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

## SUBJECT: 2014-2015 AVID PROGRAM

## CONTACT: Carla Stevens, 713-556-6700

The Advancement Via Individual Determination (AVID) program was developed to increase the number of secondary students who participate in rigorous academic courses, to accelerate student learning, and to improve student performance. The AVID program in the Houston Independent School District (HISD) targets students who (1) are in the academic middle and earn grades of B, C, and D; (2) desire to go to college; (3) are willing to work hard; (4) are capable of completing rigorous curricula; and (5) are not reaching their full academic potential. The program's mission is to close achievement gaps through the use of educational strategies that prepare all students for success.

Key findings are as follows:

- Overall, 1,310 students were enrolled in the 2014-2015 AVID program, a 10.4 percent decrease from 2013-2014. Student enrollment increased 37.8 percent at the middle school level and decreased 45.6 percent at the high school level.
- Nearly two-thirds of AVID students ( 64.4 percent) and slightly more than one-third of nonAVID students (34.2 percent) enrolled in pre-AP courses. In addition, 19.9 percent of AVID students versus 4.8 percent of non-AVID students enrolled in AP courses.
- The number of Advanced Placement exams on which AVID students scored three or higher increased 18 percent from 2013-2014 to 2014-2015. In addition, the percentage of the AP exams on which students in AVID scored three or higher increased 2.7 percentage points from 2013-2014 to 2014-2015.
- Students in AVID achieved higher average scale scores than their non-AVID peers on all five STAAR EOC assessments administered in 2014-2015 (English I, English II, Algebra I, Biology, and U.S. History). Differences between the groups' scores were statistically significant on all the exams.
- Greater proportions of AVID students than non-AVID students met or exceeded (combined) Progress Measure standards on STAAR writing and STAAR EOC English II and Algebra I exams.
- Across student groups assessed, AVID students had greater proportions of students who met or exceeded (combined) Progress Measure standards on STAAR and STAAR EOC exams than did non-AVID students, with the exceptions of African American, White, and male AVID students in reading; Hispanic and economically disadvantaged AVID students in writing; and AVID students not at-risk for dropping out of school in all subjects analyzed.
- In 2014, AVID eighth-grade students scored slightly higher than their non-AVID peers in each subject on the ReadiStep assessment. The performance difference in writing was statistically significant.

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


Attachment
cc: Superintendent's Direct Reports
Derick Hutchinson
Dedre Jefferson


Educational Program Report

ADVANCEMENT VIA INDIVIDUAL DETERMINATION (AVID) 2014 - 2015

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# ADVANCEMENT VIA INDIVIDUAL DETERMINATION (AVID) FINDINGS RELATED TO STUDENT PERFORMANCE, 2014-2015 

EXECUTIVE SUMMARY

## Program Description

The Advancement Via Individual Determination (AVID) program is used in 16 countries, 44 states, and more than 5,000 schools, to help prepare teachers to support students of color and students with low socioeconomic backgrounds to succeed beyond obstacles that have historically kept generations of the students' ancestors out of college, i.e., poverty, language differences, and the lack of kinship with college graduates (Magee, 2015). AVID was developed originally in 1980 in San Diego, California by a high school English teacher to help students succeed in school through students' participation in nontraditional classrooms designed to meet their academic and emotional needs. AVID classrooms feature studentcentered decision-making, student contracts to outline their learning goals and willingness to work, and a curriculum with emphasis on academic reading and writing. AVID classrooms also highlight the teacher's role as students' advocate/advisor/counselor, academic support from teachers as well as trained and skillful tutors, emphasis on objective data, and a commitment to the Socratic process of inquiry for asking and responding to questions to illustrate ideas and advance critical thinking skills collaboratively. AVID's philosophy and framework are promoted through its nonprofit, global organization, which focuses in particular on low-income students who possess the capacity to complete college-preparatory coursework with the proper academic and emotional support. The program's mission is to close achievement gaps through the use of educational strategies that prepare all students for success in college and in our global society (AVID, 2015).

Equity in education is AVID's fundamental premise. The primary objectives of the AVID program are to increase the number of secondary students who participate in rigorous academic courses, such as Advanced Placement (AP) courses, to accelerate student learning, and to improve student performance. The AVID program in the Houston Independent School District (HISD) targets students who (1) are in the "academic middle" and earn grades of B, C, and D; (2) desire to go to college; (3) are willing to work hard; (4) are capable of completing rigorous curricula; and (5) are not reaching their full academic potential. Typically, these students (1) are enrolled in regular classes (non-gifted and talented, non-special education); (2) are economically disadvantaged or are from non-White families; (3) are underrepresented in four-year colleges; and (4) possess the potential to become first-generation college students. In order to be selected for the AVID program, students must have a GPA between 2.0 and 3.5 and never have taken an AP course. HISD teachers who elected to participate in the AVID program received training on the AVID curriculum to ensure it would be implemented appropriately. Students who participated in the AVID program on 12 HISD middle and high school campuses received tutoring twice weekly from volunteer AVID tutors. All tutors were college students. They provided content-specific support and guidance with reading, study skills, note-taking, organizational skills, writing, inquiry, collaboration, and critical thinking to enhance learning, including mathematical reasoning (Houston Independent School District, 2011).

The AVID program aligns with the district's Strategic Direction Core Initiative 3, "Rigorous Instructional Standards and Supports," and "College Readiness" as authorized under House Bill 1. The 2014-2015 AVID program was implemented in part through district funding for AVID materials, services (including professional development), and products obtained through the AVID Center Headquarters ( $\$ 110,412$ ).

## Highlights

- AVID participation decreased 10.4 percent from the 2013-2014 ( $n=1,462$ ) to the 2014-2015 school year ( $n=1,310$ ), with an increase of 37.8 percent at the middle school level and a decrease of 45.6 percent at the high school level.
- Pre-Advanced Placement (pre-AP), Advanced Placement (AP), and dual credit course enrollment rates for students in the AVID program were higher than non-AVID students' enrollment rates. A total of 64.4 percent of students in AVID and 34.2 percent of non-AVID students enrolled in preAP courses. A total of 19.9 percent of students in AVID and 4.8 percent of non-AVID students enrolled in AP courses. A total of 56.3 percent of high school students in AVID and 4.0 percent of non-AVID high school students enrolled in dual credit courses.
- Non-AVID students attained a significantly higher average pre-AP course grade (84.17) than the average pre-AP course grade for AVID students (81.26).
- AVID students' average AP course grade (77.97) was higher, but was not significantly higher than the average AP course grade for non-AVID students (77.76).
- The average dual credit course grade for non-AVID students (85.34) was higher than the average course grade for AVID students in dual credit courses (82.53). The difference was statistically significant.
- The number of Advanced Placement exams on which AVID students scored three or higher increased 18 percent from 50 in 2013-2014 to 59 in 2014-2015. In addition, the percentage of the AP exams taken on which students in AVID scored three or higher increased 2.7 percentage points from 15.0 percent in 2013-2014 to 17.7 percent in 2014-2015.
- AVID students achieved significantly higher average scale scores than their non-AVID peers on all STAAR subtests at each grade level except grade eight in mathematics where AVID students also achieved a higher average scale score than their non-AVID peers, but the difference was not statistically significant.
- Analyses of program effects on students' STAAR scores revealed the performance differences between AVID students and non-AVID students were substantially significant in reading at grade eight (0.26) and in mathematics at grade six (0.26) and grade seven (0.32).
- Students enrolled in AVID met the STAAR Level III Advanced performance standard at a higher rate than their peers who were not enrolled in AVID in reading and mathematics at grade six, mathematics at grade seven, and science at grade eight.
- Grade 9-11 students in AVID achieved higher average scale scores than their non-AVID peers on all five STAAR EOC assessments administered in 2014-2015 (English I, English II, Algebra I, Biology, and U.S. History). The differences between the groups' scores were statistically significant.
- Greater proportions of AVID high school students achieved Level III Advanced scores on STAAR EOC exams in English I, English II, Algebra I, Biology, and U.S. History than did the non-AVID students.
- Disaggregated by grade level, program effects on high school students' performance on STAAR EOC exams were substantially significant on all STAAR EOC exams at each grade level with at least five AVID and non-AVID students tested (English I at grade nine, English II at grades 9-11, Algebra I at grades 9-10; Biology at grade nine; and U.S. History at grade 11).
- On the STAAR EOC Algebra I exam, grade seven students in AVID scored higher than their nonAVID peers, while in grade eight non-AVID students scored higher than their AVID peers.
- Greater proportions of AVID students than non-AVID students met or exceeded (combined) Progress Measure standards on STAAR writing and STAAR EOC English II and Algebra I exams.
- Across student groups, AVID students had greater proportions of students who met or exceeded (combined) Progress Measure standards on STAAR and STAAR EOC exams than did non-AVID students, with the exceptions of African American, White, and male AVID students in reading, Hispanic and economically disadvantaged AVID students in writing, and AVID students not at-risk for dropping out of school in all subjects assessed.
- AVID students scored approximately 0.1 point higher than non-AVID students on ReadiStep critical reading, mathematics, and writing skills assessments in 2014. The difference between the groups' scores was statistically significant in writing skills.


## Recommendations

- Ensure that all students in student groups targeted by the district for program participation are appropriately identified and encouraged to participate in AVID.
- Explore ways to further improve the academic performance of AVID students who enroll in preAP, AP, and dual credit courses and who take AP, STAAR, and STAAR EOC assessments by identifying gaps in teaching and learning in pre-AP, AP, and dual credit courses.
- Closely examine and document the extent to which AVID schools and teachers in HISD implement each of the 11 AVID factors, which include employing the AVID curriculum and providing the instructional support necessary for AVID students to be as successful as possible in all their courses.


## Administrative Response

The continuity of the district's existing AVID campuses proved beneficial to the recruitment for and implementation of the AVID program for the 2014-2015 school year. Pre-existing site coordinators were able to provide mentorship to new site coordinators who participated in AVID's onboarding for the first time. Moreover, standardization of best practices for coordination of the AVID program across all AVID campuses was encouraged by the addition of new middle schools to the program.

In 2014-2015, AVID's District Director was able to monitor the strengths and weaknesses of the program on each AVID campus, as well as to connect with program personnel across the district to share ideas for program success. Campus site visits were conducted by the District Director. However, this posed challenges because, schedules for AVID classes were different across the district's AVID campuses and, sometimes, the AVID class schedules overlapped with AVID class schedules on other AVID campuses. Nonetheless, the District Director found AVID site coordinators were highly motivated to implement AVID on their campuses and encouraged students to perform at higher levels, using proven methods. In 2014-

2015, the biggest struggle to implement AVID with fidelity was to coordinate tutoring for the AVID elective classes. In fact, some schools were not able to accommodate the tutors' availability due to block schedules and split periods. In the future, a best practice will be implemented so that AVID elective courses are scheduled in ways that make them accessible and convenient for volunteer tutors on a regular basis.

## Introduction

Advancement Via Individual Determination (AVID) is a secondary education program to prepare students for the rigors of a four-year college or university. The Houston Independent School District (HISD) works to ensure the preparation of AVID students for higher education through a six-year plan which highlights collaborative learning and critical inquiry with specific focus on reading and writing. The plan was developed in collaboration with HISD's Federal and State Compliance, College Readiness, Career Readiness, and Dropout Prevention departments, and with the secondary lead counselors. It is now the official format for mapping student graduation plans in middle and high schools. AVID utilizes an array of strategies to support HISD students' successful completion of high school and entrance into college.

