 0.1 1 0.0 1 0.0 **Computer Programming** 1 Computer Science Fundamentals 0.0 0.0 Computer Science I 12 0.1 Computer Science II 2 0.0 2 0.0 Computer Science III Consumer and Family Economics 3 0.0 Cosmetology Introduction 1 0.0 **Culinary Arts** 2 0.0 Dance 0.0 Desktop Publishing 3 0.0 2 0.0 Digital Media **Driver Education** 1 0.0 2 0.0 4 0.0 1 0.0 English Foundations Interm A (INN) English Language Development I (INN) 19 2 0.0 0.1 2 English Language Development II (INN) 0.0 3 2 0.0 English Newcomer (INN) 0.0 Forensic Science 0.0 Foundations of Personal Fitness 57 0.3 13 .01 9 0.0 French I French II 4 0.0 French III 1 0.0

1

1

58

0.0

0.0

0.3

French IV

German II

Fundamental English I

**Health Education** 

0.0

0.0

4

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011-2012 and 2012-2013 2011-2012 2012-2013 **Provider and** Course Subjects Number Percent Number Percent **Other Provider** (continued) Other (continued) Health Education, Advanced 0.0 Hebrew I 8 0.0 Hindi I 2 0.0 0.0 **Human Body Systems** Human Growth and Development 0.0 Individual and Family Life 2 0.0 1 0.0 Individual Sports (first time) Individual Sports (second time) 2 0.0 2 Italian III 0.0 2 Japanese I 0.0 Keyboarding 2 0.0 0.0 Latin (Vergil) 2 0.0 1 0.0 Latin II 2 0.0 Latin III Local Credit: College Skill Building 2 0.0 Local Credit: Foundations of Math 1 0.0 Local Credit: ROTC Drill 2 0.0 Local Credit: STAAR Review 1 0.0 Local Credit: TAKS Review 3 0.0 Local Credit: TAKS Math Prep 0.0 Mandarin Chinese I 0.0 0.0 Mandarin Chinese II Media Technology Introduction 2 0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.1

0.1

0.0

0.0

2

9

2

2

1

3

18

17

2

10

**Medical Terminology** 

Music Instrumental Ensemble I

Money Matters

Music Choir I

Music Choir II

PE 2F Alt

Music Orchestra I

Music Orchestra II

Music Vocal Ensemble I

Other Foreign Languages I

Other Foreign Languages II

Other Foreign Languages III

PE Substitution: Athletics I

0.0

0.0

0.0

0.0

4

1

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and	and Course, 2011–2012 and 20		-2012	2012–2013	
Subjects	Course	Number	Percent	Number	Percent
Other Provider					
(continued)					
Other					
(continued)					
	PE Substitution: Athletics II	2	0.0	1	0.0
	PE Substitution: Athletics III	4	0.0		
	PE Substitution: Non-District Program I	13	0.1	7	0.0
	PE Substitution: Non-District Program II	6	0.0	8	0.1
	PE Substitution: Non-District Program III	2	0.0	2	0.0
	PE Substitution: Non-District Program IV	3	0.0		
	Personal and Family Development	2	0.0		
	Physical Education IA	1	0.0		
	Principles of Agric, Food, & Nat Resources	2	0.0		
	Principles of Busi, Marketing, & Finance Principles of Health Science		0.0		
			0.0		
	Principles of Human Services	3	0.0		
	Principles of Information Technology		0.1	32	0.2
	Principles of Marketing	3	0.0		
	Research in Info Tech Sol	1	0.0		
	Reserve Officers Training I	6	0.0	1	0.0
	Robotics (INN)	3	0.0		
	Robotics and Automation	1	0.0		
	Small Animal Management	1	0.0		
	Spanish I	85	0.4	6	0.0
	Spanish I for Spanish Speakers	13	0.1	45	0.3
	Spanish II	15	0.1	11	0.1
	Spanish II for Spanish Speakers	13	0.1	10	0.1
	Spanish III	9	0.0	6	0.0
	Spanish V	2	0.0		
	STAAR Review – English			3	0.0
	Teacher Assistant	1	0.0		
	Team Sports	27	0.1	6	0.0
	Technical Theatre	4	0.0		
	Technology Training	4	0.0		
	Telecommunications and Networking	1	0.0		
	Textile and Apparel Design	1	0.0		
	Theatre I	6	0.0	1	0.0
	Theatre II	3	0.0		
	Theatre III	1	0.0		
	Touch Systems Data	52	0.2	2	0.0

