MEMORANDUM June 19, 2015

TO: School Board Members

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

SUBJECT: **2013–2014 AVID PROGRAM**

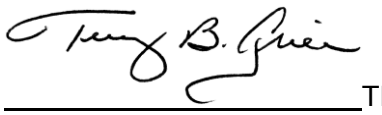
CONTACT: Carla Stevens, 713-556-6700

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.

Key findings are as follows:

- Overall, 1,462 students were enrolled in the 2013–2013 AVID program, a 10.9 percent decrease from 2012–2013. There was a student enrollment decrease of 25.5 percent at the middle school level and an increase of 3.9 percent at the middle school level.
- AVID students attained a higher average pre-AP course grade (81.03) that was significantly higher than the pre-AP course grade average for non-AVID students (80.21).
- The number of exams on which AVID students scored 3 or higher decreased 13.8 percent from 58 in 2012–2013 to 50 in 2013–2014. However, the percentage of the AP exams taken on which students in AVID scored 3 or higher increased 1.1 percentage points from 2012–2013 to 2013–2014.
- Analyses of program effects on students' STAAR scores revealed the performance differences between AVID and non-AVID students were substantially significant (i.e. effect size ≥ 0.25 standard deviations) in writing at grade 7 (0.51) and grade 8 in science (0.56) and social studies (0.56).
- Students in AVID achieved higher average scale scores than their non-AVID peers on all five STAAR EOC assessments administered in 2013–2014 (English I, English II, Algebra I, Biology, and U.S. History). Differences between the groups' scores were statistically significant on all exams with the exception of U.S. History.

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


TBG

Attachment

cc: Superintendent's Direct Reports
Harrison Peters
Michael Cordona
Richard Cruz
Derick Hutchinson

HOUSTON INDEPENDENT SCHOOL DISTRICT

RESEARCH

Educational Program Report

ADVANCEMENT VIA INDIVIDUAL DETERMINATION (AVID), 2013 – 2014

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ANALYZING DATA, MEASURING PERFORMANCE.

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ADVANCEMENT VIA INDIVIDUAL DETERMINATION (AVID)

FINDINGS RELATED TO STUDENT PERFORMANCE, 2013–2014

EXECUTIVE SUMMARY

Program Description

The Advancement Via Individual Determination (AVID) program 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 also 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 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 who are able to do so with the proper academic and emotional support. The program's mission is to close the achievement gaps through the use of educational strategies that prepare all students for success in college and in our global society (AVID, 2015).

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 (non-gifted and 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. 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. During the 2013–2014 school year, 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 19 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.

The AVID program aligns with the district's Strategic Direction Core Initiative 3, "Rigorous Instructional Standards and Supports," and the "College Readiness" as authorized under House Bill 1. The 2013–2014 AVID program was funded through the High School State Allotment (Fund 147) as a part of PSAT, SAT, Duke Tip, and ReadiStep funding ($1,345,976) under the district's Chief Academic Officer. Allowable expenditures for AVID program implementation included stipends and extra-duty pay for pre-AP and AP tutorials on identified campuses. Tutors included work-study students from the Houston Community College and the University of Houston-Downtown.

Highlights

- AVID participation decreased 10.9 percent from the 2012–2013 (n=1,641) to the 2013–2014 school year (n=1,462), with a decrease of 25.5 percent at the middle school level and an increase of 3.9 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 63.5 percent of students in AVID and 24.2 percent of non-AVID students enrolled in pre-AP courses. A total of 19.1 percent of students in AVID and 7.9 percent of non-AVID students enrolled in AP courses. A total of 12.6 percent of high school students in AVID and 0.5 percent of non-AVID high school students enrolled in dual credit courses.

- AVID students attained a higher average pre-AP course grade (81.03) that was statistically significantly higher than the pre-AP course grade average for non-AVID students (80.21).

- AVID students' average AP course grade (77.42) was significantly higher than the average AP course grade for non-AVID students (76.03).

- The average dual credit course grade for non-AVID students (83.67) was higher than the average course grade for AVID students in dual credit courses (81.71); however, the difference was not statistically significant.

- The number of exams on which AVID students scored 3 or higher decreased 13.8 percent from 58 in 2012–2013 to 50 in 2013–2014. However, the percentage of the AP exams taken on which students in AVID scored 3 or higher increased 1.1 percentage points from 2012–2013 to 2013–2014, due to the smaller number of exams taken in 2013–2014.

- Analyses of program effects on students' STAAR scores revealed the performance differences between AVID and non-AVID students were substantially significant (i.e. effect size ≥ 0.25 standard deviations) in writing at grade 7 (0.51) and grade 8 in science (0.56) and social studies (0.56).

- 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 at each grade level in each subject.

- Students in AVID achieved higher average scale scores than their non-AVID peers on all five STAAR EOC assessments administered in 2013–2014 (English I, English II, Algebra I, Biology, and U.S. History). Differences between the groups' scores were statistically significant on all exams with the exception of U.S. History.

- Greater proportions of AVID students achieved Level III Advanced scores on STAAR EOC exams in English I, English II, Algebra I, and Biology than did the non-AVID students on their campuses.

- Disaggregated by grade level, program effects on student performance on STAAR EOC exams were substantially significant at grades nine and ten, with the exception of tenth grade Biology. Effect sizes ranged from 0.33 to 0.75.

- AVID students scored 0.1 to 0.4 points higher than non-AVID students on the ReadiStep assessment in fall 2013, with the largest performance gap in math. The difference between the groups was statistically significant.

Recommendations

- To help the program to recover from the decline in AVID enrollment, consider carefully assessing reasons for the decline in program enrollment among middle school students and systemically address challenges that may negatively impact student participation in the AVID program, particularly at the middle school level.

- To allow students who are normally passed over to be taught academic skills necessary to transition into increasingly rigorous courses and programs, examine the capacity of current AVID recruitment strategies to assess each prospective AVID student's achievement, attendance, and behavior through culturally sensitive lens, prior to excluding a student from the opportunity to enroll in the program.

- Identify strategies to address the decline in pre-AP course enrollment for students in AVID and continue to improve AVID students' enrollment rates in advanced placement and dual credit courses.

- To extend the academic success of AVID students and to improve the academic performances of AVID students who enroll in dual credit courses, pre-AP, and AP classes and who take AP and STAAR assessments, further examine the extent to which AVID program providers employ the rigorous AVID curriculum and provide the instructional support necessary for AVID students to be as successful as possible in all their courses. Provide proactive steps to identify gaps in teaching and learning in pre-AP, AP, and dual credit courses may help improve student performance in courses and on AP exams. Also, consider replicating best practices (instructional and learning) that contribute to the success of students in AVID.

- To further increase program participation and improve the consistency of positive outcomes in achievement among students in AVID, it may prove beneficial to ensure full implementation of each of the eleven factors that have been identified by AVID program developers to guide successful program implementation and enhance the success of AVID students.

Administrative Response

Thirteen HISD schools provided schoolwide AVID programs during the 2013-2014 school year. Each site is expected to monitor their implementation of AVID's 11 Essentials using a mid-year assessment (Initial Self-Study) and an end- of-year assessment (Certification Self-Study) to be reviewed and approved by the District Director. After a site has implemented AVID for at least one school year and all 11 essentials meet minimum standards, the site can become "certified." Sites are rated on their implementation of the 11 AVID essentials with one of the following five ratings: Non-Certified, Certified, Highly Certified, Site of Distinction, and Demonstration Site. Unfortunately, due to recent changes regarding the role of AVID's District Director in HISD, additional information and insights about AVID's implementation are not available at this time. However, during the administrative transition, many personnel including AVID's Texas State Office staff have assisted the district to ensure AVID schools continue to be well-supported. Nonetheless, of the 13 participating sites, five high schools have not renewed their contracts to participate in the AVID program in 2014-2015 for various reasons. Fortunately, the federally-funded Race To The Top grant through the district's Linked Learning Department is expected to positively impact middle school students' participation in the AVID program next year.

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.

The AVID 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. 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 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. The program's mission is to close the 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).

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 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 open-mindedness activities (Contreras, et al., 2007). Students may apply the techniques they learn in the AVID program in all their courses. During the 2013–2014 school year, students on 19 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 math.
- 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 late November 2014, student-level Chancery records were used to identify the HISD secondary students who participated in at least one AVID elective course between August 2013 and May of 2014. In addition, student-level Chancery records were used to identify all students at the same HISD schools and grade levels as students who participated in the 2013–2014 AVID program. The data comprised 19 AVID schools (6 middle, 12 high, and one combined-level), with 617 middle and 845 high school program participants (n=1,462). However, the data revealed fewer than five AVID students at Advanced Virtual Academy, Hope Academy, Ross Sterling, Westbury, and Westside high schools and fewer than five AVID students in the 11th- and 12th-grade at Charles Milby High School. Therefore, the data for nine AVID participants and their counterparts at the same schools and grade levels were omitted from student performance analyses to mask the students' identities. This resulted in the inclusion of 1,453 AVID participants and their counterparts in the student performance analyses.

- Identified students were matched to their HISD 2013–2014 Public Education Information Management System (PEIMS) student information and to their 2013–2014 State of Texas Assessments of Academic Readiness (STAAR), STAAR End-of-Course (EOC), and ReadiStep scores. STAAR, STAAR EOC, and ReadiStep mean scale scores were retrieved in addition to ReadiStep national percentile ranks (NPRs). ReadiStep is administered at grade 8. NPRs were based on a national sample of 8th and 9th 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' characteristics, participation and grades in advanced courses, and performance on exams.