Equity in education is AVID's fundamental premise (Magee, 2015). The program components were developed originally in 1980 in San Diego, California by a high school English teacher, Mary Swanson, to help students succeed in school through students' participation in nontraditional classrooms designed to meet students' academic and emotional needs. The AVID philosophy and framework are promoted through its nonprofit, global organization which focuses on students, particularly low-income students, who possess the capacity to complete college-preparatory coursework and are able to do so with the proper academic and emotional support. AVID classrooms feature student-centered decision-making, student contracts to outline students' learning goals and willingness to work, a curriculum with emphasis on academic reading and writing, the teacher as student advocate/advisor/counselor, academic support from teachers and trained and skillful tutors, an emphasis on objective data, and a commitment to the Socratic process of inquiry for asking and responding to questions to illustrate ideas and to advance critical thinking skills collaboratively. The program's mission is to close achievement gaps through the use of educational strategies that prepare all students for success in a college or university and in our global society (AVID, 2015). In fact, AVID recently broadened its mission from targeting traditionally underserved students to transforming whole school systems to better support students of all backgrounds and walks of life (Magee, 2015).

In 16 countries, 44 states, and more than 5,000 schools, the AVID program is used to help prepare teachers to support students of color and students with low socioeconomic backgrounds to succeed beyond obstacles that have historically kept generations of the students' ancestors out of college, i.e., poverty, language differences, and the lack of kinship with college graduates (Magee, 2015). The AVID program employs four basic strategies to help students to develop their academic skills for success: writing, reading, collaboration, and inquiry to target students' needs. Writing and reading are emphasized across subjects to help students clarify, organize, understand, and communicate ideas. To improve their writing, students may participate in Cornell note-taking, prewriting, journaling/learning logs, draft and final draft, editing, and reader response activities. Activities to help students become more effective and confident life-long learners and readers include survey/question/read/record/recite/review/reflect (SQ5R), What I Know/Want to Learn/Learned (KWL), reciprocal teaching, and Think-Aloud. Unlike traditional models for teaching and learning, collaborative processes are infused throughout the AVID program and
include group projects, study groups, Jigsaw Activities, response/edit/revision groups, and Read-Around. Inquiry or questioning is AVID's foundational strategy and is used to help AVID students critique and synthesize information so they may advance to higher levels of thinking incrementally. This is achieved through skilled questioning and Socratic Seminars, as well as through critical thinking and openmindedness activities (Contreras, et al., 2007). Students may apply the techniques they learn in the AVID program in all their courses. During the 2014-2015 school year, students on 12 HISD middle and high school campuses participated in AVID.
There are three program goals outlined for AVID:

- Provide education reform and school improvement to advance student success in reading and mathematics.
- Increase Advanced Placement (AP), International Baccalaureate (IB), and dual credit course enrollment and completion for participating students.
- Expand learning opportunities through best practice models to improve teaching and learning (Department of Research and Accountability, 2012).


## Methods

- In mid-February 2015 the AVID District Director in HISD provided a list of 13 AVID schools for the 2014-2015 school year. Students in grades six through twelve who participated in at least one AVID elective course were grouped as AVID program participants. Student-level Cognos Chancery Ad Hoc Student Information System (Cognos Chancery Ad Hoc) records were used to identify secondary students who participated in at least one AVID elective course by March 2015. One of the 13 AVID schools identified by the AVID District Director did not have any students who were enrolled in AVID courses. Therefore, the campus was eliminated from this analysis.
- For a non-AVID comparison group, student-level Cognos Chancery Ad Hoc records were used to identify all other students at the same HISD schools as students who participated in an AVID course in 2014-2015. The data comprised 12 AVID schools (nine middle, one combined-level, and two high), with 850 middle and 460 high school program participants ( $n=1,310$ ). The combined-level school, Woodson Education Center, had AVID participants at the middle school level only, and therefore, is listed among the middle schools. All Houston Academy for International (HAIS) students in grades 911 participated in an AVID elective course, which resulted in no comparison (non-AVID) students at HAIS in grades 9-11.
- Identified students were matched to their HISD 2014-2015 Public Education Information Management System (PEIMS) student information and to their 2014-2015 State of Texas Assessments of Academic Readiness (STAAR), STAAR End-of-Course (EOC), and ReadiStep scores. STAAR and STAAR EOC scale scores and ReadiStep scores and national percentile ranks (NPRs) were retrieved from Cognos Chancery Ad Hoc databases. ReadiStep is administered at grade eight. NPRs were based on a national sample of $8^{\text {th }}$ and $9^{\text {th }}$ graders (CollegeBoard, 2013).
- AVID participants were also matched to HISD Advanced Placement (AP), International Baccalaureate (IB), and dual credit grades and/or examination (exam) databases. The data were used to determine students' participation, and grades in advanced courses, and performance on exams.
- 2014-2015 demographic data were available for the 1,310 AVID students in grades 6-12. Campus, grade level enrollment, and AVID course participation were retrieved from Cognos Chancery Ad Hoc
databases on March 4, 2015. All course participation and completion data were retrieved from Cognos Chancery Ad Hoc Grades files on July 8, 2015. Test participation and scores were retrieved from Cognos Chancery Ad Hoc databases during October 2015. The data included 850 AVID students in grades 6-8 and 460 AVID students in grades 9-12. This resulted in the inclusion of 12 schools ( 9 middle, one combined-level, and 2 high schools).
- For performance comparisons, the 2014-2015 course and examination performance of the non-AVID students on AVID campuses ( $\mathrm{n}=9,214$ ) was compared to students enrolled in the AVID program ( $\mathrm{n}=1,310$ ) during the 2014-2015 school year. Grade level enrollment data from Cognos Chancery Ad Hoc were used in the analyses.
- Unduplicated grade files for pre-Advanced Placement (pre-AP), AP (Advanced Placement), and dual credit courses taken by AVID students and non-AVID students on AVID campuses were retrieved. HISD schools that provide Inter-baccalaureate (IB) courses were not among the AVID schools; therefore, analysis of IB course performance was not conducted.
- Comparative analyses using independent $t$-tests, with probability levels set at $p \leq 0.05$ were conducted to determine the statistical significance of differences found between the mean performances of 2014-2015 students in AVID and non-AVID students on AVID campuses in pre-AP, AP, and dual credit courses using mean grades. Comparative analyses were also conducted using scale scores for 2014-2015 state-mandated, criterion-referenced STAAR tests for grades 6-8 and STAAR EOC tests for high school course-takers. Grade 3-8 STAAR mathematics progress measure scores were not available for 2014-2015 because the state administered a new test based on revised Texas Essential Knowledge and Skills (TEKS). In addition, comparative analyses were conducted using ReadiStep scores. Test data for groups smaller than five students were not included in the report. The number of students tested is included in statistics tables of results by exam.
- Some high school students take courses tested by the STAAR EOC out of sequence (Witte, 2014). Therefore, STAAR EOC exam results were aggregated for all AVID and for all non-AVID students on AVID campuses, as well as disaggregated by grade level to help target instructional improvements. No grade 12 STAAR EOC exam results were available for AVID students; therefore, grade 12 nonAVID results were not included in the analyses. AVID students were selected for program participation due to their under-achievement. Therefore, both first time and retesters were included to assess all AVID students who may have received program benefits.
- Students' scores on STAAR Progress Measures (the amount of growth non-ELL students made in a subject area from test to test) and ELL Progress Measures (the expected performance of ELL students taking into account their level of English language proficiency and years in U.S. schools) were obtained from the HISD Accountability-Consolidated Data Files, Files, CAF 2014-15 (1, 2, and 5). Each student receives either a STAAR Progress Measure or an ELL Progress Measure. The outcomes of these two measures were combined in this report. Results were compared for AVID and non-AVID students by gender and race/ethnicity as well as by economic disadvantage (free or reduced lunch) and at-risk status.
- Hedge's $g$ effect size statistics were used to determine the magnitude of the AVID program's effect on student performance-based mean differences between course or test performances of students in AVID and their non-AVID peers. A conservative standard deviation unit of .25 or higher was used to identify substantially important findings (Texas Education Agency, 2014).


## Data Limitations

- Complete budget information and program implementation data were not available.
- The comparison group of students was a convenience sample of students in the same schools and grades, and in many cases, in the same courses with AVID students and AVID teachers. AVID teachers who taught core content areas (AVID site team members) taught both AVID and nonAVID students, using the same instructional strategies. The fundamental difference(s) between the educational programming received by AVID students versus non-AVID students depended on the overall level of AVID program implementation on the campus, which could not be determined for this analysis. Campus-level AVID implementation data were not available for this report. Consequently, AVID students who experienced instructional strategies and supports that were different from those experienced by non-AVID students on their campuses could not be identified. Therefore, the comparison group used for the analyses was not a statistically matched sample, which is necessary for rigorous analyses of program effects. Though correlations can be identified, conclusions of causation cannot be made.
- Sufficient student performance data to allow comparisons of AVID and non-AVID students at some grade levels were not available for some measures due to group sizes of fewer than five students.
- Grade 3-8 STAAR mathematics progress measure scores were not available for 2014-2015, which impacted performance analyses conducted for grades 6-8 for this report.


## Results

What were the levels of participation in the AVID program from the 2011-2012 through the 20142015 school years, particularly in 2013-2014 and 2014-2015?

- In 2014-2015, 850 middle school and 460 high school students participated in AVID (Table 1, page 29).
- Figure 1 shows AVID program enrollment increased 24.1 percent over the last four years from 20112012 ( $\mathrm{n}=1,056$ ) to 2014-2015 ( $\mathrm{n}=1,310$ ), including a 37.8 percent increase among middle school students and a 4.8 percent increase among high school students. The highest enrollment in the time period was 1,641 students in 2012-2013 and enrollment has dropped each year since then.
- From 2013-2014 ( $\mathrm{n}=1,462$ ) to 2014-2015 ( $\mathrm{n}=1,310$ ), there was a 10.4 percent drop in AVID program participation, which included a 37.8 percent increase among middle school students and a 45.6 percent decrease among high school students. Figure 2 (page 9) shows 2013-2014 and 2014-2015 AVID participation by grade level.

Figure 1. AVID participation, 2011-2012 through 2014-2015


Source: Cognos Chancery Ad Hoc, March 4, 2015; Department of Research and Accountability, June 2015.
Figure 2. AVID participation by grade level, 2013-2014 and 2014-2015


Source: Cognos Chancery Ad Hoc, March 4, 2015; Department of Research and Accountability, June 2015.

- Figure 2 (page 8) shows AVID participation increased at each middle school grade level and at grade 11 from 2013-2014 to 2014-2015, with the most growth at grade 11 ( 51.0 percent). The largest decline ( 95.2 percent) was at grade 12.

How did the characteristics of 2014-2015 AVID participants compare to the characteristics of their non-AVID counterparts?

- There were 1,310 AVID participants and 9,214 non-AVID students on the twelve AVID campuses in HISD in 2014-2015 (Table 1 and Table 2, respectively, page 29). To explore the extent to which AVID participation was comparable to non-AVID participation at each grade level, Figure 3 shows the proportions of the total number of AVID and non-AVID students by grade level. To indicate comparable AVID participation, the proportion of AVID students at each grade level was expected to be comparable to the proportion of non-AVID students at the same grade level.
- The largest proportions of both AVID and non-AVID students were in the sixth through eighth grades. However, AVID and non-AVID students differed in that there were greater proportions of non-AVID than AVID students in grades six through eight and greater proportions of AVID versus non-AVID students in high school grades, nine through eleven (Figure 3; Table 1 and Table 2, respectively, page 29).
- The proportions of AVID and non-AVID students were most comparable at grade seven, with a difference of 1.9 percentage points. The proportions of AVID students and non-AVID students differed most at grade six by 10.0 percentage points (Table 3, page 30).