Table 9 (contin	ued). Number and Percentage of HIS and Course, 2011–2012 and 20		ourses Con	npleted, By	Provider		
Provider and		2011-	-2012	2012-	2012–2013		
Subjects	Course	Number	Percent	Number	Percent		
Other Provider							
(continued)							
Other							
(continued)							
	Vocal Ensemble			1	0.0		
	Vocational for Life I	2	0.0				
	Vocational for Life II	2	0.0				
	Vocational for Life III	2	0.0				
	Web Design	1	0.0				
	Web Mastering	1	0.0				
	Welding	1	0.0				
	Yearbook			1	0.0		
TOTAL	195 Courses	2,285	10.8	516	3.2		
Penn Foster							
Social Studies							
	World History	1	0.0				
Other							
	Foundations of Personal Fitness	1	0.0				
	Journalism: Newspaper I	1	0.0				
	Local Credit: Foundations of Math	1	0.0				
	Theatre II	1	0.0				
TOTAL	5 Courses	5	0.0	0	0.0		
Plato							
English							
_	English I			1	0.0		
	English II			1	0.0		
	English III			2	0.0		
	English IV			1	0.0		
Mathematics							
	Algebra II			1	0.0		
	Geometry			1	0.0		
Science							
	Physics			19	0.1		
Social Studies	·						
	Economics			4	0.0		
	US History			4	0.0		
Other	_						
	Communication Applications	40	0.2	28	0.2		

40

0.2

62

TOTAL

10 Courses

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and	and Course, 2011–2012 and 20		-2012	2012-	-2013
Subjects	Course	Number	Percent	Number	Percent
SSCSP					
Mathematics					
	Advanced Quantitative Reasoning	1	0.0		
	Algebra I			1	0.0
Social Studies					
	US History	1	0.0		
Other					
	Communication Applications	1	0.0		
	Health Education	1	0.0		
	Spanish I	1	0.0		
	Spanish II	1	0.0		
TOTAL	7 Courses	6	0.0	1	0.0
Texas TechD					
English					
	English I	2	0.0		
	English II	2	0.0	2	0.0
	English III	2	0.0	1	0.0
	English IV			2	0.0
Mathematics					
	Algebra I	10	0.0	10	0.1
	Algebra II	3	0.0	2	0.0
	Geometry	3	0.0		
	Mathematical Models with Applications	1	0.0		
	Pre-Calculus	1	0.0	2	0.0
Science					
	Biology	2	0.0		
	Chemistry	1	0.0		
	Environmental Systems	2	0.0	2	0.0
	Physics	3	0.0	3	0.0
Social Studies					
	Economics	13	0.1	14	0.1
	Psychology	1	0.0		
	Sociology	2	0.0		
	US Government	18	0.1	22	0.1
	US History			4	0.0
	World Geography	3	0.0		
	World History	3	0.0	6	0.0

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and	and Course, 2011–2012 and 20	ı	-2012	2012-	-2013
Subjects	Course	Number	Percent	Number	Percent
Texas TechD					
(continued)					
Other					
	Art I	1	0.0		
	Business Image Management			2	0.0
	Business Information Management I	7	0.0		
	Child Development	1	0.0		
	Communication Applications	59	0.3	40	0.3
	Digital and Interactive Media	1	0.0		
	Foundations of Personal Fitness			1	0.0
	French	1	0.0		
	Health Education	69	0.3	45	0.3
	Music History	1	0.0	5	0.0
	Physical Education IA	1	0.0		
	Principles of Information Technology	5	0.0	4	0.0
	Principles of Technology	1	0.0	4	0.0
	Principles of Technology: Tech Prep	1	0.0		
	Spanish I	22	0.1	1	0.0
	Spanish II	24	0.1	1	0.0
	Spanish III	84	0.4	2	0.0
	Web Mastering	1	0.0		
TOTAL	38 Courses	351	1.7	175	1.1
TxVSN StU					
English					
	English II	1	0.0	3	0.0
	English III			1	0.0
	English IV	4	0.0		
	Reading I	1	0.0		
	Reading Applications and Study Skills	1	0.0		
Mathematics					
	Advanced Quantitative Reasoning			1	0.0
	Algebra I	3	0.0	4	0.0
	Algebra II			4	0.0
	AP Calculus BC	1	0.0	1	0.0
	Mathematical Models with Applications	3	0.0		
	Pre-Calculus			3	0.0