- 2013–2014 Demographic data were available for the 1,453 AVID students in grades 6–12. Campus, grade level enrollment, and AVID course participation and completion data retrieved from Chancery Grades files on November 21, 2014 included 1,051 students in grades 6–9 and 402 students in grades 10–12. This resulted in the inclusion of 14 schools (6 middle, 7 high, and one combined-level schools) or 73.7 percent of the 19 AVID schools initially identified.

- For the purpose of comparison, the performance of the 2013–2014 non-AVID peers of AVID students used in this analysis to provide real-world student performance comparisons within the context of the student cohorts from which AVID students were identified for program participation and within which AVID students selected courses, performed in courses and on associated tests, and were assessed academically on their campuses. Students in AVID during the 2013–2014 school year and all non-AVID students on AVID campuses enrolled in the same grade levels of the AVID participants during the 2013–2014 school year were included in this analysis. The 2013–2014 course and examination performances of the AVID students were compared to the performances of 10,150 non-AVID students on the same campuses and on the same measures with 4,067 students in grades 6–8 and 6,083 in grades 9–12. Grade level enrollment data from Chancery were used in the analyses.

- Unduplicated grade files for students' pre-Advanced Placement (pre-AP), AP (Advanced Placement), and dual credit courses taken by AVID and non-AVID students 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 2013–2014 students in AVID and their non-AVID peers on 2013–2014 state-mandated, criterion-referenced STAAR tests for grades 6–8 and STAAR EOC tests for grades 6–12 using scale scores. Test data for groups smaller than five students were not included in the report. Some high school students take courses tested by the STAAR out of sequence (Witte, 2014). Therefore, STAAR EOC exam results were aggregated for all AVID and non-AVID students, as well as disaggregated by grade level to help target instructional improvements. STAAR EOC Level III results for a group greater than 5 students in AVID were available for English I, English II, and Algebra I. The number of students tested is included in statistics tables of results by exam if at least one AVID student was tested.

- 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

- 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.

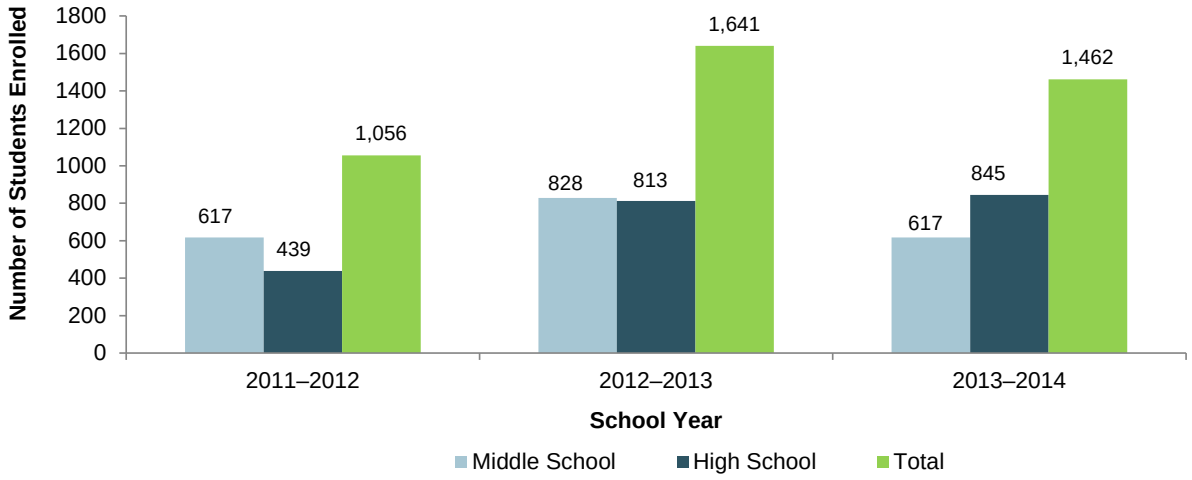
- The comparison group of students was a convenience sample of students in the same grades and schools, and in many cases, in the same courses. However, it was not a statistically matched sample, so conclusions of causation cannot be made.

Results

What were the levels of participation in the AVID program from the 2011–2012 through the 2013–2014 school year, particularly in 2012–2013 and 2013–2014?

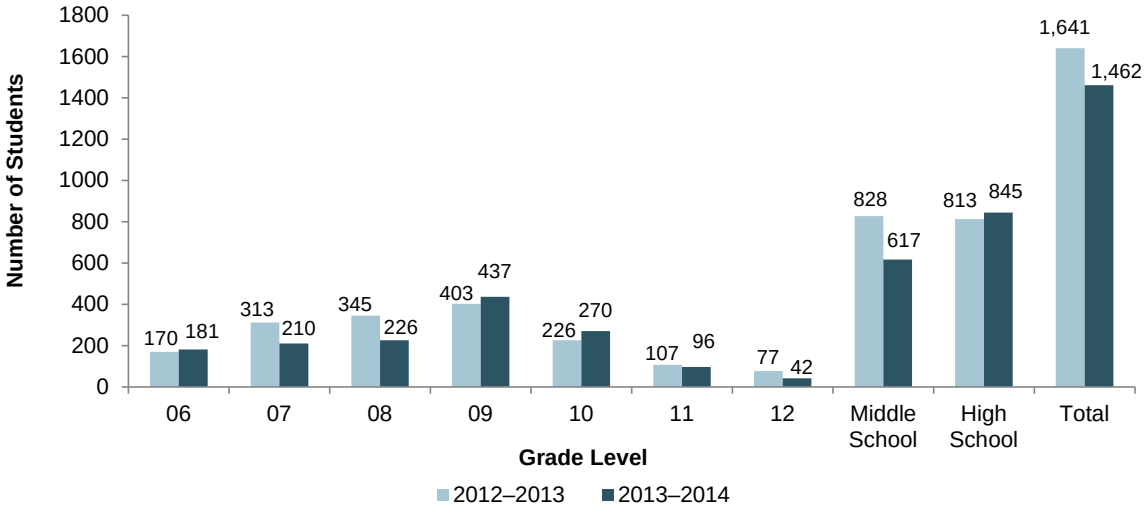
- **Figure 1** shows AVID program enrollment increased 38.4 percent over the last three years from 2011–2012 (n=1,056) to 2013–2014 (n=1,462), including no change in participation among middle school students and a 92.5 percent increase among high school students.

Figure 1. AVID participation, 2011–2012 through 2013–2014



- **Figure 2** shows AVID participation decreased 10.9 percent from 2012–2013 (n=1,641) to 2013–2014 (n=1,462), with a decrease of 25.5 percent at the middle school level (grades 6–8) and an increase of 3.9 percent at the high school level (grades 9–12).

Figure 2. AVID participation by grade level, 2012–2013 and 2013–2014



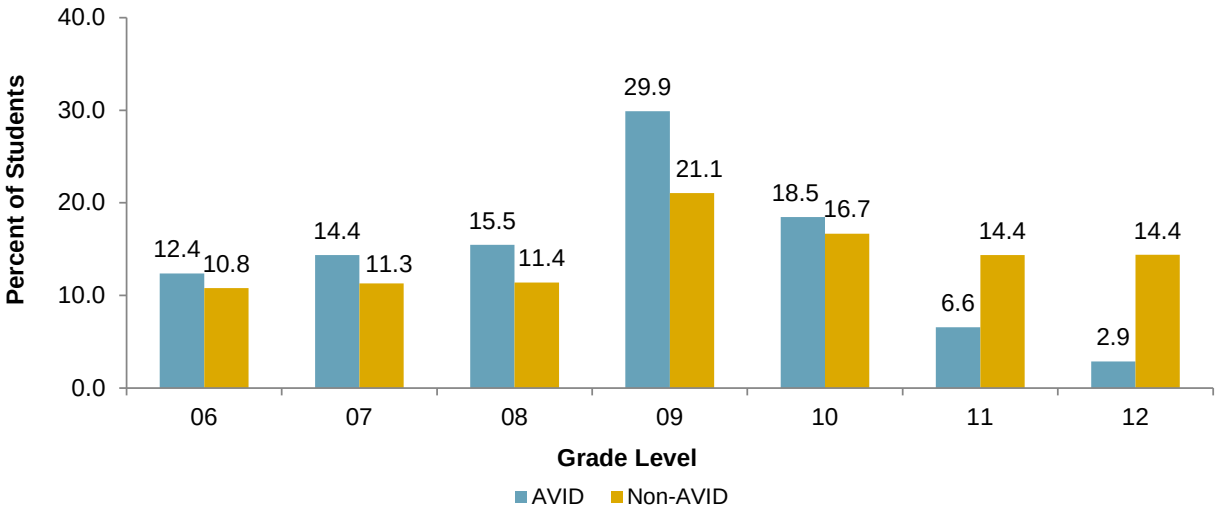
- AVID participation increased at grades six, nine, and ten from 2012–2013 to 2013–2014, with most growth at grade 10 (19.5 percent). However, AVID participation decreased among seventh, eighth-, eleventh-, and twelfth-grade students from 2012–2013 to 2013–2014, with the largest decline (45.5 percent) at grade 12 (Figure 2, page 7).

How do the characteristics of 2013–2014 AVID participants compare to the characteristics of their non-AVID counter-parts?

- There were 1,462 AVID participants and 34,422 non-AVID students on AVID campuses for whom grade level data were available. **Figure 3** shows higher percentages of AVID versus non-AVID students in grades 6–10. Across groups, the largest proportions of students were in the ninth grade, followed by the tenth grade.