Figure 3. Percentage of total AVID and non-AVID students by grade level, 2014-2015


Source: Cognos Chancery Ad Hoc, March 4, 2015

- To assess the similarities and differences between the characteristics of the 1,310 AVID students and the non-AVID students, Figure 4 (page 10) shows the percentage of AVID and non-AVID students by their demographic characteristics. A total of 92.9 percent of AVID students and 91.7 percent of nonAVID students were Hispanic or African American, with far more Hispanic than African American students in each group.
- A slightly greater proportion of AVID students (81.5 percent) was economically disadvantaged than the proportion among non-AVID students (80.5). However, a larger proportion of non-AVID students ( 68.2 percent) than AVID students ( 57.7 percent) was classified as students at-risk. A much larger proportion of special education ( 11.5 percent) was found among non-AVID students than among AVID students (3.0). However, the proportion of gifted and talented students among AVID students ( 56.2 percent) was 19.5 percentage points greater than the proportion of gifted and talented students among non-AVID students ( 36.7 percent) on AVID campuses (Table 3, page 30).

Figure 4. Demographic characteristics of AVID and non-AVID students, 2014-2015


Student Charateristics
-AVID Non-AVID Students
Source: Cognos Chancery Ad Hoc, March 4, 2015

## Did AVID students enroll in more pre-AP, AP, and dual credit courses than non-AVID students?

- Figure 5 (page 11) shows the proportions of AVID students enrolled in pre-AP, AP, and dual credit courses were higher than the proportions of non-AVID students on AVID campuses enrolled in the courses. Fewer than five middle school AVID students enrolled in AP courses and, therefore, were not reported while 0.8 percent of non-AVID students enrolled in AP courses (Table 4, page 31).
- The biggest difference in the proportion of AVID students' and non-AVID students' course enrollment was found in high school Pre-AP course enrollment (75.7 percentage points), followed by high school dual credit course enrollment ( 52.3 percentage points).
- In total, nearly two-thirds of AVID students (64.4 percent) and slightly more than one-third of nonAVID students ( 34.2 percent) enrolled in pre-AP courses. In addition, 19.9 percent of AVID students versus 4.8 percent of non-AVID students enrolled in AP courses.
- The enrollment rate of AVID students in dual credit courses far exceeded the enrollment rate of nonAVID students ( 56.3 percent and 4.0 percent, respectively).

Figure 5. Enrollment rates for AVID and non-AVID students in pre-AP, AP, and dual credit courses, 2014-2015


## School Level and Program Participation Status

$$
■ \text { AVID } \quad \text { Non-AVID }
$$

Source: Cognos Chancery Ad Hoc Historical Grades File, July 8, 2015
Note: Course enrollment rates are based on the number of AVID students or non-AVID students who took pre-AP, AP, and dual credit courses;*Fewer than five students enrolled.

- Figure 6 shows students in AVID had a higher per student enrollment rate in pre-AP courses at the high school level and in total than non-AVID students based on the total number of AVID students or non-AVID students who took the courses (Table 4, page 31).
- Non-AVID students' per student enrollment rates were higher for pre-AP courses at the middle school level and for AP and dual credit courses at the high school level and in total.

Figure 6. Average number of courses per student for AVID and non-AVID students who were enrolled in pre-AP, AP, and dual credit courses, 2014-2015


School Level and Program Participation Status

$$
■ \text { AVID } \quad \text { Non-AVID }
$$

Source: Cognos Chancery Ad Hoc Historical Grades File, July 8, 2015
Note: Course per student enrollment rates are based on the number of AVID students or non-AVID students who took pre-AP, AP, and dual credit courses. *Fewer than five students enrolled.

## Did students in AVID make higher course grades in Pre-AP, AP, and dual credit courses than their

 non-AVID counterparts?- Figure 7 shows non-AVID students attained higher grade averages in pre-AP and dual credit courses than did AVID students, but made a lower average course grade in AP courses. The differences in pre-AP and dual credit grades were significant, while the difference between AVID and non-AVID students' AP grades was not statistically significant (Table 5, page 32).
- Analyses of the program effects on students' course grades revealed the performance differences were substantially significant (i.e., effect size $\geq 0.25$ standard deviations) for Pre-AP courses (Table 5, page 32).

Figure 7. Average pre-AP, AP, and dual credit course grades for AVID and non-AVID students, 2014-2015


Source: Cognos Chancery Ad Hoc Historical Grades File, July 8, 2015
Note:*Indicates statistical significance, $p \leq 0.001$.
How did the levels of AP exam participation and performance of students in the AVID program compare between the 2013-2014 and 2014-2015 school years?

- Though the total number of AVID students decreased from 1,462 in 2013-2014 to 1,310 in 20142015, Figure 8 (page 13) shows the number of AVID students taking AP exams decreased by only one student ( 0.4 percent), from 275 in 2013-2014 to 274 in 2014-2015.
- The percentage of the total number of AVID participants who took AP exams increased 2.1 percentage points, from 18.8 percent in 2013-2014 to 20.9 percent in 2014-2015 (Table 6, page 32).
- The number of AP exams taken by students in AVID increased by one exam ( 0.3 percent) from 333 in 2013-2014 to 334 in 2014-2015 (Table 6, page 32).

Figure 8. Number of students in AVID tested on AP exams and the number of AP exams taken by students in AVID, 2013-2014 and 2014-2015


- 2013-2014 ■ 2014-2015

Source: Cognos Chancery Ad Hoc, July 8, 2015

- Figure 9 shows the number of exams on which AVID students scored three or higher increased from 50 in 2013-2014 to 59 in 2014-2015. The percentage of the AP exams taken on which students in AVID scored three or higher increased 2.7 percentage points between the two years.

Figure 9. Number and percentage of AP exams on which AVID students scored three or higher, 2013-2014 and 2014-2015


Source: Cognos Chancery Ad Hoc, July 8, 2015

## Did students in AVID complete more AP exams than their non-AVID counterparts?

- In 2014-2015, 274 AVID participants took a total of 334 AP exams. This represented 46.3 percent of the 592 students enrolled in AVID who enrolled in AP courses (Figure 10). This compared to a lower percentage ( 32.1 percent or 382) of the 1,190 non-AVID participants who enrolled in AP courses and took 582 AP exams in 2014-2015 (Table 7, page 32).
- AVID students completed an average of 1.2 AP exams per student and non-AVID students completed a higher average of AP exams per student (1.5) than did AVID students (Figure 11) (Table 7, page 32).

Figure 10. Percentage of students in AVID and their non-AVID peers enrolled in AP courses who took AP exams, 2014-2015


Source: Cognos Chancery Ad Hoc, July 8, 2015

Figure 11. Average number of AP exams taken per student by students in AVID and their non-AVID peers, 2014-2015


[^0]
## Did students in AVID score higher on AP exams than their non-AVID counterparts?

- Figure 12 shows the percentage of AP exams on which students scored three or higher was 5.2 percentage points greater among non-AVID than AVID students (Table 7, page 32).

Figure 12. Percentage of AP exams on which AVID students and their non-AVID peers scored three or higher, 2014-2015


Source: Cognos Chancery Ad Hoc, July 8, 2015

Did students in AVID receive higher mean scores and more Level III Advanced scores on the STAAR examinations than their non-AVID counterparts?

- Figure 13 (page 16) shows AVID students achieved significantly higher average scale scores than their non-AVID peers on all STAAR subtests at each grade level except grade eight in mathematics, where AVID students also achieved a higher average scale score than their non-AVID peers, but the difference was smaller (10 points) and was not statistically significant (Table 8, page 33).
- Disaggregated by grade level, analyses of program effects on students' STAAR scores revealed performance differences between AVID and non-AVID students were substantially significant (i.e., effect size $\geq 0.25$ standard deviations) in reading at grade eight (0.26) and in mathematics at grade six (0.26) and grade seven (0.32) (Table 8, page 33).
- In addition, aggregated across grade levels, AVID students had a higher average scale score than did their non-AVID peers on STAAR reading and mathematics tests. The differences were statistically significant (Table 9, page 33).
- Analyses of program effects on students' aggregated STAAR scores revealed performance differences in reading between AVID and non-AVID students were substantially significant (i.e., effect size $\geq 0.25$ standard deviations). (Table 9, page 33.)

Figure 13. STAAR performance in all subjects tested in grades 6-8 for students who enrolled in AVID and their non-AVID peers, 2014-2015


Subject and Grade Level
$■$ AVID - Non-AVID

Source: Cognos Chancery Ad Hoc, October 7, 2015
Note:*Indicates statistical significance, $p \leq 0.01$.

- In total, Figure 14 shows students enrolled in AVID met the Level III Advanced performance standard at higher rates than non-AVID students on four of the nine STAAR tests administered, including reading and mathematics at grade six, mathematics at grade seven, and science at grade eight. The largest differences among these scores were in mathematics at grade six ( 5.2 percentage points) and grade seven (3.8 percentage points). (Table 10, page 34.)
- Non-AVID students met the Level III Advanced performance standard at higher rates than AVID students in five of the nine STAAR tests administered, including reading and writing at grade seven and reading, mathematics, and social studies at grade eight. The largest differences were at grade eight in mathematics ( 3.9 percentage points) and social studies ( 3.2 percentage points) (Table 10, page 34).

Figure 14. STAAR Level III Advanced performance for students in grades 6-8 who enrolled in AVID and their non-AVID peers, 2014-2015


> Subject and Grade Level
> $\square$ AVID $\quad$ Non-AVID

Source: Cognos Chancery Ad Hoc, October 7, 2015

## Did students in AVID receive higher mean scores and more Level III Advanced scores on STAAR End-of-Course (EOC) examinations than their non-AVID counterparts?

- STAAR EOC performance results for first time and retesters were included in the analysis. Figure 15 shows AVID students in grades 9-11 achieved higher average scale scores than their non-AVID peers on the five state-mandated STAAR EOC assessments administered in 2014-2015 (English I, English II, Algebra I, Biology, and U.S. History). The differences between AVID and non-AVID students' average scale scores were statistically significant (Table 11, page 35).
- Analyses of program effects on grades 9-11 student performance on STAAR EOC exams, revealed the performance differences were substantially significant (i.e., effect size $\geq 0.25$ standard deviations) on all of the five STAAR EOC exams, with effect sizes between 0.44 and 1.13 (Table 11, page 35).

Figure 15. STAAR End of Course mean scale scores in all subjects for students in grades 9-11 who enrolled in AVID and their non-AVID peers, 2014-2015


Source: Cognos Chancery Ad Hoc, October 7, 2015
Note:*Indicates statistical significance, $p \leq 0.001$. No grade 12 STAAR EOC exam results were available for AVID students; therefore, grade 12 non-AVID results were not included in the analyses.