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and	and Course, 2011–2012 and 20		-2012	2012-	-2013
Subjects	Course	Number	Percent	Number	Percent
TxVSN StU					
(continued)					
Science					
	AP Biology			2	0.0
	AP Environmental Science			1	0.0
	Astronomy	2	0.0	2	0.0
	Biology	1	0.0		
	Environmental Systems			2	0.0
	Physics	2	0.0	2	0.0
Social Studies					
	AP US Government	15	0.1		
	Economics	3	0.0	12	0.1
	Special Topics – Social Studies			2	0.0 0.0
	US Government			1	
	World Geography	4	0.0		
	World History			1	0.0
Other					
	AP Spanish	1	0.0		
	Art I	4	0.0	2	0.0
	Communication Applications	25	0.1	43	0.3
	Digital and Interactive Media	5	0.0		
	Driver Education	2	0.0		
	Driver and Safety Education	2	0.0	1	0.0
	Health Education	8	0.0	14	0.1
	Latin II	3	0.0		
	Multimedia	1	0.0		
	Music I History			3	0.0
	Principles of Information Technology	6	0.0	3	0.0
	Spanish I	6	0.0	5	0.0
	Spanish II	1	0.0	6	0.0
TOTAL	36 Courses	105	0.5	119	0.7
UT DL					
English					
	English I	8	0.0	2	0.0
	English II	2	0.0	1	0.0
	English III	5	0.0		
	English IV			1	0.0

Table 9 (continued). Number and Percentage of HISD Online Courses Completed, By Provider and Course, 2011–2012 and 2012–2013

Provider and 2011–2012 and 2012–2013 2011–2012 2012–2013								
Provider and	Course							
Subjects		Number	Percent	Number	Percent			
UT DL								
(continued)								
Mathematics								
	Algebra I	11	0.1	6	0.0			
	Algebra II	7	0.0	1	0.0			
	Geometry	1	0.0					
	Mathematical Models with Applications	4	0.0	1	0.0			
	Pre-Calculus	2	0.0					
Science								
	Biology			1	0.0			
	Chemistry	1	0.0	1	0.0			
	Environmental Systems	15	0.1	5	0.0			
Social Studies								
	World Geography	6	0.0	1	0.0			
	World History	1	0.0					
Other								
	Business Information Management I	2	0.0					
	Communication Applications	4	0.0	1	0.0			
	French I	2	0.0					
	French II			2	0.0			
	Health Education	6	0.0					
	Mandarin Chinese I			2	0.0			
	Mandarin Chinese II			2	0.0			
	Spanish I	763	3.6	465	2.9			
	Spanish II	866	4.1	390	2.4			
	Spanish III	72	0.3	156	1.0			
TOTAL	23 Courses	1,778	8.4	1,038	6.5			
GRAND TOTAL		21,247	100.0	15,939	100.00			

Table 10. TAKS Performance of HISD Students Who Took a Course through Apex Learning and Performance of All Other HISD Students, 2011–2012 and 2012–2013

	I CITOII	mance of All Other	ט סטווו	tuuents,	2011-2	UIZ allu	2012-20	713		
				2011-	-2012			2012	-2013	
			Rdg	Math	Sci	SocSt	Rdg	Math	Sci	SocSt
Apex Learning	Grade 10	Total N Tested	268	220	143	237	NA	NA	NA	NA
		% Met Standard	85.8	76.4	59.4	91.6				
		N Met Standard	230	168	85	217				
		N Not Mtg.Stand.	38	52	58	20				
		% Commended	4.9	8.6	2.8	22.4				
		N Commended	13	19	4	53				
		N Not Comm.	255	201	139	184				
HISD (excluding Apex Learning)	Grade 10	Total Tested	9,422	9,379	9,411	9,166	NA	NA	NA	NA
		% Met Standard	90.3	75.2	74.0	95.0				
		N Met Standard	8,506	7,051	6,964	8,705				
		N Not Mtg.Stand.	916	2,328	2,447	461				
		% Commended	18.0	18.4	16.1	38.2				
		N Commended	1,696	1,722	1,512	3,500				
	-	N Not Comm.	7,726	7,657	7,899	5,666		=	-	=
Apex Learning	Grade 11	Total Tested	362	201	165	438	270	193	207	438
		% Met Standard	92.0	87.1	92.1	97.0	94.8	90.2	94.2	98.4
		N Met Standard	333	175	152	425	256	174	195	431
		N Not Mtg.Stand.	29	26	13	13	14	19	12	7
		% Commended	14.1	23.4	12.7	49.5	11.1	13.0	14.0	53.7
		N Commended	51	47	21	217	30	25	29	235
		N Not Comm.	311	154	144	221	240	168	178	203
HISD (excluding Apex Learning)	Grade 11	Total Tested	8,791	8,923	8,961	8,657	8,625	8,728	8,729	8,496
		% Met Standard	92.3	91.3	94.1	98.3	93.8	88.7	95.2	98.0
		N Met Standard	8,117	8,144	8,433	8,506	8,090	7,743	8,309	8,328
		N Not Mtg.Stand.	674	779	528	151	535	985	420	168
		% Commended	24.5	32.6	25.5	62.7	22.6	24.6	19.1	60.6
		N Commended	2,150	2,913	2,289	5,431	1,946	2,148	1,671	5,150
		N Not Comm.	6,641	6,010	6,672	3,226	6,679	6,580	7,058	3,346