- The proportions of AVID and non-AVID students were most comparable at grades six and ten, with differences of 1.6 and 1.8 percentage points, respectively. Conversely, at grades nine and twelve, the proportions of students differed by 8.8 and 11.5 percentage points, respectively. (**Table 1**, page 28; **Table 2**, page 29.)

Figure 3. Percentage of AVID and non-AVID students by grade level, 2013–2014

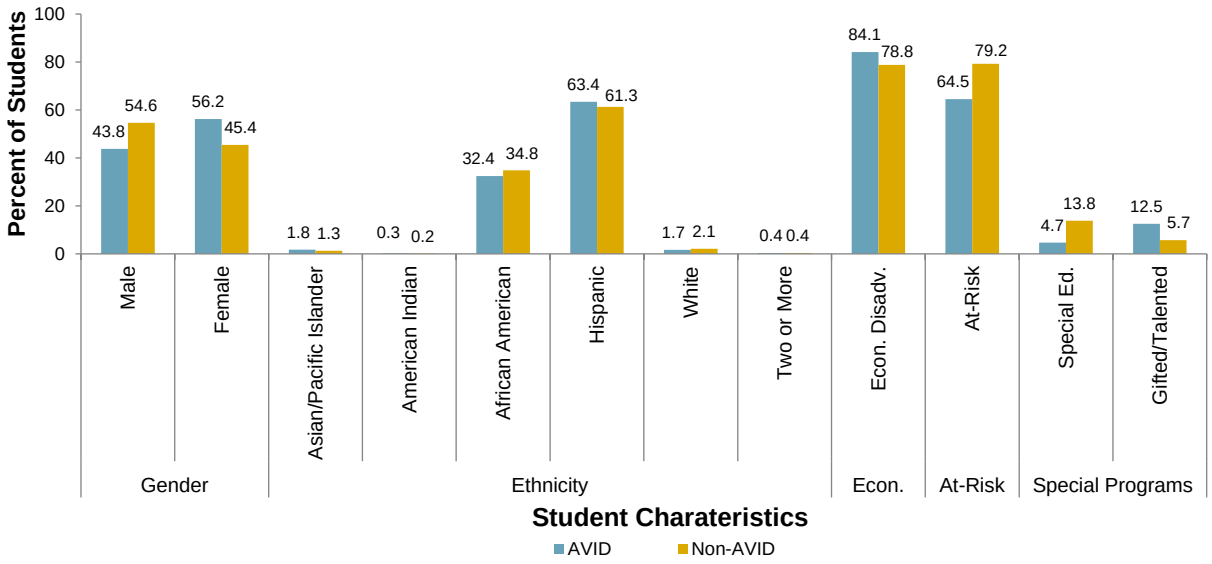


- In addition, Table 1, page 28 shows fewer than five AVID students were identified at grade 9 on three AVID campuses, at grade 11 on two AVID campuses, and at grade 12 on two campuses, totaling nine students who were omitted from student performance analyses to mask the students' identities.

- To assess the similarities and differences between the characteristics of the 1,453 AVID students and their 10,150 non-AVID peers included in the student performance analysis, **Figure 4** shows the percentage of AVID and non-AVID students by their demographic characteristics. A total of 95.8 percent of AVID students and 96.1 percent of non-AVID students were Hispanic or African American, with nearly twice the number of Hispanic than African American students in each group.

- A greater proportion of AVID students (84.1 percent) was economically disadvantaged than non-AVID students (78.8 percent). However, a larger proportion of non-AVID students (79.2 percent) than AVID students (64.5 percent) was classified as students at-risk. Non-AVID students comprised a much larger proportion of special education (13.8 percent) students than did AVID students (4.7). In addition, the proportion of gifted and talented students among AVID students (12.5 percent) was more than twice that of gifted and talented non-AVID students (5.7 percent). These trends indicate AVID is attracting and serving the students for whom it was designed. (**Table 3**, page 30.)

Figure 4. Demographic characteristics of AVID and non-AVID students, 2013–2014



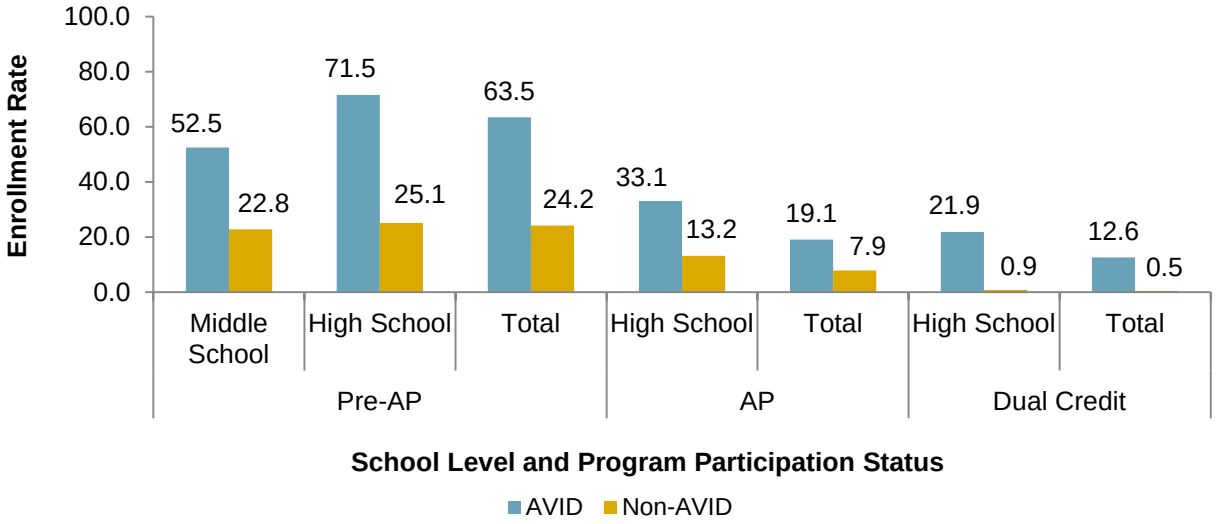
Do AVID students enroll in more pre-AP, AP, and dual credit courses than non-AVID students enroll in these courses?

- **Figure 5** shows pre-AP, AP, and dual credit course enrollment rates of the 1,453 students in AVID were higher than the course enrollment rates of the 10,150 non-AVID students at the school levels and in relation to the total number of AVID participants or non-AVID students. The biggest differences between AVID and non-AVID students were found in Pre-AP course enrollment. (**Table 4**, page 31)

- In total, nearly two-thirds of AVID (63.5 percent) and one-fourth of non-AVID students (24.2 percent) enrolled in pre-AP courses. A large difference between the groups' enrollment rate is evident when considered in relation to total students, with even larger differences apparent at the middle and high school levels.

- The enrollment rate of AVID students (19.1 percent) was more than twice the enrollment of non-AVID students (7.9 percent) in AP courses and in dual credit courses (12.6 percent and 0.5 percent, respectively).

Figure 5. Enrollment rates for AVID and non-AVID students in pre-AP, AP, and dual credit courses, 2013–2014



Note: Beechnut Academy courses were taken at grade 9 and included in the high school counts.

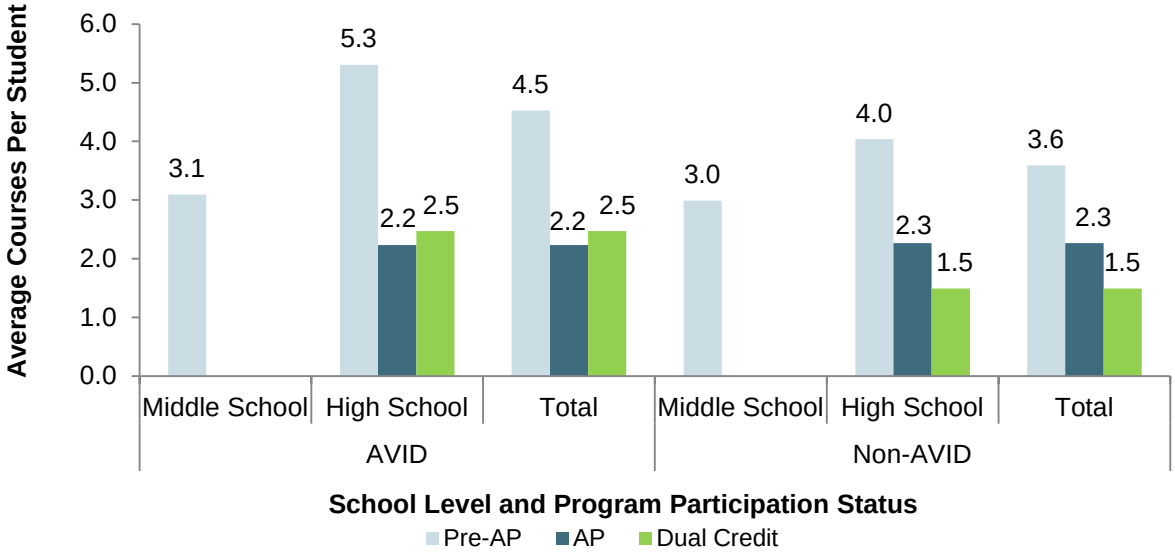
- **Figure 6** shows students in AVID had higher per student enrollment rates in pre-AP and dual credit courses than non-AVID students based on the total number of AVID or non-AVID students who took the courses. Course enrollment counts for pre-AP, AP, and dual credit courses by school level and in total are provided in Table 4, page 31.

- At the middle school level, AVID and non-AVID pre-AP per student enrollment rates were very comparable rates (3.1 courses versus 3.0 courses, respectively), yet the per student enrollment rate for students in AVID at the high school level was higher than their non-AVID peers (5.3 courses versus 4.0 courses).