- Some high school students take STAAR courses and the related EOC exams out of sequence. In addition, middle school students who show the potential for success in Algebra I, in particular, are encouraged to take the Algebra I course in the $8^{\text {th }}$ grade, which is not consistent with the standard course sequence. To help target instructional improvements, STAAR EOC exam results are presented by subject and grade level in Figure 16 through Figure 21 (pages 18-21) (Table 11 and Table 12, pages 35 and 36 ).
- Sufficient STAAR EOC exam data to allow statistical comparisons of the performances of high school students in AVID and students not enrolled in AVID by grade level were available for English I students in grade nine, English II students in grades 9-11, Algebra I students in grades 7-10, Biology students in grade nine, and U.S. History students in grade 11.
- Figure 16 shows AVID high school students achieved higher average scale scores than non-AVID students on each exam and at each grade level with AVID results. The differences between AVID and non-AVID students were statistically significant in English I at grade nine, English II at grade 10, and Algebra I at grades nine and 10. These tests were given at the appropriate grade levels, consistent with the standard course sequence, except Algebra I at grade 10 (Table 12, page 36).

Figure 16. STAAR End of Course performance in ELA and mathematics for high school students who enrolled in AVID and their non-AVID peers by grade level, 2014-2015


Source: Cognos Chancery Ad Hoc, October 7, 2015
Note:*Indicates statistical significance, $p \leq 0.05$; **Fewer than five students tested.

- Figure 17 shows students enrolled in AVID achieved significantly higher average scale scores than their peers who were not enrolled in AVID in Biology at grade nine and U.S. History at grade 11 which were given at the appropriate grade levels, consistent with the standard course sequence (Table 12, page 36).

Figure 17. STAAR End of Course performance in science and social studies for high school students enrolled in AVID and their non-AVID peers by grade level, 2014-2015


Subject and Grade Level

$$
■ \text { AVID } \quad \text { Non-AVID }
$$

Source: Cognos Chancery Ad Hoc, October 7, 2015
Note:*Indicates statistical significance, $p \leq 0.001$. **Fewer than five students tested.

- Disaggregated by grade level, analyses of program effects on grades 9-11 student performance on STAAR EOC exams revealed the performance differences between AVID and non-AVID students were substantially significant (i.e., effect size $\geq 0.25$ standard deviations) on all STAAR EOC exams at each grade level with at least five AVID and non-AVID students tested. Effect sizes ranged between 0.42 and 1.06 (Table 12, page 36).
- Sufficient STAAR EOC exam data were available to allow statistical comparisons of the Algebra I performances by grade level of middle school students in AVID and students not enrolled in AVID.
- Figure 18 shows grade seven students enrolled in AVID achieved a higher average scale score on the Algebra I exam than their peers who were not enrolled in AVID, while grade eight non-AVID students achieved the higher score. The differences between the $7^{\text {th }}$ and $8^{\text {th }}$ grade AVID versus nonAVID students were not statistically significant. However, aggregated across grade levels, the nonAVID students' average STAAR EOC Algebra I scale score was significantly higher than the AVID students' average score (Table 11 and Table 12, pages 35 and 36).

Figure 18. STAAR End of Course performance on Algebra I and Biology exams for middle school students who enrolled in AVID and their non-AVID peers, 2014-2015


Subject and Grade Level
-AVID - Non-AVID
Source: Cognos Chancery Ad Hoc, October 7, 2015
Note:*Indicates statistical significance, $p \leq 0.05$; **Fewer than five students tested.

- Program effects on middle school student performance on the STAAR EOC Algebra exam were substantially significant (i.e., effect size $\geq 0.25$ standard deviations) overall where non-AVID students scored higher than AVID students $(-0.29)$ and at grade seven where AVID students scored higher than their non-AVID peers (0.37). However, the effect size for grade eight Algebra I where non-AVID students scored higher than AVID students was not substantially significant ( 0.20 ). (Table 12, page 36.)
- Figure 19 (page 20) shows greater proportions of grades 9-11 AVID students (in total) achieved Level III Advanced scores on the five STAAR EOC exams in (English I, English II, Algebra I, Biology, and U.S. History) than did the non-AVID students (Table 13, page 37).
- The largest differences of 28.9, 11.5, and 10.6 percentage points between AVID and non-AVID students' STAAR EOC Level III Advanced performances in total were on Algebra I, U.S. History I, and Biology exams, respectively (Table 13, page 37).

Figure 19. STAAR End of Course Level III Advanced performance in English I, English II, and Algebra I for grades 9-11 students who enrolled in AVID and their non-AVID peers, 2014-2015


Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: No grade 12 STAAR EOC exam results were available for AVID students; therefore, grade 12 non-AVID results were not included in the analyses. None of the non-AVID students achieved Level III Advanced in English II.

- STAAR EOC Level III Advanced results presented by grade level in Figure 20 show high school students enrolled in AVID had larger proportions of Level III Advanced scores than did non-AVID students on English I, Algebra I, and Biology exams at grade nine, English II exams at grade 10, and U.S. History exams at grade 11. These exams were given at the grade level consistent with the standard course sequence (Table 13, page 37).

Figure 20. STAAR End of Course Level III Advanced performance for high school students who enrolled in AVID and their non-AVID peers by grade level, 2014-2015


Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: *Fewer than five students tested. A zero indicates none of the students reached the Level III Advanced standard.

- Middle school STAAR EOC Level III Advanced results, presented by grade level and in total in Figure 21, show students enrolled in AVID had a larger proportion of Level III Advanced scores than did nonAVID students on the Algebra I exam at grade seven. However, at grade eight and in total in Algebra I, non-AVID students had higher proportions of students who achieved Level III Advanced performance on their EOC exams. All middle school EOC exams were given to Advanced course sequence students (Table 13, page 37).

Figure 21. STAAR End of Course Level III Advanced performance on Algebra I and Biology exams for middle school students who enrolled in AVID and their non-AVID peers by grade level, 2014-2015


Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: *Fewer than five students tested.

Did 2014-2015 students in AVID score higher on STAAR Progress Measures and ELL Progress Measures than their non-AVID counterparts?

- For all AVID and non-AVID students with Progress Measure results based on either STAAR or STAAR EOC progress or on ELL progress measures, Figure 22 (page 22) shows greater proportions of AVID students than non-AVID students met or exceeded (combined) Progress Measure standards on STAAR writing and STAAR EOC English II and Algebra I exams (Table 14, page 38).
- Figure 23 (page 22) shows greater proportions of AVID students than their non-AVID counterparts achieved the "Met" or "Exceeded" Progress Measure standards (combined) on STAAR and STAAR EOC exams, across the races/ethnicities assessed, with the exception of African American and White AVID students in reading and Hispanic AVID students in writing (Table 15, page 39).

Figure 22. STAAR and STAAR EOC Progress and ELL Progress Measure results for students who enrolled in AVID and their non-AVID peers, 2014-2015


Source: HISD Accountability-Consolidated Data Files, CAF 2014-15 (1, 2, and 5)
Note: *Results not presented for fewer than five students.
Figure 23. STAAR and STAAR EOC Progress and ELL Progress Measure results for students who enrolled in AVID and their non-AVID peers by race/ethnicity, 2014-2015




Source: HISD Accountability-Consolidated Data Files, CAF 2014-15 (1, 2, and 5)
Note: *Results not presented for fewer than five students.

- Figure 24 shows greater proportions of AVID students than their non-AVID counterparts achieved the "Met" or "Exceeded" Progress Measure standards (combined) on STAAR and STAAR EOC exams, across gender groups, with the exception of male AVID students in reading (Table 16, pages 40-41).

Figure 24. STAAR and STAAR EOC Progress and ELL Progress Measure results for students who enrolled in AVID and their non-AVID peers by gender, 2014-2015



Source: HISD Accountability-Consolidated Data Files, CAF 2014-15 (1, 2, and 5)
Note: *Results not presented for fewer than five students.

- Figure 25 (page 24) shows greater proportions of AVID students than their non-AVID counterparts achieved the "Met" or "Exceeded" Progress Measure standards (combined) on STAAR and STAAR EOC exams assessed, regardless of economic status, with the exception of economically disadvantaged AVID students in writing and AVID students who were not economically disadvantaged in reading (Table 16, pages 40-41).
- Figure 26 (page 24) shows greater proportions of AVID students at-risk for dropping out of school than their non-AVID counterparts achieved the "Met" or "Exceeded" Progress Measure standards (combined) on all STAAR and STAAR EOC exams (Table 16, pages 38-39). Conversely, greater proportions of non-AVID students not at-risk for dropping out of school than their AVID counterparts achieved the "Met" or "Exceeded" Progress Measure standards (combined) on all STAAR and STAAR EOC exams assessed (Table 16, pages 40-41).

Figure 25. STAAR and STAAR EOC Progress and ELL Progress Measure results for students who enrolled in AVID and their non-AVID peers by economic status, 2014-2015



- AVID Non-AVID

Source: HISD Accountability-Consolidated Data Files, CAF 2014-15 (1, 2, and 5)
Note: Results not presented for fewer than five students.
Figure 26. STAAR and STAAR EOC Progress and ELL Progress Measure results for students who enrolled in AVID and their non-AVID peers by at-risk status, 2014-2015


Source: HISD Accountability-Consolidated Data Files, CAF 2014-15 (1, 2, and 5)
Note: *Results not shown for fewer than five students.

## Did 2014-2015 students in AVID score higher on ReadiStep exams than their non-AVID

 counterparts?- The College Board ReadiStep critical reading, mathematics, and writing skills exams are given in grade eight to indicate students' readiness for the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) and for the SAT Reasoning Test. Scores are reported on a scale of 1-7 points (Table 17, page 42).
- Figure 27 shows AVID students scored 0.1 point higher than their non-AVID peers in each subject area in 2014. The difference between the groups was statistically significant in writing skills. However, the highest mean score in any subject for either group was only half (AVID 3.5 in mathematics) or nearly half (non-AVID 3.4 in mathematics) of the maximum score of 7 points (Table 18, page 42).

Figure 27. ReadiStep performance for 2014-2015 $8^{\text {th }}$-grade AVID students and their nonAVID peers, fall 2014


Source: Cognos Chancery Ad Hoc, October 7, 2015
Note:*Indicates statistical significance, $p \leq 0.05$.

- The national percentile ranks (NPRs) presented in Table 17 (page 42) show AVID students reached the $42^{\text {nd }}$ percentile in writing skills and the $47^{\text {th }}$ percentile in mathematics. This constituted five and four percentile points, respectively, higher than their non-AVID peers.
- Analyses of program effects on student performance on the ReadiStep exams revealed the performance differences were not substantially significant (i.e., effect size not $\geq 0.25$ standard deviations), with effect sizes ranging from 0.08 for mathematics to 0.16 for writing skills (Table 18, page 42).


## Discussion

The district has implemented the AVID program to target students who (1) are in the academic "middle" and earn grades of B, C, and D; (2) desire to go to college; (3) are willing to work hard; (4) are capable of completing rigorous curricula; and (5) are not reaching their full academic potential. Typically, these students (1) are enrolled in regular (non-gifted/talented, non-special education) classes; (2) are economically disadvantaged or are from non-White families; (3) are underrepresented in four-year colleges; and (4) possess the potential to become first-generation college students (Houston Independent School District, 2011).