Source: Source: State of Texas, Texas Assessment of Knowledge and Skills

Table 11. Results for Chi-Square Tests of the Differences in Performance on Texas Assessment of Knowledge and Skills (TAKS) Tests between HISD Students Who Completed at Least One Apex Learning Course and HISD Students Who Did Not, 2011–2012 and 2012–2013

	2011–	-2012		2012–2013		
TAKS Test	Chi-Square	р	Cramer's V	Chi-Square	р	Cramer's V
Reading/ELA						
Grade 10				NA		
Met Standard	$X^2(1, N=9,690) = 5.83$	.02	.03			
Commended	$X^{2}(1, N=9,690) = 31.02$	< .001	.06			
Grade 11						
Met Standard	$X^2(1, N=9,153) = 0.06$	.81	NA	$X^2(1, N=8,895) = 0.47$	.49	NA
Commended	$X^{2}(1, N=9,153) = 20.47$	< .001	.05	$X^{2}(1, N=8,895) = 19.87$	< .001	.05
Mathematics						
Grade 10				NA		
Met Standard	$X^2(1, N=9,599) = 0.16$	.69	NA			
Commended	$X^2(1, N=9,599) = 13.69$	< .001	.04			
Grade 11						
Met Standard	$X^{2}(1, N=9,124) = 4.32$	.04	.02	$X^{2}(1, N=8,921) = 0.39$	.53	NA
Commended	$X^2(1, N=9,124) = 7.70$	.006	.03	$X^{2}(1, N=8,921) = 13.93$	< .001	.04
Science						
Grade 10				NA		
Met Standard	$X^{2}(1, N=9,554) = 15.43$	< .001	.04			
Commended	$X^{2}(1, N=9,554) = 18.58$	< .001	.04			
Grade 11						
Met Standard	$X^{2}(1, N=9,126) = 1.15$	.28	NA	$X^2(1, N=8,936) = 0.43$	.51	NA
Commended	$X^{2}(1, N=9,126) = 14.08$	< .001	.04	$X^2(1, N=8,936) = 3.46$	.06	NA
Social Studies						
Grade 10				NA		
Met Standard	$X^2(1, N=9,403) = 5.53$	.02	.02			
Commended	$X^2(1, N=9,403) = 24.60$	< .001	.05			
Grade 11						
Met Standard	$X^2(1, N=9,095) = 3.53$	.06	NA	$X^{2}(1, N=8,934) = 0.31$	.58	NA
Commended	$X^2(1, N=9,095) = 30.83$	< .001	.06	$X^{2}(1, N=8,934) = 8.44$	.004	.03

Notes: Effect size conventions for Cramer's V are: .10 indicates a small effect, .30 indicates a medium effect, and .50 indicates a large effect.

Table 12. STAAR EOC Performance of HISD Students Who Completed an Associated Course through Apex Learning and Performance of All Other HISD Students, 2011–2012 and 2012–2013

		2011-	2011–2012			2–2013		
		Eng I:R	Eng I:W	Eng I:R	Eng II:R	Eng I:W	Eng II:W	
Apex Learning	Total N Tested	67	67	67	59	68	60	
	% Satisfactory	77.6	52.2	67.2	76.3	44.1	38.3	
	N Satisfactory	52	35	45	45	30	23	
	N Not Satisfactory	15	32	22	14	38	37	
	% Advanced	7.5	0.0	4.5	6.8	0.0	0.0	
	N Advanced	5	0	3	4	0	0	
	N Not Advanced	62	67	64	55	68	60	
HISD (excluding Apex Learning)	Total Tested	11,437	11,447	12,916	10,394	13,317	10,426	
	% Satisfactory	58.9	47.1	59.3	71.2	42.5	45.0	
	N Satisfactory	6,739	5,389	7,663	7,404	5,655	4,688	
	N Not Satisfactory	4,698	6,058	5,253	2,990	7,662	5,738	
	% Advanced	6.1	2.6	8.6	17.2	1.7	2.1	
	N Advanced	695	295	1106	1791	233	222	
	N Not Advanced	10,742	11,152	11,810	8,603	13,084	10,204	

Table 12 (continued). STAAR EOC Performance of HISD Students Who Completed an Associated Course through Apex Learning and Performance of All Other HISD Students, 2011–2012 and 2012–2013