- AVID and non-AVID enrollment in AP courses per student was also very comparable (2.2 courses versus 2.3 courses, respectively).

- Dual credit course enrollment per student for students in AVID (2.5 courses) was higher than the enrollment rate of their non-AVID peers (1.5 courses).

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, 2013–2014

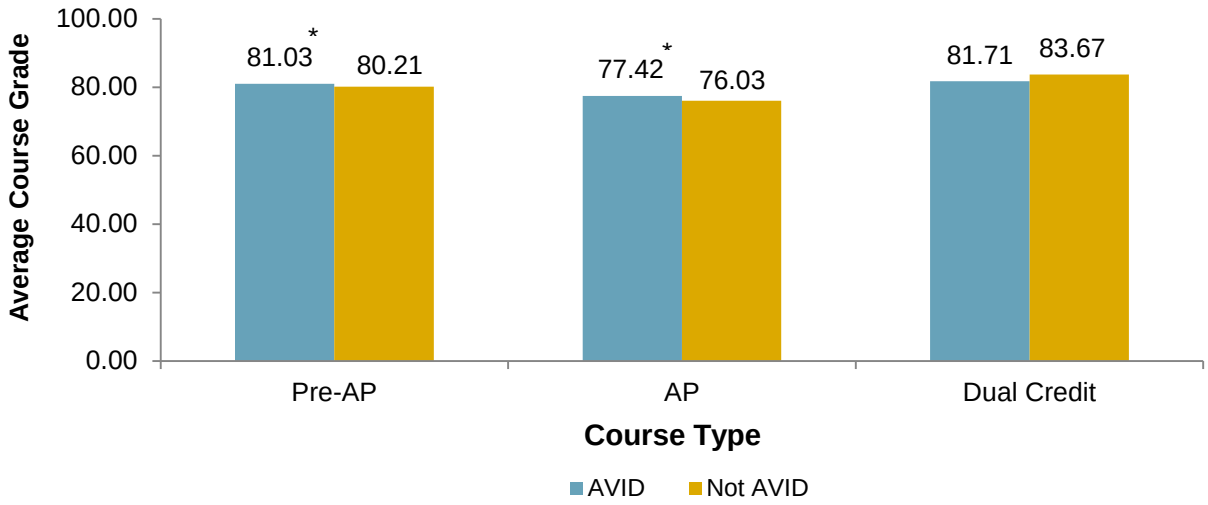


Note: Courses per student enrollment rates are based on the number of AVID or non-AVID students who took pre-AP, AP, and dual credit courses.

Do students in AVID make higher course grades in AP, IB, and dual credit courses than their non-AVID counterparts?

- **Figure 7** shows AVID students attained statistically significantly higher grade averages in pre-AP and AP courses than non-AVID students, but made a lower average course grade in dual credit courses than did non-AVID students. However, the difference between AVID and non-AVID students' dual credit grades was not statistically significant. (**Table 5**, page 32.)

Figure 7. Average pre-AP, AP, and dual credit course grades for AVID and non-AVID students, 2013–2014



Note:*Indicates statistical significance, $p \leq 0.05$.

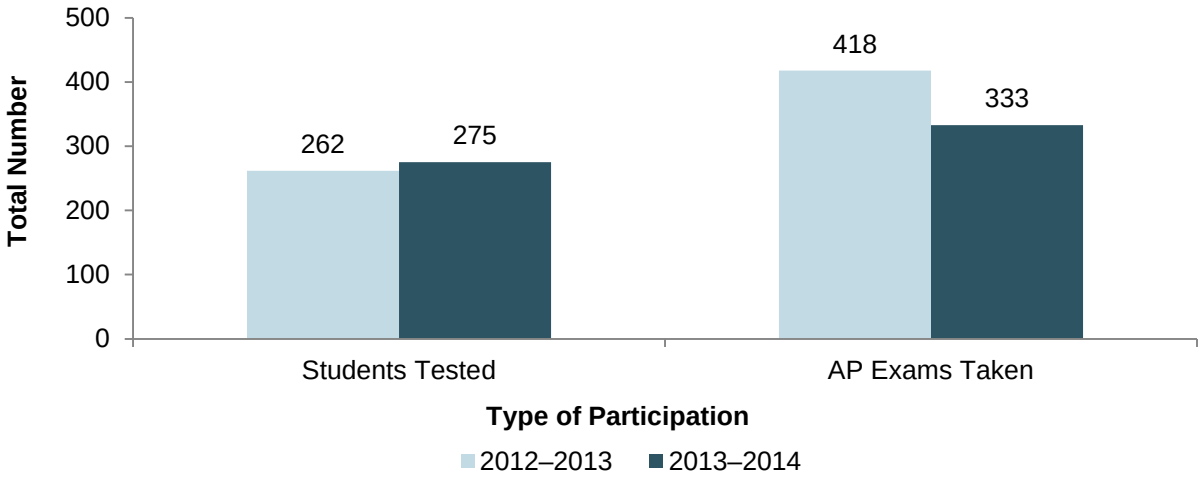
- Analyses of the program effects on students' Pre-AP and AP course grades revealed the performance differences were not substantially significant (i.e. effect size not ≥ 0.25 standard deviations). (Table 5, Page 32.)

How do the levels of AP exam participation and performance of students in the AVID program compare between the 2012–2013 and 2013–2014 school years?

- **Figure 8** shows the number of AVID students taking AP exams increased 5.0 percent from 262 in 2012–2013 to 275 in 2013–2014.

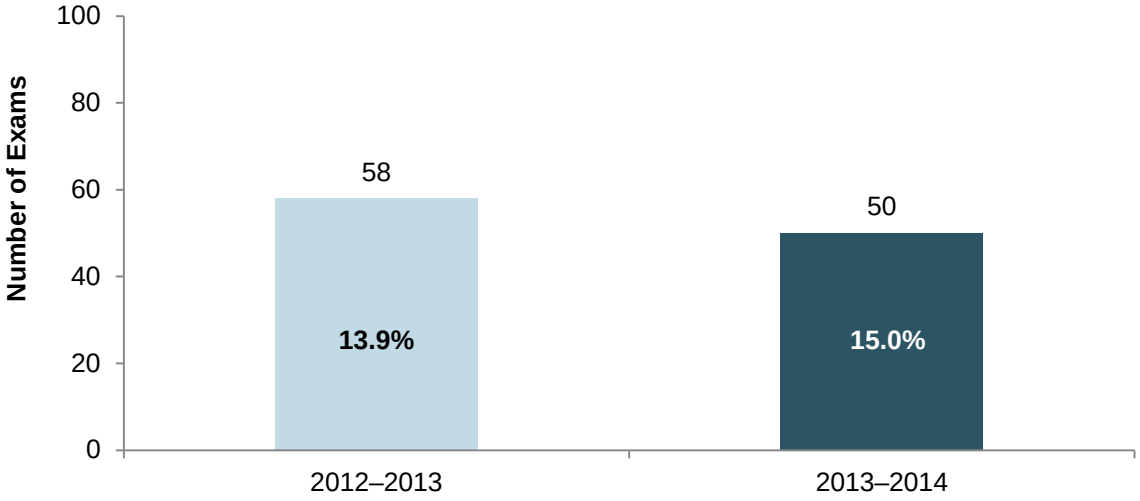
- The percentage of the total number of AVID participants who took AP exams increased 2.8 percentage points (5.0 percent) from 16.0 percent in 2012–2013 to 18.8 percent in 2013–2014. However, the number of AP exams taken by students in AVID decreased 20.3 percent from 2012–2013 to 2013–2014. (**Table 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, 2012–2013 and 2013–2014



- **Figure 9** shows the number of exams on which AVID students scored 3 or higher decreased 13.8 percent from 58 in 2012–2013 to 50 in 2013–2014. However, the percentage of the AP exams taken on which students in AVID scored 3 or higher increased 1.1 percentage points from 2012–2013 to 2013–2014, due to the smaller number of exams taken in 2013–2014.

Figure 9. Number and percentage of AP exams on which AVID students scored three or more points, 2012–2013 and 2013–2014



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

- In 2013–2014, 275 AVID participants took a total of 333 AP exams. This represented 99.3 percent of the 277 AVID students who took AP courses (**Figure 10**). AVID students completed an average of 1.2 AP exams per student. This compared to a lower percentage (754 or 93.9 percent) of the 803 non-AVID participants who took 956 AP exams in 2013–2014. However, non-AVID students completed a slightly higher average of AP exams per student (1.3) (**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, 2013–2014