Student participation in the AVID program increased 24.1 percent over the last four years from 20112012 ( $\mathrm{n}=1,056$ ) to 2014-2015 ( $\mathrm{n}=1,310$ ), including a 37.8 percent increase among middle school students and a 4.8 percent increase among high school students. However, from the 2013-2014 school year to the 2014-2015 school year, AVID participation decreased 10.4 percent, including a 37.8 increase at the middle school level and a 45.6 percent decrease at the high school level. Recent changes in AVID participation resulted from five 2013-2014 AVID high schools that for various reasons did not have their contracts to participate renewed for 2014-2015. In addition, the federal Race To The Top grant (managed through the Linked Learning Department) funded middle school students' participation in the 2014-2015 AVID program. To further support program participation, it may prove beneficial to ensure that all students with characteristics targeted by the district for program participation are appropriately identified and encouraged to participate in AVID, with heightened focus on grade levels with smaller proportions of AVID students than non-AVID students in 2014-2015.

Findings of this report reveal pre-AP, AP, and dual credit course enrollment rates were higher for students in AVID than for non-AVID students. However, non-AVID students achieved higher average grades in pre-AP and dual credit classes, but a slightly lower average course grade than their AVID peers in AP courses. The performance differences in pre-AP and dual credit course grades were statistically significant ( $p \leq 0.05$ ). Analysis of the program effects revealed the pre-AP performance difference was substantially significant (i.e., effect size $\geq 0.25$ standard deviations), in favor of non-AVID programming. This finding clearly supports the need to explore instructional improvements to enhance student learning and achievement in all AVID students' courses and particularly in pre-AP courses.

From 2013-2014 to 2014-2015, the percentage of AVID students taking AP exams increased 2.1 percentage points and the percentage of AVID students' exams that were scored three or higher increased 2.7 percentage points. However, a greater proportion of non-AVID students ( 22.9 percent) scored three or higher on AP exams than did AVID students (17.7 percent) in 2014-2015. Proactive steps to identify gaps in teaching and learning in pre-AP, AP, and dual credit courses may help improve AVID student performance in coursework and on associated exams.

Generally, in 2014-2015, students in AVID outperformed their non-AVID peers on state standardized assessments (STAAR and STAAR EOC) and on ReadiStep. Analyses of program effects on STAAR performance differences between AVID and non-AVID students were mixed, but were substantially significant for each STAAR EOC exam except Algebra I taken by $8^{\text {th }}$-graders. Further, AVID students showed greater progress on state-mandated assessments than their non-AVID peers. Greater proportions of AVID students than non-AVID students met Progress Measure standards on STAAR reading and STAAR EOC English II and Algebra I exams as well as exceeded Progress Measure standards on STAAR writing exams and on STAAR EOC English II and Algebra I exams. These results
support previous research that indicate students in an AVID program show higher mean scores than nonAVID students on state-mandated assessments of reading, mathematics, and science (Murray, 2012).

Disaggregated by student group, AVID students had greater proportions of students who met or exceeded (combined) Progress Measure standards on STAAR and STAAR EOC exams than did nonAVID students, with the exceptions of African American, White, and male students in reading; Hispanic and economically disadvantaged students in writing; and students not at-risk for dropping out of school in all subjects assessed. Targeted interventions may be warranted to identify and address the needs of these students relative to the identified subject areas.

Furthermore, the performances of AVID students in pre-AP and dual credit courses (outperformed by non-AVID peers), on AP exams (lower percentages of exams scored three or higher as compared to their non-AVID peers), and on ReadiStep exams (scored only half of the maximum points in one subject, mathematics) highlight crucial areas for program improvements. The need for program improvements was confirmed by results of analyses of program effects on pre-AP and dual credit course grades (more favorable for non-AVID students), STAAR (mixed with some substantial impact), and ReadiStep (no substantial impact, but favorable for AVID students). A study in which cognitive principles were applied to education interventions concluded that AVID's conventional strategies (unlike metacognitive approaches) do not support long-term retention and transfer of knowledge. Some researchers have suggested this may explain AVID's failure to demonstrate strong program effects on students' learning and study skills (ED Week 2015). Explorations of ways to improve student learning and retention for the heightened academic performance of AVID students are warranted.

It is also important to note that in HISD, AVID teachers also teach other campus students (non-AVID students) and use the same instructional strategies as used with AVID students. This approach may be consistent with AVID's new, broader mission of whole school reform (Magee, 2015); however, it weakens the results of comparative analyses between the two groups of students. Though AVID students have exclusive access to elective AVID courses, AVID and non-AVID students are taught by AVID teachers who use the same strategies with both student groups. This seems to indicate a form of 'contamination' of the comparison group through a 'bleed-over' of the treatment (i.e., classroom instruction by AVID-trained teachers). Therefore, overall, the results of this analysis should be considered with this in mind. In future analyses, AVID implementation data (which was not available for this report) should be used to conduct more rigorous analyses of program impacts on student performance. It will be important to ensure that a statistically matched comparison of "AVID" students to "non-AVID" students is grounded upon actual differences in the educational programming received by the different groups of students and that 'bleedover' effects are assessed. This may clarify the mixed outcomes on program effects found in this analysis.

Moreover, to better prepare more students in AVID for greater levels of success in advanced courses and on associated assessments and college-readiness exams, program administrators should consider confirming program adherence to the 11 factors that AVID has identified to guide the overall program philosophy, successful implementation of the program, and the success of AVID students (Contreras, et al., 2009). Careful attention to the program features may prove beneficial to improve program participation and to heighten positive student achievement outcomes among students in the AVID program. It is recommended that AVID administrators closely examine the extent to which AVID schools and teachers in HISD implement each of the 11 AVID factors, which include employing the AVID curriculum and providing the instructional support necessary for AVID students to be as successful as possible in all their courses and on examinations.

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## Table 1: Number of AVID Participants by Grade Level and School, 2014-2015

| School Name | Grade Level |  |  |  |  |  |  | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 6th | 7th | 8th | 9th | 10th | 11th | 12th |  |
| Deady MS | - | 24 | 60 | - | - | - | - | $\mathbf{8 4}$ |
| Henry MS | 62 | 57 | 65 | - | - | - | - | $\mathbf{1 8 4}$ |
| Holland MS | - | 28 | 26 | - | - | - | - | 54 |
| Jackson MS | 22 | 24 | - | - | - | - | - | 46 |
| Ortíz MS | 48 | 46 | 52 | - | - | - | - | $\mathbf{1 4 6}$ |
| Revere MS | - | 45 | 41 | - | - | - | - | 86 |
| Stevenson MS | 25 | 16 | 26 | - | - | - | - | $\mathbf{6 7}$ |
| Thomas MS | - | 24 | - | - | - | - | - | $\mathbf{2 4}$ |
| Westbriar MS | 16 | - | - | - | - | - | - | $\mathbf{1 6}$ |
| Woodson Education Center | 49 | 52 | 42 | - | - | - | - | $\mathbf{1 4 3}$ |
| Middle School Total | $\mathbf{2 2 2}$ | $\mathbf{3 1 6}$ | $\mathbf{3 1 2}$ |  |  |  |  | $\mathbf{8 5 0}$ |
| Houston Academy for |  |  |  |  |  |  |  |  |
| International Studies HS | - | - | - | 122 | 104 | 104 | $\mathbf{2}^{*}$ | $\mathbf{3 3 2}$ |
| Madison HS | - | - | - | 49 | 38 | 41 | - | $\mathbf{1 2 8}$ |
| High School Total | - | - | - | $\mathbf{1 7 1}$ | $\mathbf{1 4 2}$ | $\mathbf{1 4 5}$ | $\mathbf{2}^{*}$ | $\mathbf{4 6 0}$ |
| AVID Total | $\mathbf{2 2 2}$ | $\mathbf{3 1 6}$ | $\mathbf{3 1 2}$ | $\mathbf{1 7 1}$ | $\mathbf{1 4 2}$ | $\mathbf{1 4 5}$ | $\mathbf{2}^{*}$ | $\mathbf{1 , 3 1 0}$ |

Source: Cognos Chancery Ad Hoc Student Information System, March 4, 2015
Note: *Grade levels with fewer than five students were not matched with non-AVID students and were not included in student performance analyses, which resulted in 2 student omissions (*) and 1,308 student inclusions.

Table 2: Number of Non-AVID Students by Grade Level and School, 2014-2015

| School Name | Grade Level |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6th | 7th | 8th | 9th | 10th | 11th | 12th |  |
| Deady MS | 223 | 251 | 222 | - | - | - | - | 696 |
| Henry MS | 74 | 83 | 51 | - | - | - | - | 208 |
| Holland MS | 236 | 208 | 215 | - | - | - | - | 659 |
| Jackson MS | 272 | 196 | 321 | - | - | - | - | 789 |
| Ortíz MS | 297 | 303 | 314 | - | - | - | - | 914 |
| Revere MS | 425 | 352 | 406 | - | - | - | - | 1,183 |
| Stevenson MS | 405 | 434 | 425 | - | - | - | - | 1,264 |
| Thomas MS | 169 | 143 | 169 | - | - | - | - | 481 |
| Westbriar MS | 323 | 350 | 382 | - | - | - | - | 1,055 |
| Woodson Education Center | 52 | 77 | 98 | - | - | - | - | 227 |
| Middle School Total | 2,476 | 2,397 | 2,603 |  |  |  |  | 7,476 |
| Houston Academy for International Studies HS | - | - | - | 0 | 0 | 0 | 26^ | 26 |
| Madison HS | - | - | - | 544 | 454 | 331 | 383^ | 1,712 |
| High School Total |  |  |  | 544 | 454 | 331 | 409^ | 1,738 |
| Total | 2,476 | 2,397 | 2,603 | 544 | 454 | 331 | 409^ | 9,214 |

[^1]Table 3. Characteristics of AVID Participants and Non-AVID Students, 2014-2015

|  | AVID Students$(\mathrm{N}=1,310)$ |  | Non-AVID Students$(\mathrm{N}=9,214)$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% |
| Grade |  |  |  |  |
| 6 | 222 | 16.9 | 2,476 | 26.9 |
| 7 | 316 | 24.1 | 2,397 | 26.0 |
| 8 | 312 | 23.8 | 2,603 | 28.3 |
| 9 | 171 | 13.1 | 544 | 5.9 |
| 10 | 142 | 10.8 | 454 | 4.9 |
| 11 | 145 | 11.1 | 331 | 3.6 |
| 12 | 2 | 0.2 | 409 | 4.4 |
| Total | 1,310 | 100.0 | 9,214 | 100.0 |
| Gender |  |  |  |  |
| Male | 607 | 46.3 | 4,898 | 53.2 |
| Female | 703 | 53.7 | 4,316 | 46.8 |
| Total | 1,310 | 100.0 | 9,214 | 100.0 |
| Race/Ethnicity |  |  |  |  |
| Asian/Pacific Islander | 44 | 3.4 | 247 | 2.7 |
| African American | 428 | 32.7 | 2,408 | 26.1 |
| Hispanic | 789 | 60.2 | 6,041 | 65.6 |
| American Indian/Alaska Native | 2 | 0.2 | 19 | 0.2 |
| White | 41 | 3.1 | 459 | 5.0 |
| Two or more | 6 | 0.5 | 40 | 0.4 |
| Total | 1,310 | 100.1 | 9,214 | 100.0 |
| Economic Disadvantaged | 1,068 | 81.5 | 7,414 | 80.5 |
| At-Risk | 756 | 57.7 | 6,286 | 68.2 |
| Special Education | 39 | 3.0 | 1,060 | 11.5 |
| Gifted/Talented | 736 | 56.2 | 3,384 | 36.7 |

Source: Cognos Chancery Ad Hoc Student Information System, March 4, 2015
Note: Economic Disadvantaged, At-Risk, Special Ed., and Gifted/Talented numbers represent duplicated counts.