			2011–2012	!			2012-	-2013		_
		Alg I	Biol	WGeog	Alg I	Geom	Biol	Chem	WGeog	WHist
Apex Learning	Total N Tested	28	47	43	20	59	50	65	48	61
	% Satisfactory	75.0	91.5	88.4	80.0	94.9	88.0	78.5	66.7	67.2
	N Satisfactory	21	43	38	16	56	44	51	32	41
	N Not Satisfactory	7	4	5	4	3	6	14	16	20
	% Advanced	0.0	2.1	11.6	10.0	5.1	4.0	1.5	2.1	0.0
	N Advanced	0	1	5	2	3	2	1	1	0
	N Not Advanced	28	46	38	18	56	48	64	47	61
HISD (excluding Apex	Total Tested	11,014	10,212	10,836	11,817	8,978	12,458	9,158	12,338	9,901
Learning)		70.0	04.4	70.0	75.4	04.0	00.4	70.4	74.0	00.4
	% Satisfactory N Satisfactory N Not Satisfactory	78.9 8,688 2,326	84.1 8,590 1,622	72.9 7,904 2,932	75.4 8,906 2,911	81.9 7,353 1,625	82.4 10,263 2,195	76.1 6,971 2,187	71.0 8,764 3,574	62.4 6,174 3,727
	% Advanced	14.3	8.3	9.6	14.9	15.2	11.4	9.7	11.3	7.4
	N Advanced	1,573	846	1,043	1,758	1,367	1,418	888	1,390	735
	N Not Advanced	9,441	9,366	9,793	10,059	7,611	11,040	8,270	10,948	9,166

Source: Source: State of Texas Assessment of Academic Readiness/End of Course Assessments Summary Report

Table 13. Results for Chi-Square Tests of the Differences in Performance on State of Texas Assessment of Academic Readiness End of Course (STAAR EOC) Tests between HISD Students Who Completed an Apex Learning Course Associated with the Test and All Other HISD Students Who Took the Exam, 2011–2012 and 2012–2013

	2011–2	2012		2012–2	2013	
STAAR EOC Test	Chi-Square	р	Cramer's V	Chi-Square	р	Cramer's V
English I						
Reading I						
Satisfactory	$X^2(1, N=11,504) = 9.62$	.002	.03	$X^2(1, N=12,983) = 1.70$	.19	NA
Advanced	$X^{2}(1, N=11,504) = 0.22$	.64	NA	$X^{2}(1, N=12,983) = 1.42$	.23	NA
Writing I						
Satisfactory	$X^{2}(1, N=11,514) = 0.71$	.40	NA	$X^2(1, N=13,385) = 0.08$	.78	NA
Advanced	$X^{2}(1, N=11,514) = 1.77$	.18	NA	$X^2(1, N=13,385) = 1.21$	.27	NA
English II						
Reading II						
Satisfactory				$X^{2}(1, N=10,453) = 0.73$	.39	NA
Advanced				$X^{2}(1, N=10,453) = 4.51$	.03	.02
Writing II						
Satisfactory				$X^{2}(1, N=10,486) = 1.06$	.30	NA
Advanced				$X^{2}(1, N=10,486) = 1.31$	.25	NA
Mathematics						
Algebra I						
Satisfactory	$X^{2}(1, N=11,042) = 0.25$	.62	NA	$X^{2}(1, N=11,837) = 0.23$	.63	NA
Advanced	$X^{2}(1, N=11,042) = 4.66$	.03	.02	$X^{2}(1, N=11,837) = 0.38$	.54	NA
Geometry						
Satisfactory				$X^{2}(1, N=9,037) = 6.72$	.01	.03
Advanced				$X^{2}(1, N=9,037) = 4.69$	.03	.02
Science						
Biology						
Satisfactory	$X^{2}(1, N=10,259) = 1.91$	.17	NA	$X^{2}(1, N=12,508) = 1.08$	.30	NA
Advanced	$X^{2}(1, N=10,259) = 2.34$	.13	NA	$X^2(1, N=12,508) = 2.70$	.10	NA
Chemistry						
Satisfactory				$X^{2}(1, N=9,223) = 0.20$	.66	NA
Advanced				$X^{2}(1, N=9,223) = 4.93$	.03	.02
Social Studies						
World Geog.						
Satisfactory	$X^{2}(1, N=10,879) = 5.17$	.02	.02	$X^2(1, N=12,386) = 0.44$	.51	NA
Advanced	$X^{2}(1, N=10,879) = 0.20$	.66	NA	$X^{2}(1, N=12,386) = 4.04$	.04	.02
World History						
Satisfactory				$X^2(1, N=9,962) = 0.61$	.44	NA
Advanced				$X^{2}(1, N=9,962) = 4.89$	.03	.02

Notes: Effect size conventions for Cramer's V are: .10 indicates a small effect, .30 indicates a medium effect, and .50 indicates a large effect.