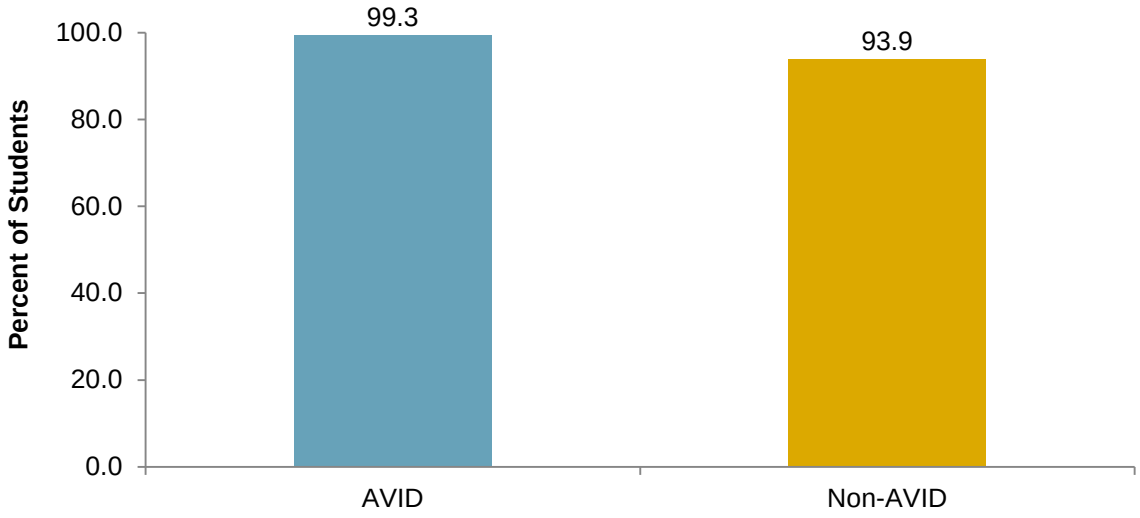
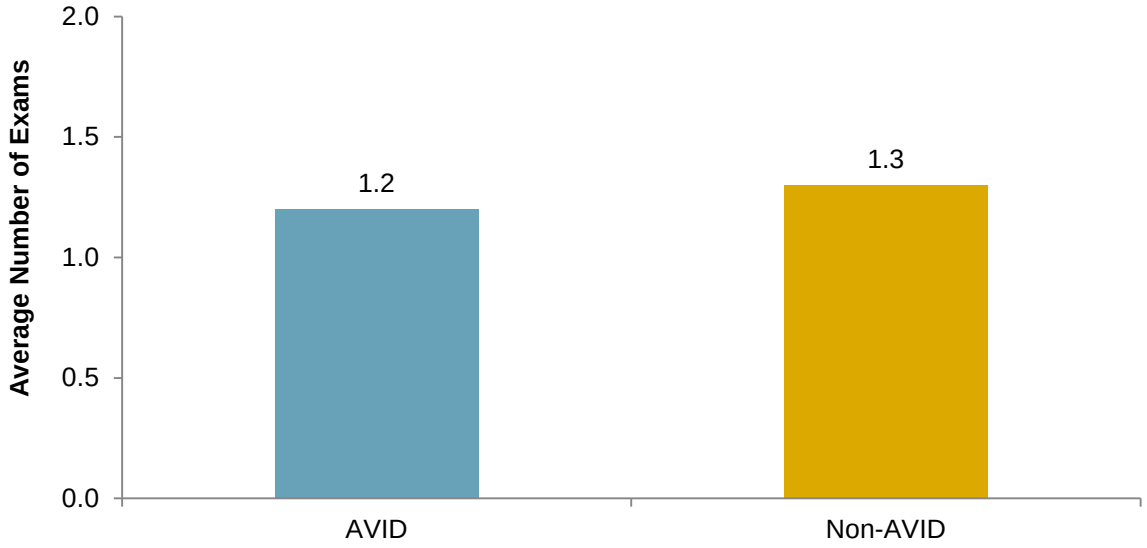


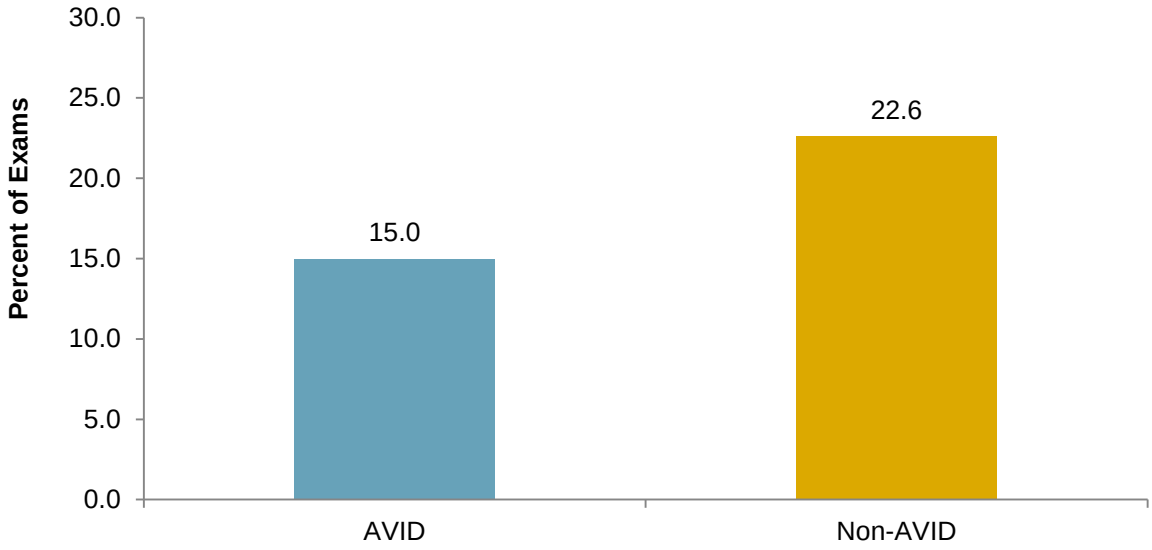
Figure 11. Average number of AP exams taken per student by students in AVID and their non-AVID peers, 2013–2014



Do students in AVID score higher on AP exams than their non-AVID counterparts?

- **Figure 12** shows the percentage of exams on which students scored 3 or more points was 7.6 percentage points higher 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 more points, 2013–2014



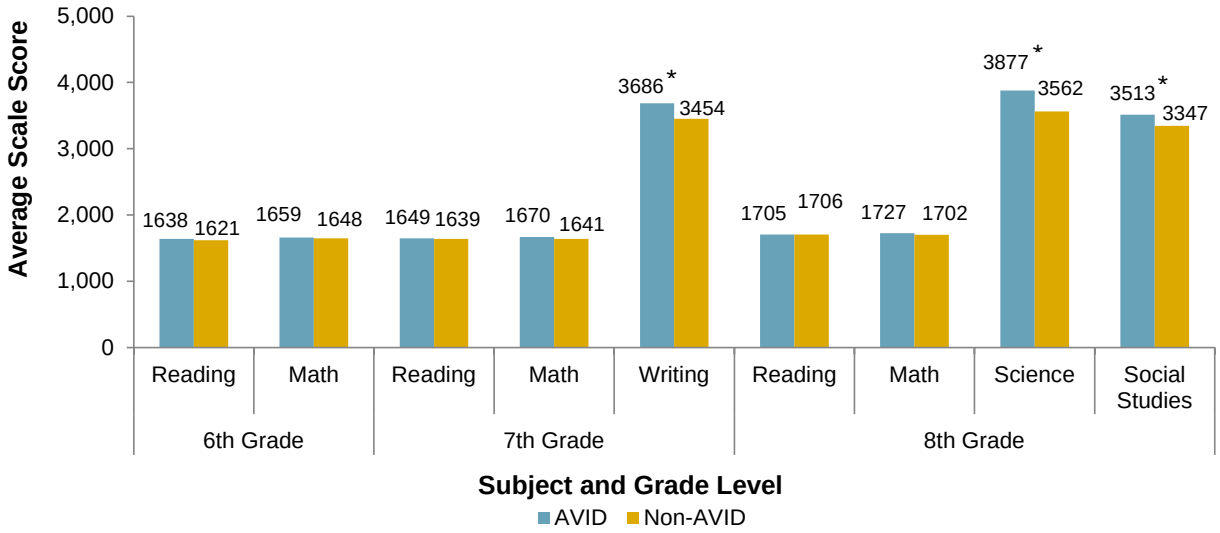
Do students in AVID receive higher mean scores and more Level III Advanced scores on the STAAR examinations than their non-AVID counterparts?

- **Figure 13** (page 16) shows AVID students achieved higher average scale scores than their non-AVID peers on all STAAR tests at each grade level except grade 8 in reading where the difference was negligible. Differences between the groups' average scores were statistically significant in writing at grade 7 and in science and social studies at grade 8.

- Analyses of program effects on students' STAAR scores revealed performance differences between AVID and non-AVID students were substantially significant (i.e. effect size ≥ 0.25 standard deviations) in writing at grade 7 (0.51) and grade 8 in science (0.56) and social studies (0.56). (**Table 8**, page 33.)

- STAAR reading and math scores aggregated across grade levels for AVID and non-AVID students were not significantly different (**Table 9**, page 33).

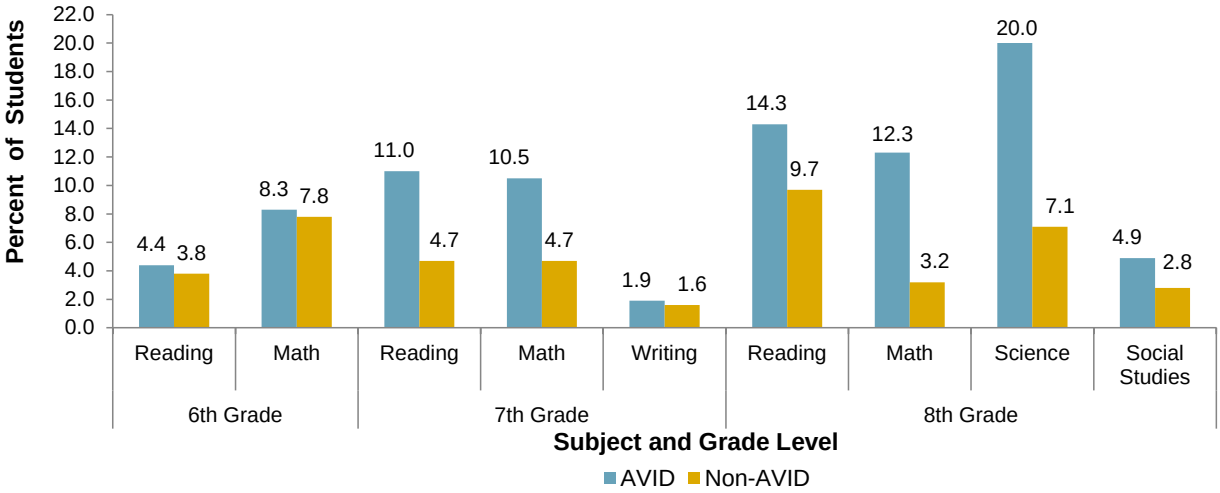
Figure 13. STAAR performance in all subjects tested in grades 6–8 for students who enrolled in AVID and their non-AVID peers, 2013–2014



Note:*Indicates statistical significance, $p \leq 0.05$.