## Table 4. Number of Pre-AP, AP, and Dual Credit Course Enrollments for AVID and Non-AVID

 Students by Course Type, School Level, and School, 2014-2015|  | Pre-AP |  | AP |  | Dual Credit |  | Total Students |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AVID | NonAVID | AVID | Non- AVID | AVID | NonAVID | AVID | Non- <br> AVID |
| Students |  |  |  |  |  |  |  |  |
| Middle School Students | 408 | 2,823 | 1 | 60 | - | - | 850 | 7,476 |
| High School Students | 436 | 332 | 260 | 378 | 259 | 70 | 460 | 1,738 |
| Total Students Enrolled | 844 | 3,155 | 261 | 438 | 259 | 70 | 1,310 | 9,214 |
| Course Enrollments |  |  |  |  |  |  | Total Enrollments |  |
| Middle School |  |  |  |  |  |  | AVID | $\begin{aligned} & \text { Non- } \\ & \text { AVID } \end{aligned}$ |
| Deady MS | 31 | 560 | - | - | - | - | 31 | 560 |
| Henry MS | 249 | 136 | - | - | - | - | 249 | 136 |
| Holland MS | 168 | 682 | - | - | - | - | 168 | 682 |
| Jackson MS | - | 710 | - | 29 | - | - | - | 739 |
| Ortíz MS | 360 | 801 | - | - | - | - | 360 | 801 |
| Revere MS | 123 | 960 | 2 | 40 | - | - | 125 | 1,000 |
| Stevenson MS | 142 | 2,095 | - | - | - | - | 142 | 2,095 |
| Thomas MS | 12 | 236 | - | - | - | - | 12 | 236 |
| Westbriar MS | 4 | 2,487 | - | 48 |  |  | 4 | 2,535 |
| Woodson Education Center | 40 | - | - | - | - | - | 40 | - |
| Middle School Total Course Enrollments | 1,129 | 8,667 | 2 | 117 | - | - | 1,131 | 8,784 |
| High School |  |  |  |  |  |  |  |  |
| Houston Academy for International HS | 2,075 | 22 | 418 | 53 | 718 | 114 | 3,211 | 189 |
| Madison HS | 374 | 1,210 | 172 | 1,020 | 9 | 118 | 555 | 2,348 |
| High School Total Course Enrollments | 2,449 | 1,232 | 590 | 1,073 | 727 | 232 | 3,766 | 2,537 |
| Total Course Enrollments | 3,578 | 9,899 | 592 | 1,190 | 727 | 232 | 4,897 | 11,321 |

Source: Cognos Chancery Ad Hoc Historical Grades File, July 8, 2015

## Table 5. Results of Statistical Analyses of Differences Between Average Course Grades Earned by AVID and non-AVID Students by Course Type, 2014-2015

| Course <br> Type |  | N | Mean | Std. <br> Dev. | t | df | Sig. <br> (2-tailed) | Mean Diff. | Effect Size |
| :--- | :---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-AP | AVID | 3,578 | 81.26 | 9.56 | -15.611 | 6310.493 | 0.000 | -2.908 | -0.31 |
|  | Non-AVID | 9,898 | 84.17 | 9.52 |  |  |  |  |  |
| AP | AVID | 592 | 77.97 | 11.50 | 0.351 | 1374.053 | 0.726 | 0.216 | 0.02 |
|  | Non-AVID | 1,190 | 77.76 | 13.61 |  |  |  |  |  |
| Dual |  |  |  |  |  |  |  |  |  |
| Credit | AVID | 725 | 82.53 | 12.07 | -3.553 | 468.708 | 0.000 | -2.807 | -0.24 |
|  | Non-AVID | 232 | 85.34 | 9.91 |  |  |  |  |  |

Source: Cognos Chancery Ad Hoc Historical Grades File, July 8, 2015
Note: Two AVID students did not have scores for dual credit courses. Effect sizes of 0.25 or higher indicates substantially important findings (Texas Education Agency, 2014).

|  | $\begin{gathered} 2013-2014 \\ (\mathrm{~N}=1,462) \\ \hline \end{gathered}$ |  | $\begin{gathered} 2014-2015 \\ (\mathrm{~N}=1,310) \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | Change |
| Students Taking Exams | 275 | 18.8 | 274 | 20.9 | 2.1 ppts. |
| Exams Taken | 333 | - | 334 | - | 1 exam |
| Exams Scored Three or Higher | 50 | 15.0 | 59 | 17.7 | 2.7 ppts. |
| Average Number of Exams per student | 1.2 | - | 1.2 | - | 0 exams |

Sources: Cognos Chancery Ad Hoc, July 8, 2015; Department of Research and Accountability, June 2015 Note: * "ppts." means percentage points.

Table 7. AP Examination Participation and Performance Results for AVID and Non-AVID Students Who Enrolled in AP Courses, 2014-2015

|  | AVID Participants <br> Enrolled in AP Courses <br> (N=592) | Non-AVID Students <br> Enrolled in AP Courses <br> ( $\mathbf{N = 1 , 1 9 0 )}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | $\%$ | N | $\%$ |
| Students Taking Exams | 274 | 46.3 | 382 | 32.1 |
| Exams Taken | 334 | - | 582 | - |
| Exams Scored Three or Higher <br> Average Number of Exams <br> per student | 59 | 17.7 | 133 | 22.9 |
| 1.2 exams | - | 1.5 exams | - |  |

Source: Cognos Chancery Ad Hoc, July 8, 2015
Note: * "ppts." means percentage points.


Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: Effect sizes $\geq 0.25$ standard deviations were considered to be substantially significant.

## Table 9. STAAR Results of Statistical Analyses of Differences Between AVID and Non-AVID Students' Scale Scores by Subject, 2014-2015

|  | Subject | N | Mean | Std. <br> Dev. | t | df | Sig. (2-tailed) | Mean Diff. | Effect Size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reading Scale Scores |  |  |  |  |  |  |  |  |
|  | Grades |  |  |  |  |  |  |  |  |
| AVID | 6-8 | 801 | 1610 | 117.243 | 11.503 | 1756.771 | . 000 | 58.433 | 0.25 |
|  | Grades |  |  |  |  |  |  |  |  |
| Non-AVID | 6-8 | 6,825 | 1551 | 242.903 |  |  |  |  |  |
|  | Mathematics Scale Scores |  |  |  |  |  |  |  |  |
|  | Grades |  |  |  |  |  |  |  |  |
| AVID | 6-8 <br> Grades | 741 | 1602 | 184.206 | 6.861 | 1122.783 | . 000 | 51.604 | 0.20 |
|  |  |  |  |  |  |  |  |  |  |
| Non-AVID | 6-8 | 6,658 | 1551 | 267.995 |  |  |  |  |  |

Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: Effect sizes $\geq 0.25$ standard deviations were considered to be substantially significant.

| Table 10. Results of AVID and Non-AVID Students' STAAR Level III Advanced Performances by Subject and Grade Level, 2014-2015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Test | Subject and Grade | N | Number Advanced | Percent Advanced | Percentage Point Difference |
| STAAR | Reading |  |  |  |  |
| AVID | 6 | 205 | 22 | 10.7 |  |
| Non-AVID | 6 | 2,264 | 241 | 10.6 |  |
| AVID | 7 | 295 | 23 | 7.8 | -2.1 |
| Non-AVID | 7 | 2,175 | 215 | 9.9 | 2. |
| AVID | 8 | 301 | 36 | 12.0 | -2.0 |
| Non-AVID | 8 | 2,386 | 333 | 14.0 |  |
| Total AVID |  | 801 | 81 | 10.1 |  |
| Total NonAVID |  | 6,825 | 789 | 11.6 | -1.5 |
| STAAR | Mathematics |  |  |  |  |
| AVID | 6 | 205 | 31 | 15.1 | 5.2 |
| Non-AVID | 6 | 2,264 | 225 | 9.9 | 5.2 |
| AVID | 7 | 295 | 31 | 10.5 | 3.8 |
| Non-AVID | 7 | 2,175 | 145 | 6.7 |  |
| AVID | 8 | 241 | 6 | 2.5 | 39 |
| Non-AVID | 8 | 2,219 | 141 | 6.4 | 3. |
| Total AVID |  | 741 | 68 | 9.2 |  |
| Total NonAVID |  | 6,658 | 511 | 7.7 | 1.5 |
| STAAR | Writing |  |  |  |  |
| AVID | 7 | 295 | 13 | 4.4 | - |
| Non-AVID | 7 | 2,178 | 98 | 4.5 | - |
| STAAR | Science |  |  |  |  |
| AVID | 8 | 300 | 32 | 10.7 | 0.5 |
| Non-AVID | 8 | 2,388 | 242 | 10.1 |  |
| STAAR | Social Studies |  |  |  |  |
| AVID | 8 | 300 | 11 | 3.7 | -3.2 |
| Non-AVID | 8 | 2,388 | 165 | 6.9 | -3.2 |

Source: Cognos Chancery Ad Hoc, October 7, 2015

| Grades 9-12 | Subject | N | Mean | Std. <br> Deviation | t | df | Sig. <br> (2-tailed) | Mean Difference | Effect <br> Size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STAAR EOC | English I Scale Scores |  |  |  |  |  |  |  |  |
| AVID |  | 167 | 4093 | 389.677 | 15.384 | 494.797 | . 000 | 654.422 | 1.07 |
| Non-AVID |  | 496 | 3439 | 668.249 |  |  |  |  |  |
| STAAR EOC | English II Scale Scores |  |  |  |  |  |  |  |  |
| AVID |  | 150 | 3987 | 451.022 | 11.993 | 355.309 | . 000 | 566.183 | 0.95 |
| Non-AVID |  | 466 | 3421 | 637.691 |  |  |  |  |  |
| STAAR EOC | Algebra I Scale Scores |  |  |  |  |  |  |  |  |
| AVID |  | 105 | 4157 | 482.849 | 10.176 | 530.000 | . 000 | 712.211 | 1.11 |
| Non-AVID |  | 427 | 3445 | 675.757 |  |  |  |  |  |
| STAAR EOC | Biology Scale Scores |  |  |  |  |  |  |  |  |
| AVID |  | 162 | 4127 | 357.712 | 12.015 | 538.000 | 000 | 443.551 | 1.13 |
| Non-AVID |  | 378 | 3683 | 407.298 | 12.015 | 538.000 | . 000 | 443.551 | 1.13 |
| STAAR EOC | U.S. History Scale Scores |  |  |  |  |  |  |  |  |
| AVID |  | 138 | 4073 | 368.386 | 5.353 | 431281 | 000 | 264.707 | 0.44 |
| Non-AVID |  | 315 | 3808 | 678.675 |  | 431.281 |  | 264.707 |  |
| Grades 7-8 | Subject | N | Mean | Std. <br> Deviation | t | df | Sig. (2-tailed) | Mean Difference | Effect Size |
| STAAR EOC | Algebra I Scale Scores |  |  |  |  |  |  |  |  |
| AVID |  | 98 | 4322 | 468.2201 | -2 573 | 573.000 | 010 | -121 830 | -0.29 |
| Non-AVID |  | 477 | 4444 | 418.0467 | -2.573 | 573.000 | . 010 | -121.830 | -0.29 |
| STAAR EOC | Biology Scale Scores |  |  |  |  |  |  |  |  |
| AVID |  | 3 | * | * | No analysis due to group size < 5 . |  |  |  |  |
| Non-AVID |  | 56 | 4827 | 499.5499 |  |  |  |  |  |

Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: *Results not presented for groups of fewer than five students. Effect sizes $\geq 0.25$ standard deviations were considered to be substantially significant.

| Table 12. STAAR EOC Results of Statistical Analyses of AVID and Non-AVID Students' Performances, 2014-2015 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject and Grade | N | Mean | Std. Deviation | t | df | Sig. (2-tailed) | Mean Difference | Effect Size |
| STAAR EOC | English I Scale Score |  |  |  |  |  |  |  |  |
| AVID | 9 | 161 | 4120 | 370.443 | 13.335 | 505.395 | 0.000 | 621.846 |  |
| Non-AVID | 9 | 364 | 3498 | 693.796 | 13.335 | 505.395 | 0.000 | 621.846 | 1.01 |
| AVID | 10 | 3 | * | * |  | o analys | due to group | size < 5 |  |
| Non-AVID | 10 | 90 | 3248 | 548.199 |  | No analys | due to group | 位 size < 5 . |  |
| AVID | 11 | 3 | * | * |  | No analysis | due to group | up size < 5 . |  |
| Non-AVID | 11 | 42 | 3335 | 595.91 |  | No analysis | due to group | up size < 5 . |  |
| STAAR EOC | English II Scale Score |  |  |  |  |  |  |  |  |
| AVID | 9 | 5 | 3681 | 250.940 | 1.108 | 75.000 | 0.271 | 320.064 | 0.51 |
| Non-AVID | 9 | 72 | 3361 | 639.152 |  |  |  |  |  |
| AVID | 10 | 136 | 4032 | 443.260 | 10.565 | 342.090 | 0.000 | 536.225 | 0.95 |
| Non-AVID | 10 | 326 | 3495 | 607.315 |  |  |  |  |  |
| AVID | 11 | 9 | 3482 | 250.072 | 1.517 | 75.000 | 0.134 | 355.590 | 0.54 |
| Non-AVID | 11 | 68 | 3127 | 693.889 |  |  |  |  |  |
| STAAR EOC | Algebra I Scale Scor |  |  |  |  |  |  |  |  |
| AVID | 7 | 7 | 4825 | 306.373 | 0.948 | 124.000 | 0.345 | 145.118 | 0.37 |
| Non-AVID | 7 | 119 | 4679 | 397.542 |  |  |  |  |  |
| AVID | 8 | 91 | 4283 | 456.999 | -1.713 | 447.000 | 0.087 | -82.108 | -0.20 |
| Non-AVID | 8 | 358 | 4365 | 395.061 |  |  |  |  |  |
| AVID | 9 | 97 | 4179 | 476.531 | 8.851 | 434.000 | 0.000 | 654.918 | 1.02 |
| Non-AVID | 9 | 339 | 3524 | 682.469 |  |  |  |  |  |
| AVID | 10 | 5 | 3660 | 405.381 | 2.053 | 67.000 | 0.044 | 554.991 | 0.95 |
| Non-AVID | 10 | 64 | 3105 | 591.685 |  |  |  |  |  |
| AVID | 11 | 3 | * | * | No analysis due to group size $<5$. |  |  |  |  |
| Non-AVID | 11 | 24 | 3231 | 437.487 |  |  |  |  |  |
| STAAR EOC | Biology Scale Scores |  |  |  |  |  |  |  |  |
| AVID | 8 | 3 | * | * | No analys is due to group size < 5 . |  |  |  |  |
| Non-AVID | 8 | 56 | 4827 | 499.55 |  |  |  |  |  |
| AVID | 9 | 160 | 4135 | 352.866 | 11.036 | 487.000 | 0.000 | 422.162 | 1.06 |
| Non-AVID | 9 | 329 | 3713 | 416.575 |  |  |  |  |  |
| AVID | 10 | 0 | * | * | No analysis due to group size < 5 . |  |  |  |  |
| Non-AVID | 10 | 38 | 3485 | 294.475 |  |  |  |  |  |
| AVID | 11 | 2 | * |  | No analysis due to group size < 5 . |  |  |  |  |
| Non-AVID | 11 | 11 | 3496 | 158.895 |  |  |  |  |  |
| STAAR EOC | U.S. History Scale Scores |  |  |  |  |  |  |  |  |
| AVID | 9 | 0 | * | * | No analysis due to group size < 5 . |  |  |  |  |
| Non-AVID | 9 | 2 | * | * |  |  |  |  |  |
| AVID | 10 | 3 | * | * | No analysis due to group size < 5 . |  |  |  |  |
| Non-AVID | 10 | 36 | 3708 | 387.207 |  |  |  |  |  |
| AVID | 11 | 135 | 4082 | 366.771 | 4.916 | 408.567 | 0.000 | 260.590 | 0.42 |
| Non-AVID | 11 | 277 | 3821 | 708.768 |  |  |  |  |  |

Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: *Results not presented for groups of fewer than five students. Effect sizes $\geq 0.25$ standard deviations were considered to be substantially significant.

|  | Subject /Grade English I | N | Number Advanced | Percent Advanced | $\wedge$ ^pt. Diff. | N | Total \% | $\wedge$ Ppt. Diff. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AVID | 9 | 161 | 14 | 8.7 | 7.1 |  |  |  |
| Non-AVID | 9 | 364 | 6 | 1.6 |  |  |  |  |
| AVID | 10 | 3 | * | * | * |  |  |  |
| Non-AVID | 10 | 90 | 0 | 0.0 |  |  |  |  |
| AVID | 11 | 3 | * | * | * | 14/167 | 8.4 | 7.2 |
| Non-AVID | 11 | 42 | 0 | 0.0 |  | $6 / 496$ | 1.2 |  |
|  | English II |  |  |  |  |  |  |  |
| AVID | 9 | 5 | 0 | 0.0 | 0.0 |  |  |  |
| Non-AVID | 9 | 72 | 0 | 0.0 |  |  |  |  |
| AVID | 10 | 136 | 2 | 1.5 | 1.5 |  |  |  |
| Non-AVID | 10 | 326 | 0 | 0.0 |  |  |  |  |
| AVID | 11 | 9 | 0 | 0.0 | 0.0 | 2/150 | 1.3 | 1.3 |
| Non-AVID | 11 | 68 | 0 | 0.0 |  | $0 / 466$ | 0.0 |  |
|  | Algebra I |  |  |  |  |  |  |  |
| AVID | 7 | 7 | 7 | 100.0 | 18.5 |  |  |  |
| Non-AVID | 7 | 119 | 97 | 81.5 |  |  |  |  |
| AVID | 8 | 91 | 36 | 39.6 | 14.6 |  |  |  |
| Non-AVID | 8 | 358 | 194 | 54.2 |  |  |  |  |
| AVID | 9 | 97 | 32 | 33.0 | 28.6 |  |  |  |
| Non-AVID | 9 | 339 | 15 | 4.4 |  |  |  |  |
| AVID | 10 | 5 | 0 | 0.0 | 0.0 |  |  |  |
| Non-AVID | 10 | 64 | 0 | 0.0 |  |  |  |  |
| AVID | 11 | 3 | * | * | * | 34/105 | 32.4 | 28.9 |
| Non-AVID | 11 | 24 | 0 | 0.0 |  | 15/427 | 3.5 |  |
|  | Biology |  |  |  |  |  |  |  |
| AVID | 8 | 3 | * | * | * |  |  |  |
| Non-AVID | 8 | 56 | 39 | 69.6 |  |  |  |  |
| AVID | 9 | 160 | 21 | 13.0 | 10.6 |  |  |  |
| Non-AVID | 9 | 329 | 8 | 2.4 |  |  |  |  |
| AVID | 10 | 0 | * | * | * |  |  |  |
| Non-AVID | 10 | 38 | 1 | 2.6 |  |  |  |  |
| AVID | 11 | 2 | * | * | * | 21/162 | 13.0 | 10.6 |
| Non-AVID | 11 | 11 | 0 | 0.0 |  | 9/378 | 2.4 |  |

U.S. History

| AVID | 9 | 0 | - | - |  |  |  |  |
| :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-AVID | 9 | 2 | $*$ | $*$ | $*$ |  |  |  |
| AVID | 10 | 3 | $*$ | $*$ |  |  |  |  |
| Non-AVID | 10 | 36 | 0 | 0.0 | $*$ |  |  |  |
| AVID | 11 | 135 | 30 | 22.2 | 10.6 | $\mathbf{3 0 / 1 3 8}$ | $\mathbf{2 1 . 7}$ | $\mathbf{1 1 . 5}$ |
| Non-AVID | 11 | 277 | 32 | 11.6 |  | $\mathbf{3 2 / 3 1 5}$ | $\mathbf{1 0 . 2}$ |  |

Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: *Results not presented for groups ( N ) of fewer than five students. No Grade 12 results were available for AVID students, therefore, grade 12 results were not presented. ${ }^{\wedge}$ Indicates percentage point difference.

## Table 14. Results of STAAR Progress Measures and ELL Progress Measures for AVID and NonAVID Students by Subject, 2014-2015

|  | N | $\#$ Did Not Meet | \% <br> Did Not <br> Meet | \# Met | $\begin{gathered} \text { \% } \\ \text { Met } \end{gathered}$ | \# <br> Exceeded | \% <br> Exceeded | \# <br> Met or <br> Exceed. | \% <br> Met or Exceed. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reading Grades 6-8 Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 759 | 368 | 48.5 | 297 | 39.1 | 94 | 12.4 | 391 | 51.5 |
| NonAVID | 5,985 | 2,901 | 48.5 | 2,293 | 38.3 | 791 | 13.2 | 3,084 | 51.5 |
| Writing Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID Non- | 235 | 111 | 47.2 | 111 | 47.2 | 13 | 5.5 | 124 | 52.8 |
| AVID | 1,524 | 736 | 48.3 | 721 | 47.3 | 67 | 4.4 | 788 | 51.7 |
| English I Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 0 | - | - | - | - | - | - | - | - |
| Non- <br> AVID | 40 | 33 | 82.5 | 7 | 17.5 | 0 | 0.7 | 7 | 17.5 |
| English II Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 137 | 66 | 48.2 | 70 | 51.1 | 1 | 0.7 | 71 | 51.8 |
| NonAVID | 343 | 206 | 60.1 | 137 | 39.9 | 0 | 0.0 | 137 | 39.9 |
| Algebra I Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 189 | 61 | 32.3 | 65 | 34.4 | 63 | 33.3 | 128 | 67.7 |
| NonAVID | 743 | 309 | 41.6 | 207 | 27.9 | 227 | 30.6 | 434 | 58.4 |

Source: HISD Accountability-Consolidated Data Files, 2015 (CAF 1, 2, and 5)
Note: STAAR Progress Measure and ELL Progress Measure results are presented only for students with a 2014-2015
Progress Measure score for the subject. Grade 3-8 STAAR mathematics progress measures were not available.
Percentages may not total 100 due to rounding.