Table 14. Number and	Table 14. Number and Percentage of HISD Graduates, 2011–2012								
	Diploma Type	Number	Percent						
Apex Learning	Recommended	1,748	66.8						
	Distinguished	110	4.2						
	Minimum/IEP	757	28.9						
Apex Learning Total		2,615	100.0						
All HISD	Recommended	7,242	74.8						
	Distinguished	596	6.2						
	Minimum/IEP	1,846	19.1						
All HISD Total		9,684	100.0						

Source: TEA Standard Reports for 2011–2012

Note: Percentages may not total 100 due to rounding

Table 15. Number and Percentage of HISD Online STAAR EOC and TAKS Review Courses, by Provider and School, 2011–2012 and 2012–2013

	2011-	-2012	2012-	-2013
	Number	Percent	Number	Percent
STAAR EOC Review				
Apex Learning	0	0.0		
Other Provider				
Bellaire High School	1	12.5	2	33.3
Reagan High School			1	16.7
TAKS Review				
Apex Learning				
Advanced Virtual Academy	1	12.5	2	33.3
Houston Math, Science & Tech. Center			1	16.7
Other Provider				
Bellaire High School	1	12.5		
Lee High School	5	62.5		
TOTAL State Test Review Courses	8	100.0	6	100.0

Table 16. HISD Online Course Providers for Advanced Placement (AP) Courses and Number and Percentage of Completed Courses, 2011–2012 and 2012–2013

	2011-	-2012	2012-	-2013
	Number	Percent	Number	Percent
Apex Learning Courses	302	77.0	86	74.8
API (American Preparatory Institute)	1	0.3	0	0.0
HVS	23	5.9	9	7.8
Other Provider	49	12.5	16	13.9
TxVSN StU (Texas Virtual School Network)	17	4.3	4	3.5
TOTAL HISD Advanced Placement (AP) Online Course Completions	392	100.0	115	100.0

Table 17. Number of HISD Advanced Placement (AP) Apex Learning Courses Completed, by School and AP Course, 2011–2012 and 2012–2013

		2011–2012		2012-	-2013
School Name	AP Course	Number of	Percentage	Number of	Percentage
	Ai Course	Courses	of Courses	Courses	of Courses
Advanced Virtual Academy	AP SPAN LA A DLOC	1	0.3		
	AP SPAN LA B DLOC	1	0.3		
Bellaire High School	AP CAL AB A DLOC	1	0.3		
Carnegie Vanguard HS	AP ENG LA A DLOC	1	0.3		
	AP ENG LA B DLOC			1	1.2
	AP STATIST A DLOC	1	0.3		
Challenge High School	AP SPAN LA A DLOC	44			
	AP SPAN LA B DLOC	24			
DeBakey HSHP	AP BIOL A CR	7	2.3		
	AP CAL AB A CR	2	0.7		
	AP CAL AB B CR	1	0.3		
	AP CHEM A CR	1	0.3		
	AP CHEM B CR	1	0.3		
	AP PHYSICS B A	2	0.7	2	2.3

Table 17 (continued). Number of HISD Advanced Placement (AP) Apex Learning Courses Completed, by School and AP Course, 2011–2012 and 2012–2013

		2011	-2012	2012	-2013
School Name	AP Course	Number of	Percentage	Number of	Percentage
DeVry Contemporary Learning Center High School (not an HISD 2012–2013 school)	AP PHYS B A DLOC	Courses 1	of Courses	Courses NA	of Courses NA
Eastwood Academy	AP GOV&POL DLOC			1	1.2
	AP SPAN LA B DLOC			1	1.2
Empowerment College Prep High School	AP PSYCH DLOC	2	0.7		
Energized for STEM HS SE	AP BIOL A DLOC	31	10.3		
	AP GOV&POL DLOC			4	4.7
	AP SPAN LA B DLOC			10	11.6
	AP GOV&POL DLCR	1	0.3		
	AP PHYS B A DLOC			2	2.3
	AP PSYCH DLOC	45	14.9		
	AP SPAN LA A DLCR			2	2.3
	AP SPAN LA B DLOC	2	0.7		
	AP US HIST A DLCR	2	0.7		
	AP US HIST A DLOC			3	3.5
	AP US HIST B DLCR			3	3.5
Furr High School	AP ENG LA A DLOC	1	0.3		
	AP ENG LIT A DLOC	1	0.3		
	AP ENG LIT B DLOC			1	1.2
	AP PSYCH DLOC	1	0.3		
	AP SPAN LA A DLOC	2	0.7	1	1.2
	AP SPAN LA B DLOC	3	1.0	1	1.2
	AP US HIST B DLOC	1	0.3		
Houston Academy for International Studies	AP ENG LA A DLOC			1	1.2
	AP ENG LIT A DLCR	1	0.3		
	AP GOV&POL DLCR	1	0.3		
	AP PHYS B A DLCR			3	3.5
	AP PHYS B B DLOC			1	1.2