- **Figure 14** indicates students enrolled in AVID met the Level III advanced performance standard at each grade level in each subject at a higher rate than their peers who were not enrolled in AVID. The largest differences were in grade 8 math and science. (**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, 2013–2014

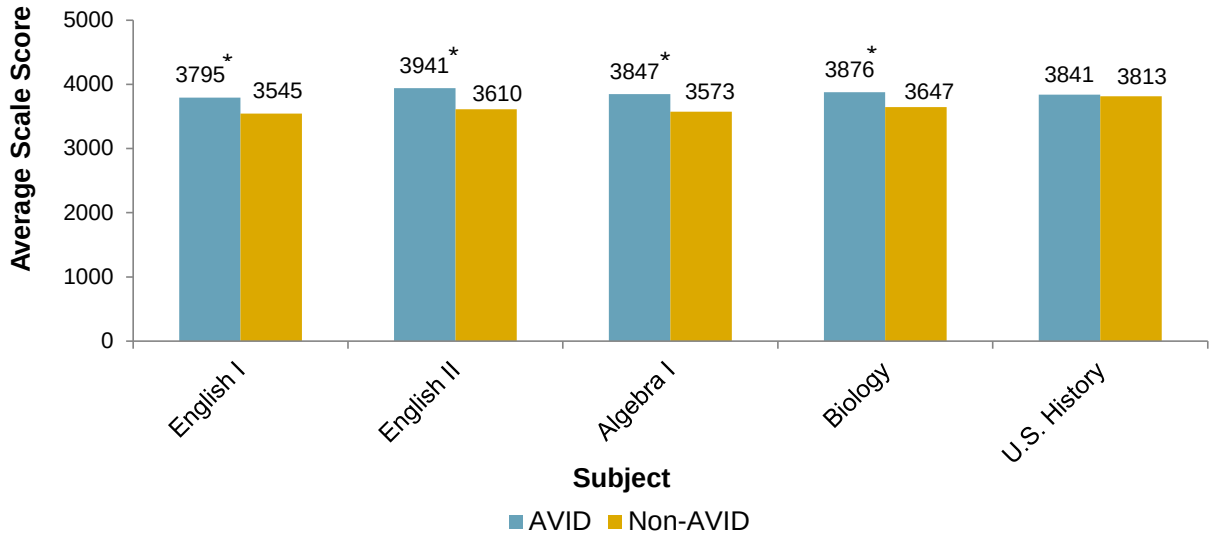


Do students in AVID receive higher mean scores and more Level III Advanced scores on STAAR End-of-Course (EOC) examinations than their non-AVID counterparts?

- **Figure 15** shows students in AVID achieved higher average scale scores than their non-AVID peers on all five STAAR EOC assessments administered for all students, first-time testers and retesters in 2013–2014 (English I, English II, Algebra I, Biology, and U.S. History).

- Differences between the groups' average scale scores were statistically significant on all exams with the exception of U.S. History. (**Table 11**, page 34.)

Figure 15. STAAR End of Course mean scale scores in all subjects for students who enrolled in AVID and their non-AVID peers, 2013–2014



Note:*Indicates statistical significance, $p \leq 0.01$.

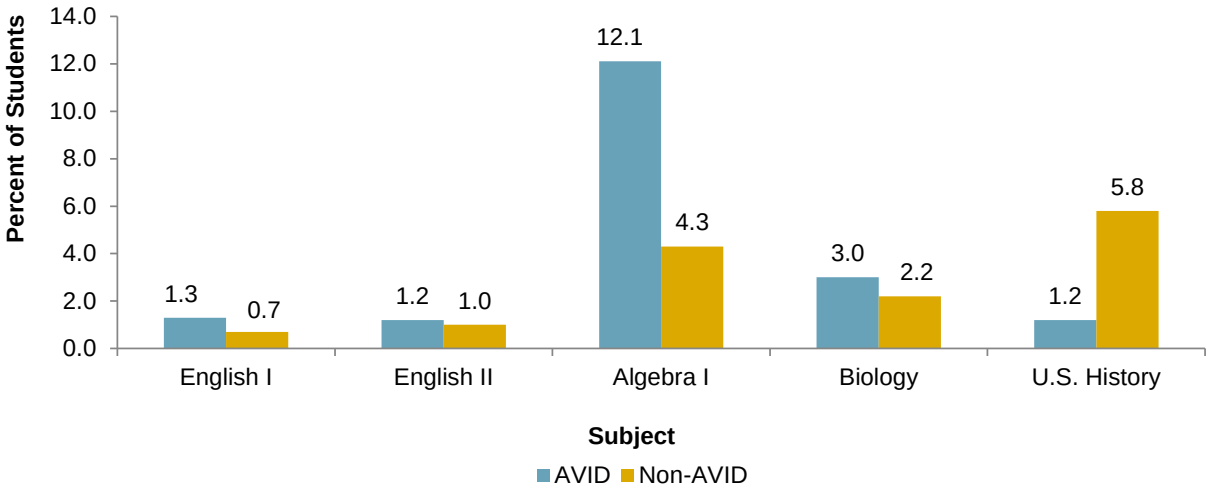
- Analyses of program effects on student performance on STAAR EOC exams, revealed the performance differences were substantially significant (i.e. effect size ≥ 0.25 standard deviations) on four (or 80.0 percent) of the five STAAR EOC exams on which AVID students achieved higher average scores than their non-AVID peers, with effect sizes between 0.55 and 0.74. (Table 11, page 34.)

- Disaggregated by grade level, program effects on student performance on STAAR EOC exams were substantially significant at grades nine and ten, with the exception of tenth grade Biology, with effect sizes that ranged from 0.33 to 0.75. (**Table 12**, page 35.)

- **Figure 16** (page 18) shows greater proportions of AVID students achieved Level III Advanced scores on STAAR EOC exams in English I, English II, Algebra I, and Biology than did the non-AVID students. Non-AVID students had higher proportions of Level III Advanced scores in U.S. History than did students in AVID. (**Table 13**, page 36.)

- The largest difference of 7.8 percentage points between AVID and non-AVID students' Level III performance was on Algebra I exams. (Table 13, page 36.)

Figure 16. STAAR End of Course Level III Advanced performance in English I, English II, and Algebra I for students who enrolled in AVID and their non-AVID peers, 2013–2014



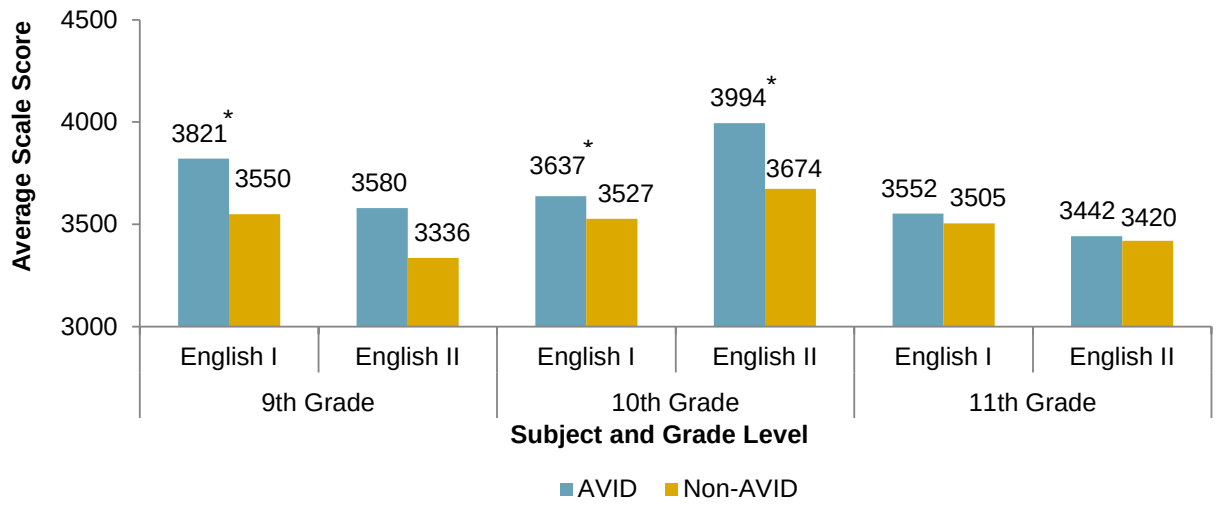
- Some high school students take STAAR courses out of sequence. To help target instructional improvements, STAAR EOC exam results are presented by grade level in Figures 17 through 21, pages 19–22. (Table 12, page 35.) Sufficient STAAR EOC exam data to allow statistical comparisons of the performances of students in AVID and students not enrolled in AVID were available for English I and English II students in grades 9–11, Algebra I students in grades 8–11, Biology students in grades 9 and 10, and U.S. History students in grade 11.