|  | N | $\#$ Did Not Meet | ```Did Not Meet``` | \# <br> Met | \% <br> Met | \# Exceeded | \% <br> Exceeded | \# <br> Met or Exceed. | Met or <br> Exceed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| African-American Students |  |  |  |  |  |  |  |  |  |
| Reading Grades 6-8 Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 192 | 96 | 50.0 | 71 | 37.0 | 25 | 13.0 | 96 | 50.0 |
| Non-AVID | 1,152 | 545 | 47.3 | 454 | 39.4 | 153 | 13.3 | 607 | 52.7 |
| Writing Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 77 | 33 | 42.9 | 41 | 53.2 | 3 | 3.9 | 44 | 57.1 |
| Non-AVID | 311 | 159 | 51.1 | 141 | 45.3 | 11 | 3.5 | 152 | 48.9 |
| English I Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 0 |  | - | - | - | - | - | - | - |
| Non-AVID | 0 |  | - | - | - | - | - | - | - |
| English II Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 62 | 31 | 50.0 | 31 | 50.0 | 0 | 0.0 | 31 | 50.0 |
| Non-AVID | 139 | 83 | 59.7 | 56 | 40.3 | 0 | 0.0 | 56 | 40.3 |
| Algebra I Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 71 | 36 | 50.7 | 22 | 31.0 | 13 | 18.3 | 35 | 49.3 |
| Non-AVID | 175 | 108 | 61.7 | 45 | 25.7 | 22 | 12.6 | 67 | 38.3 |
| Hispanic Students |  |  |  |  |  |  |  |  |  |
| Reading Grades 6-8 Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 516 | 248 | 48.1 | 206 | 39.9 | 62 | 12.0 | 268 | 51.9 |
| Non-AVID | 4,228 | 2,133 | 50.4 | 1,581 | 37.4 | 514 | 12.2 | 2,095 | 49.6 |
| Writing Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 142 | 75 | 52.8 | 60 | 42.3 | 7 | 4.9 | 67 | 47.2 |
| Non-AVID | 1,035 | 513 | 49.6 | 479 | 46.3 | 43 | 4.2 | 522 | 50.4 |
| English I Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 0 | - | - | - | - | - | - | - | - |
| Non-AVID | 40 | 33 | 82.5 | 7 | 17.5 | 0 | 0.0 | 7 | 17.5 |
| English II Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 69 | 33 | 47.8 | 36 | 52.2 | 0 | 0.0 | 36 | 52.2 |
| Non-AVID | 202 | 122 | 60.4 | 80 | 39.6 | 0 | 0.0 | 80 | 39.6 |
| Algebra I Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 103 | 23 | 22.3 | 40 | 38.8 | 40 | 38.8 | 80 | 77.7 |
| Non-AVID | 489 | 190 | 38.9 | 138 | 28.2 | 161 | 32.9 | 299 | 61.1 |
| White Students |  |  |  |  |  |  |  |  |  |
| Reading Grades 6-8 Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 12 | 8 | 66.7 | 3 | 25.0 | 1 | 8.3 | 4 | 33.3 |
| Non-AVID | 371 | 139 | 37.5 | 156 | 42.0 | 76 | 20.5 | 232 | 62.5 |
| Writing Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 2 | * |  | * | * | * | * | * | * |
| Non-AVID | 111 | 37 |  | 68 | 61.3 | 6 | 5.4 | 74 | 66.7 |
| English I Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 0 | - | - | - | - | - | - | - | - |
| Non-AVID | 0 | - | - | - | - | - | - | - | - |
| English II Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 3 | * | * | * | * | * | * | * | * |
| Non-AVID | 0 | - | - | - | - | - | - | - | - |
| Algebra I Progress Measure Scores |  |  |  |  |  |  |  |  |  |
| AVID | 4 | * | * | * | * | * | * | * | * |
| Non-AVID | 38 | 8 | 21.1 | 11 | 28.9 | 19 | 50.0 | 30 | 78.9 |

Source: HISD Accountability-Consolidated Data Files, 2015 (CAF 1, 2, and 5)
Note: *Results not presented for groups (N) of fewer than five students. Percentages may not total 100 due to rounding.


Writing Progress Measure Scores

|  | Female |  |  |  |  | Male |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AVID | 108 | 45.4 | 47.2 | 7.4 | 54.6 | 127 | 48.8 | 47.2 | 3.9 | 51.2 |
| AVID | 745 | 45.5 | 49.1 | 5.4 | 54.5 | 779 | 51.0 | 45.6 | 3.5 | 49.0 |
| Economically Disadvantaged |  |  |  |  |  | Not Economically Disadvantaged |  |  |  |  |
| AVID | 207 | 49.8 | 45.4 | 4.8 | 50.2 | 28 | 28.6 | 60.7 | 10.7 | 71.4 |
| AVID | 1,238 | 49.4 | 46.0 | 4.6 | 50.6 | 286 | 43.7 | 52.8 | 3.5 | 56.3 |
|  | At-Risk |  |  |  |  | Not At-Risk |  |  |  |  |
| AVID | 79 | 55.7 | 40.5 | 3.8 | 44.3 | 156 | 42.9 | 50.6 | 6.4 | 57.1 |
| NonAVID | 621 | 56.8 | 40.4 | 2.7 | 43.2 | 903 | 42.4 | 52.0 | 5.5 | 57.6 |

Source: HISD Accountability-Consolidated Data Files, 2015 (CAF 1, 2, and 5)
Note: Both STAAR Progress Measures and ELL Progress Measures are presented only for students with a 2014-2015 Progress Measure for the subject. Grade 3-8 STAAR mathematics progress measures were not available.
Percentages may not total 100 due to rounding.

## Table 16 continued. Results of STAAR Progress Measures and ELL Progress Measures for AVID and Non-AVID Students by Subject and Student Group, 2014-2015

|  | N | \% <br> Did <br> Not <br> Meet | \% <br> Met | \% <br> Exceeded | \% Met or Exceeded | N | \% <br> Did <br> Not <br> Meet | \% <br> Met | \% <br> Exceeded | \% Met or Exceeded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English I Progress Measure Scores |  |  |  |  |  |  |  |  |  |  |
|  | Female |  |  |  |  | Male |  |  |  |  |
| AVID | 0 | - | - | - | - | 0 | - | - | - | - |
| AVID | 16 | 81.3 | 18.8 | 0.0 | 18.8 | 24 | 83.3 | 16.7 | 0.0 | 16.7 |
|  | Economically Disadvantaged |  |  |  |  | Not Economically Disadvantaged |  |  |  |  |
| AVID | 0 | - | - | - | - | 0 | - | - | - | - |
| NonAVID | 32 | 87.5 | 12.5 | 0.0 | 12.5 | 8 | 62.5 | 37.5 | 0.0 | 37.5 |
|  | At-Risk |  |  |  |  | Not At-Risk |  |  |  |  |
| AVID | 0 | - | - | - | - | 0 | - | - | - | - |
| Non- <br> AVID | 40 | 82.5 | 17.5 | 0.0 | 17.5 | 0 | - | - | - | - |

English II Progress Measure Scores

|  | Female |  |  |  |  | Male |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AVID | 92 | 52.2 | 46.7 | 1.1 | 47.8 | 45 | 40.0 | 60.0 | 0.0 | 60.0 |
| AVID | 152 | 60.5 | 39.5 | 0.0 | 39.5 | 191 | 59.7 | 40.3 | 0.0 | 40.3 |
|  | Economically Disadvantaged |  |  |  |  | Not Economically Disadvantaged |  |  |  |  |
| AVID | 111 | 47.7 | 52.3 | 0.0 | 52.3 | 26 | 50.0 | 46.2 | 3.8 | 50.0 |
| AVID | 265 | 60.0 | 40.0 | 0.0 | 40.0 | 78 | 60.3 | 39.7 | 0.0 | 39.7 |
|  | At-Risk |  |  |  |  | Not At-Risk |  |  |  |  |
| AVID | 73 | 42.5 | 56.2 | 1.4 | 57.5 | 64 | 54.7 | 45.3 | 0.0 | 45.3 |
| NonAVID | 290 | 62.1 | 37.9 | 0.0 | 37.9 | 53 | 49.1 | 50.9 | 0.0 | 50.9 |

## Algebra I Progress Measure Scores

|  | Female |  |  |  |  | Male |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AVID | 101 | 31.7 | 39.6 | 28.7 | 68.3 | 88 | 33.0 | 28.4 | 38.6 | 67.0 |
| AVID | 373 | 37.8 | 30.3 | 31.9 | 62.2 | 370 | 45.4 | 25.4 | 29.2 | 54.6 |
| Economically Disadvantaged |  |  |  |  |  | Not Economically Disadvantaged |  |  |  |  |
| AVID | 149 | 31.5 | 33.6 | 34.9 | 68.5 | 40 | 35.0 | 37.5 | 27.5 | 65.0 |
| AVID | 582 | 42.6 | 29.6 | 27.8 | 57.4 | 161 | 37.9 | 21.7 | 40.4 | 62.1 |
| At-Risk |  |  |  |  |  | Not At-Risk |  |  |  |  |
| AVID | 52 | 55.8 | 36.5 | 7.7 | 44.2 | 137 | 23.4 | 33.6 | 43.1 | 76.7 |
| Non- <br> AVID | 278 | 72.7 | 21.2 | 6.1 | 27.3 | 465 | 23.0 | 31.8 | 45.2 | 77.0 |

Source: HISD Accountability-Consolidated Data Files, 2015 (CAF 1, 2, and 5)
Note: Both STAAR Progress Measures and ELL Progress Measures are presented only for students with a 2014-2015 Progress Measure for the subject. Percentages may not total 100 due to rounding.

|  | AVID Participants |  | Non-AVID Students |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ( $\mathrm{n}=211$ ) |  | ( $\mathrm{n}=1880$ ) |  |
| Subject | Mean | NPR | Mean | NPR |
| Critical Reading | 3.3 | 31.4 | 3.2 | 29.5 |
| Mathematics | 3.5 | 46.7 | 3.4 | 42.3 |
| Writing Skills | 3.3 | 42.1 | 3.2 | 36.9 |

Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: AVID and non-AVID participants who took the ReadiStep assessment were eighth-grade students.
NPRs are based on a national sample of eighth- and ninth-graders.

Table 18. Results of Statistical Analyses of Differences Between of AVID and Non-AVID Students' Average ReadiStep Scores by Subject, Fall 2014

|  |  | N | Mean | Std. <br> Dev. | t | df | $\begin{gathered} \text { Sig. } \\ \text { (2-tailed) } \end{gathered}$ | Mean Diff. | Effect Size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Critical <br> Reading | AVID | 210 | 3.295 | . 8180 | 1.350 | 269.765 | . 178 | . 0813 | 0.09 |
|  | Non- |  |  |  |  |  |  |  |  |
|  | AVID | 1870 | 3.214 | . 9045 |  |  |  |  |  |
|  | AVID | 210 | 3.501 | . 8585 |  |  |  |  |  |
|  | Non- |  |  |  | 1.254 | 275.897 | . 211 | . 0797 | 0.08 |
| Mathematics | AVID | 1871 | 3.422 | . 9938 |  |  |  |  |  |
| Writing | AVID | 211 | 3.301 | . 6717 |  |  |  |  |  |
| Skills | NonAVID | 1873 | 3.178 |  | 2.483 | 277.975 | . 014 | . 1233 | 0.16 |

Source: Cognos Chancery Ad Hoc, October 7, 2015
Note: AVID and non-AVID participants who took the ReadiStep assessment were eighth -grade students. Effect sizes $\geq 0.25$ standard deviations were considered to be substantially significant.


[^0]:    Source: Cognos Chancery Ad Hoc, July 8, 2015

[^1]:    Source: Cognos Chancery Ad Hoc Student Information System, March 4, 2015
    Note: ^Grade levels with fewer than five AVID students were not included in student performance analyses.