Number of HISD Advanced Placement (AP) Apex Learning Courses Table 17 (continued). Completed, by School and AP Course, 2011–2012 and 2012–2013

		2011	-2012	2012	-2013
School Name	AP Course	Number of	Percentage	Number of	Percentage
Houston Math, Science & Tech.	AD DUNG D A DUGG	Courses	of Courses	Courses	of Courses
Center	AP PHYS B A DLOC	1	0.3		
	AP PHYS B B DLOC	1	0.3		
	AP SPAN LA A DLOC	10	3.3	8	9.3
	AP SPAN LA B DLOC	3	1.0	2	2.3
Jones High School	AP PHYS B A DLOC	2	0.7		
	AP PHYS B B DLOC	2	0.7		
Jordan High School for Careers	AP MIC ECO DLOC			1	1.2
	AP PSYCH DLOC			1	1.2
	AP PHYS B B DLOC			1	1.2
Law Enforcement and Criminal Justice High School	AP PSYCH DLOC	7	2.3	3	3.5
Lee High School	AP GOV&POL DLOC			1	1.2
	AP MIC ECO-DLOC			1	1.2
	AP US HIST A DLCR	2	0.7		
Madison High School	AP PHYS B A DLOC	1	0.3		
	AP PHYS B B DLCR	1	0.3		
	AP PHYS B B DLOC	1	0.3		
Milby High School	AP SPAN LA A DLOC			1	1.2
	AP SPAN LA B DLOC			1	1.2
Mt. Carmel Academy	AP STATISTICS A			2	2.3
	AP STATISTICS B			2	2.3
North Houston Early College High School	AP ENG LA A DLCR	3	1.0		
	AP ENG LA B DLCR	8	2.6	2	2.3
	AP ENG LAN B CR	1	0.3		
	AP ENG LIT B DLOC			1	1.2
	AP SPAN LA A DLOC			1	1.2
	AP US HIST A DLCR			4	4.7
Reagan High School	AP PSYCH DLOC	16	5.3		

Number of HISD Advanced Placement (AP) Apex Learning Courses Table 17 (continued). Completed, by School and AP Course, 2011–2012 and 2012–2013

	completed, by action and		-2012		-2013
School Name	AP Course	Number of	Percentage	Number of	Percentage
		Courses	of Courses	Courses	of Courses
Scarborough High School	AP GOV&POL DLOC			2	2.3
	AP MAC ECO DLOC	2	0.7	1	1.2
	AP PHYS B A DLOC	1	0.3		1.2
	AP SPAN LA A DLOC			1	1.2
	AP SPAN LA B DLOC			1	1.2
	AP US HIST A DLOC	1	0.3		
	AP US HIST B DLOC	2	0.7		
	AP US HIST B DLCR			1	1.2
Sharpstown High School	AP BIOL A DLCR	2	0.7		
	AP BIOL A DLOC	4	1.3		
	AP BIOL B DLOC	6	2.0		
	AP GOV&POL DLOC	9	3.0		
	AP PHYS B B DLOC	2	0.7		
	AP SPAN LA A DLOC	4	1.3		
	AP SPAN LA B DLOC	2	0.7		
	AP US HIST A DLOC	1	0.3		
Sterling High School	AP CHEM A DLOC			1	1.2
	AP CHEM B DLOC			1	1.2
	AP ENG LA A DLOC	2	0.7		
	AP ENG LA B DLOC	1	0.3	1	1.2
	AP ENG LIT A DLOC			3	3.5
	AP ENG LIT B DLOC	1	0.3		
	AP GOV&POL DLOC	1	0.3		
	AP MAC ECO DLOC	1	0.3		
	AP US HIST A DLOC	1	0.3		
	AP US HIST B DLOC	1	0.3		
Waltrip High School	AP PSYCHOLOGY	1	0.3		

Table 17 (continued). Number of HISD Advanced Placement (AP) Apex Learning Courses Completed, by School and AP Course, 2011–2012 and 2012–2013 2011-2012 2012-2013 Number of Percentage Number of Percentage **School Name AP Course** Courses of Courses Courses of Courses AP ENG LA B DLCR Washington High School 0.3 AP ENG LIT A DLOC 1.2 1 AP ENG LIT B DLOC 1 1.2 AP SPAN LA A DLCR 0.3 AP SPAN LA B DLOC 1.2 AP SPAN LA A DLOC 2 0.7 Westside High School AP PHYS B A DLOC 1 0.3 AP SPAN LA A DLOC 2 0.7 AP SPAN LA B DLOC 2 0.7 Wheatley High School AP ENG LIT A DLOC 1.2 AP ENG LIT B DLOC 2 0.7 1.2 AP GOV&POL DLCR 0.3 1 Worthing High School AP ENG LIT A DLCR 1 0.3 AP ENG LIT B DLOC 0.3 AP GOV&POL DLOC 0.3 1 Yates High School AP PHYS B A DLOC 1 0.3 100.0 **TOTAL** 302 86 100.0

Note: Percentages may not total 100 due to rounding.