- **Figure 17** (page 19) shows students enrolled in AVID achieved higher average scale scores than their peers who were not enrolled in AVID on both English I and English II exams.

- Differences between the groups' average scale scores were statistically significant in English I at grade 9 and English II at grade 10 which were given at the appropriate grade levels, consistent with the standard course sequence. In addition, the difference between grade 10 AVID students' and their peers' scores on the English I exam was statistical significant. This exam was not given at the grade level consistent with the standard course sequence. (Table 12, page 35.)

- Analyses of program effects on student performance on STAAR EOC exams disaggregated by grade level, revealed the performance differences were substantially significant (i.e. effect size ≥ 0.25 standard deviations) on all three of the STAAR EOC exams on which AVID students achieved statistically significantly higher average scores than their non-AVID peers. Effect sizes were between 0.36 and 0.75. (Table 12, page 35.)

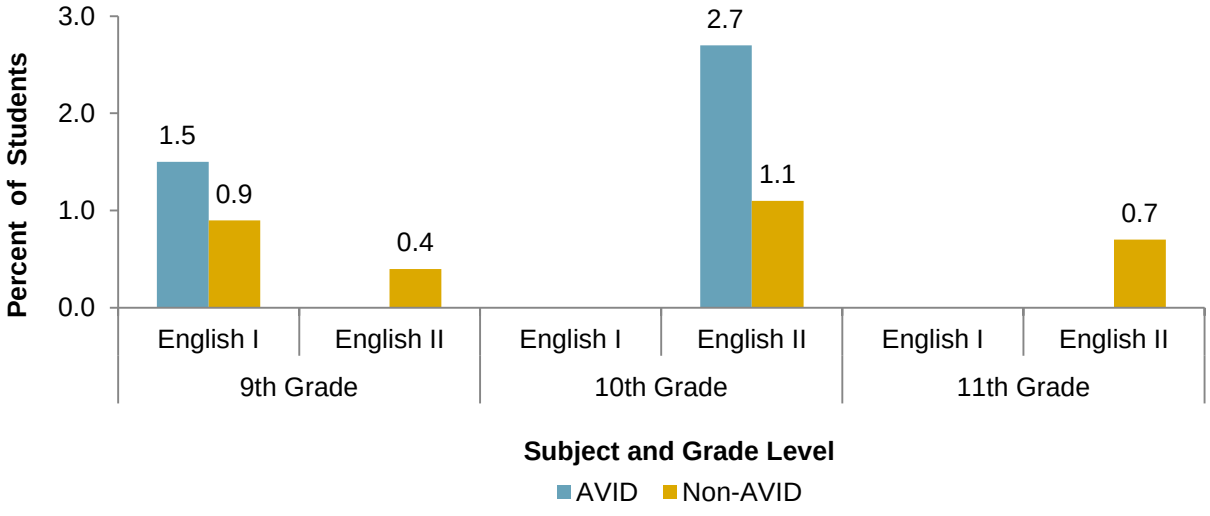
Figure 17. STAAR End of Course performance in ELA for students who enrolled in AVID and their non-AVID peers by grade level, 2013–2014



Note:*Indicates statistical significance, $p \leq 0.05$.

- STAAR EOC results shown in **Figure 18** show students enrolled in AVID had larger proportions of Level III Advanced scores than did non-AVID students on English I exams at grade 9 and English II exams at grade 10, of which both were given at the grade level consistent with the standard course sequence. (Table 13, page 36.)

Figure 18. STAAR End of Course Level III Advanced performance in English language arts for students who enrolled in AVID and their non-AVID peers by grade level, 2013–2014

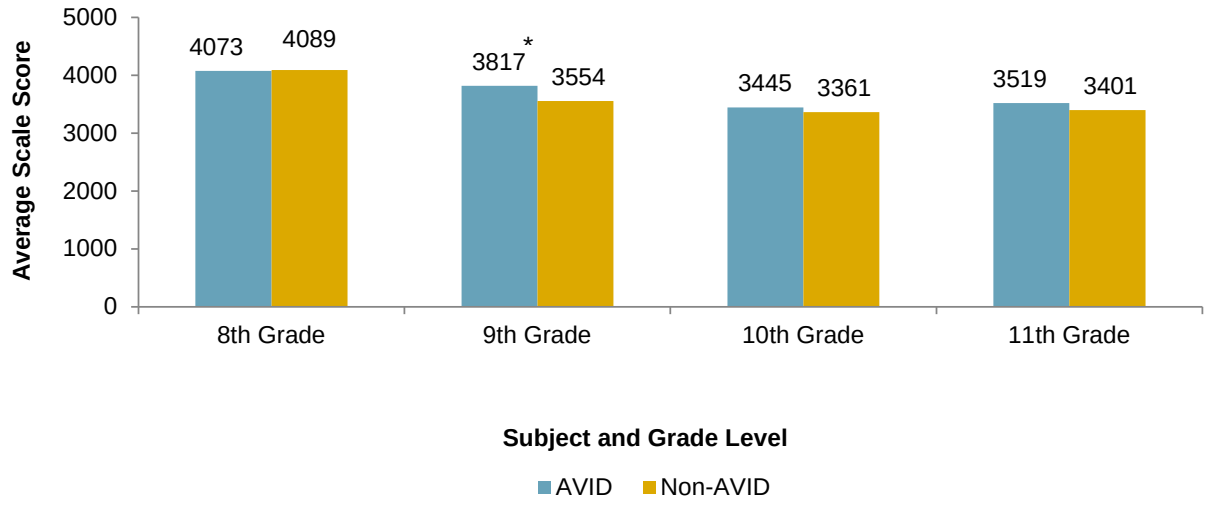


- STAAR EOC results in **Figure 19** show students enrolled in AVID had higher average scale scores than non-AVID students on Algebra I exams at grades 9–11. The difference between the groups' average scale scores was of statistical significance in Algebra I at grade 9 which was given at the appropriate grade level, consistent with the standard course sequence. (Table 12, page 35.)

- It is important to state that middle school students who show the potential for success in Algebra I are encouraged to take the course Algebra I course in the 8th grade, which is not consistent with the standard course sequence. Figure 19 shows 8th grade AVID students were slightly outperformed by their non-AVID peers. However, students in AVID and their peers achieved higher scale scores than their peers in upper grades.

- Analyses of program effects on student performance on the Algebra I exams disaggregated by grade level, revealed the performance differences were substantially significant (i.e. effect size ≥ 0.25 standard deviations) at grade 9 where AVID students achieved statistically significantly higher average scores than their non-AVID peers. The effect size was 0.63. (Table 12, page 35.)

Figure 19. STAAR End of Course performance in Algebra I for students enrolled in AVID and their non-AVID peers by grade level, 2013–2014

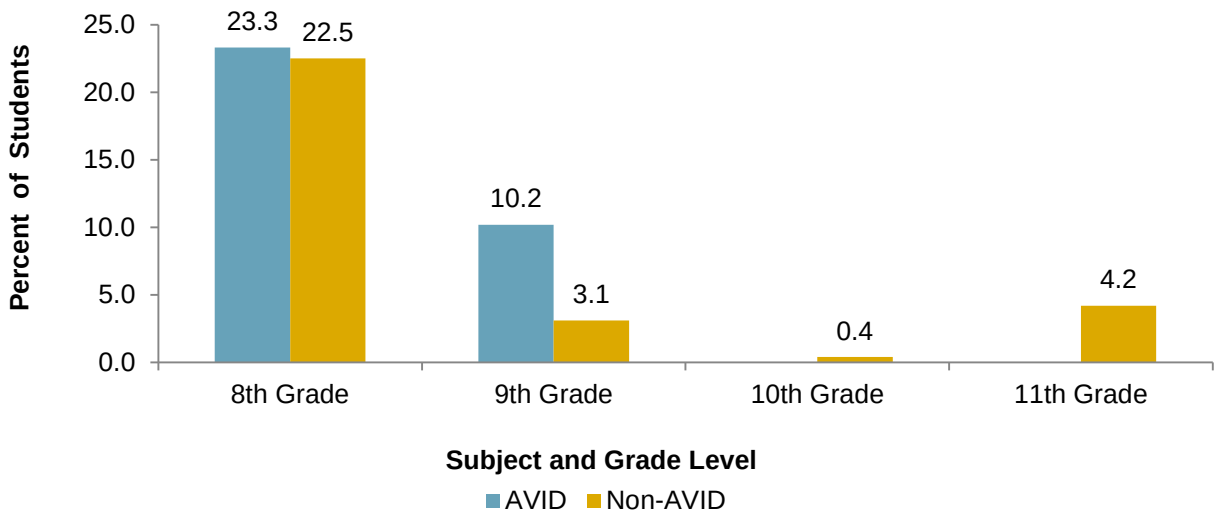


Note:*Indicates statistical significance, $p \leq 0.05$.

- Sufficient STAAR EOC exam data to allow comparisons of the Level III Advanced performances of students in AVID and students not enrolled in AVID were available for students in grades 8–11 in Algebra I.

- STAAR EOC results presented in **Figure 20** show students enrolled in AVID had larger proportions of Level III Advanced scores than did non-AVID students on Algebra I exams at grades 8 and 9, of which the grade 9 exam was given at the grade level consistent with the standard course sequence. (Table 13, page 36.)