Table 18. HISD Online AP Courses Completed through Online Providers Other than Apex Learning, 2012-2013

Provider	School Name	AP Course	Number of Courses	Percentage of Courses
HVS	Performing and Visual Arts High School	AP ENG LIT A	1	3.4
		AP PSYCH DLOC	3	10.3
		AP STATISTICS A	3	10.3
		AP STATISTICS B	1	3.4
	Jordan High School for Careers	AP STAT A CR	1	3.4
Other Provider	Bellaire High School	AP BIOLOGY B	1	3.4
		AP CHEMISTRY A	1	3.4
		AP HUMAN GEO A	1	3.4
		AP PSYCHOLOGY	2	6.9
		AP SPAN LANG A	1	3.4
		AP STATISTICS A	1	3.4
		AP US GOVT	1	3.4
		AP US HISTORY A	1	3.4
	Performing and Visual Arts High School	AP COMP SCI 1A	3	10.3
		AP COMP SCI 1B	1	3.4
		AP PSYCHOLOGY	1	3.4
	Westside High School	AP ART HIST 3A	1	3.4
		AP COMP SCI A A	1	3.4
TxVSN St	Milby High School	AP CAL BC A	1	3.4
	Jordan High School for Careers	AP ENVIRN SCI A	1	3.4
	Washington High School	AP BIOL A DLOC	1	3.4
		AP BIOL B DLOC	1	3.4
TOTAL			29	100.0

Note: Percentages may not total 100 due to rounding.

Table 19. HISD Apex Learning Students Who Earned Credit in a Course Associated with an AP Examination and Results on the Associated AP Exams, 2011–2012 and 2012–2013

	2011–2012					2012–2013						
Apex Learning AP Course	Stu Awa Cı thr A	nber of dents arded redit ough pex irning	Lea Stu Who th	apex arning idents o Took e AP xam	Lea Stud wit	pex rning dents h AP ore 3 ligher	Stu Aw C thr	nber of idents arded redit rough apex arning	Lea Stu Who th	apex arning idents o Took e AP xam	Lea Stud wit Scor	pex rning dents h AP re 3 or gher
	N	%	N	%	N	%	N	%	N	%	N	%
Biology B	6	3.8	3	50.0	*							
Calculus AB B	1	0.6	1	100.0	*							
Chemistry B							10	23.8	10	100.0	0	0.0
English Language B	11	7.0	9	81.8	0	0.0	4	9.5	1	25.0	*	
English Literature B	4	2.5	2	50.0	*		4	9.5	1	25.0	*	
Government & Politics	14	8.9	1	7.1	*		4	9.5	1	100.0	*	
Macroeconomics	2	1.3	1	50.0	*		1	2.4	0	0.0	NA	
Microeconomics							2	4.8	0	0.0	NA	
Physics B	6	3.8	0	0.0	NA		2	4.8	1	50.0	*	
Psychology	72	45.9	52	72.2	1	1.9	4	9.5	2	50.0	*	
Spanish Language B	37	23.6	9	24.3	6	66.7	6	14.3	2	33.3	*	
Statistics							2	4.8	1	50.0	*	
US History B	4	2.5	2	50.0	*	0.0	3	7.1	0	0.0	NA	
TOTAL	157	100.0	80	51.0	8	10.0	42	100.0	18	41.9	4	22.2

Notes: Total numbers of students earning credits in courses are duplicated counts; 153 students took Apex Learning AP courses associated with an AP exam in 2011–2012 and 39 students took the courses in 2012–2013.

Percentages may not total 100 due to rounding.

Source: College Board

<sup>\*</sup> Test scores are not reported for fewer than five students.

Table 20. Independent Sample <i>t</i> Test of HISD AP Psychology Examination Scores for Apex Learning and All Other HISD Students, 2011–2012									
Groups	N	Mean	Std. Deviation	t	р	d			
Apex Learning Students	52	1.06	0.31						
Other HISD Students	495	2.47	1.56						
				t(397.1)=17.28	<.001	2.52			

Note: Effect size conventions for *d* are: .2 is small, .5 is medium, and .8 is large.