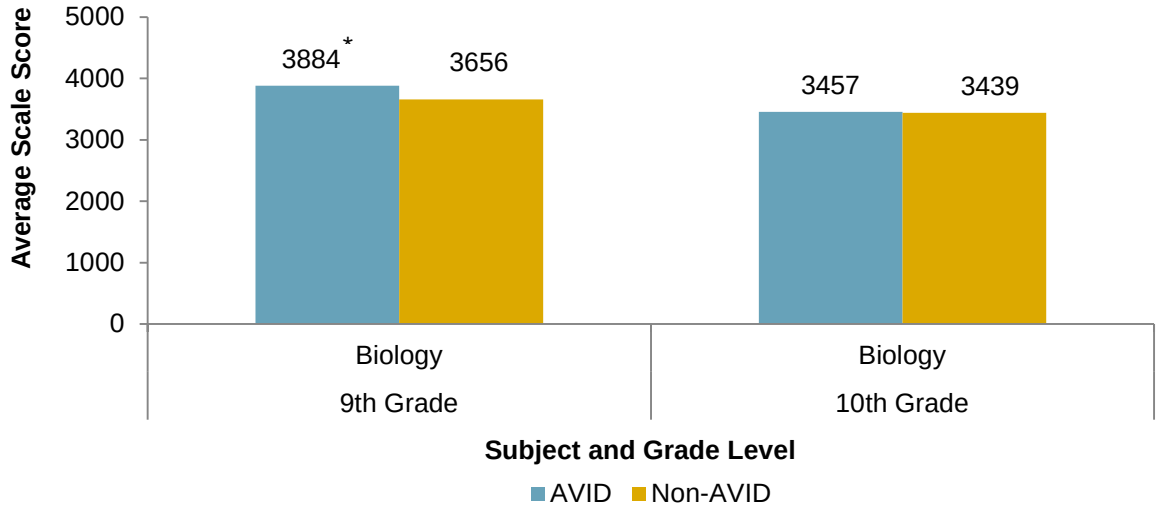
- **Figure 20. STAAR End of Course Level III Advanced performance in Algebra I for students who enrolled in AVID and their non-AVID peers by grade level, 2013–2014**



- Sufficient STAAR EOC exam data to allow statistical comparisons of the performances of students in AVID and students not enrolled in AVID were available for students in grades 9 and 10 in Biology. STAAR EOC results in **Figure 21** (page 22) show students enrolled in AVID had higher average scale scores than non-AVID students on Biology exams at grades 9 and 10. The difference between the groups' average scale scores was of statistical significance at grade 9. (Table 12, page 35.)

- Analyses of program effects on student performance on the Biology exams disaggregated by grade level, revealed the performance differences were substantially significant (i.e. effect size ≥ 0.25 standard deviations) at grade 9 where AVID students achieved statistically significantly higher average scores than their non-AVID peers. The effect size was 0.55. (Table 12, page 35.)

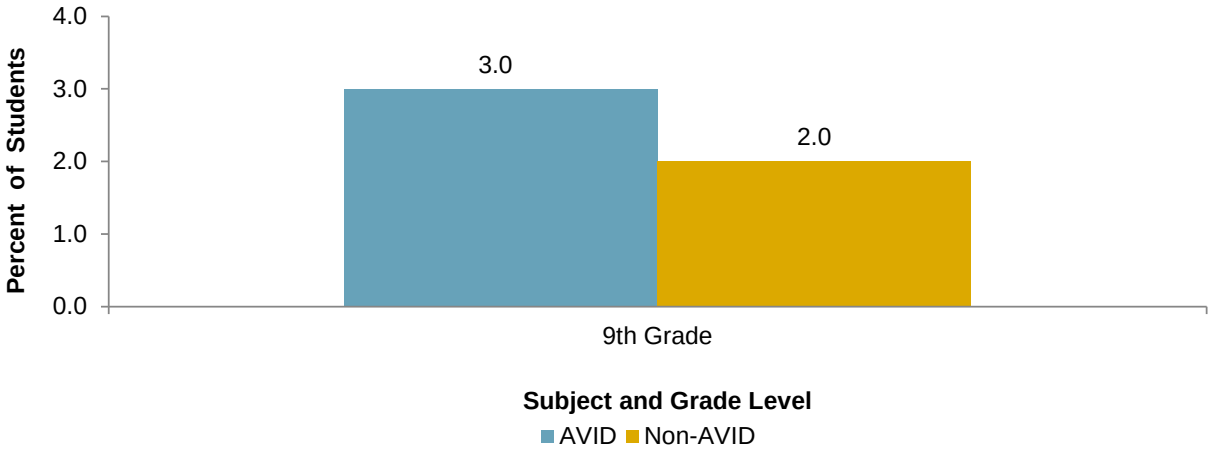
Figure 21. STAAR End of Course performance in science for students enrolled in AVID and their non-AVID peers by grade level, 2013–2014



Note:*Indicates statistical significance, $p \leq 0.05$.

- STAAR EOC results presented in **Figure 22** show students enrolled in AVID had a larger proportion of Level III Advanced scores than did non-AVID students on Biology exams at grade 9. However, none of the grade 10 students achieved Level III performance in Biology. (Table 13, page 36.)

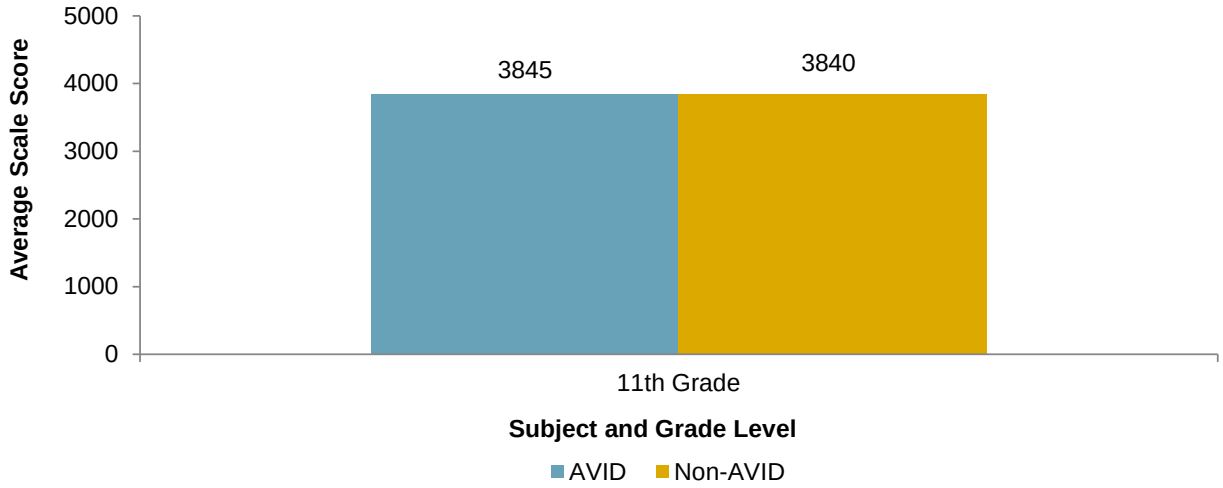
Figure 22. STAAR End of Course Level III Advanced performance for 9th grade Biology students who enrolled in AVID and their non-AVID peers by grade level, 2013–2014



- Sufficient STAAR EOC U.S. History exam data to allow statistical comparisons of the performances of students in AVID and students not enrolled in AVID were available for students in grade 11.

- STAAR EOC results shown in **Figure 23** indicate students enrolled in AVID had a slightly higher average U.S. History scale score than non-AVID students at grade 11 and the difference was not statistically significant. (Table 12, page 35.)

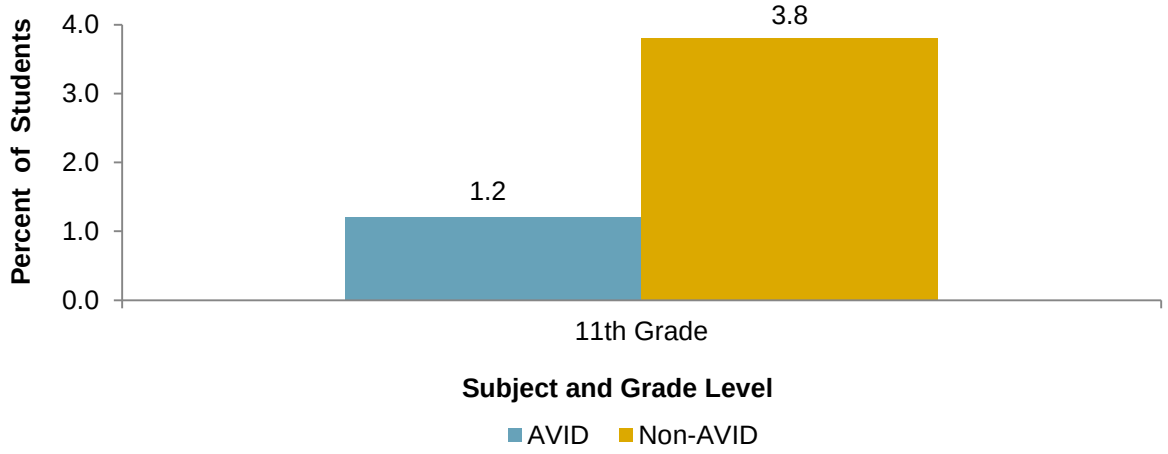
Figure 23. STAAR End of Course performance on U.S. History exam for students enrolled in AVID and their non-AVID peers, 2013–2014



- Sufficient STAAR EOC exam data to allow comparisons of the Level III Advanced performances of students in AVID and students not enrolled in AVID were available for grade 11 U.S. History students.

- Results shown in **Figure 24** indicate non-AVID students had a larger proportion of Level III Advanced scores than did AVID students on U.S. History STAAR EOC exams at grade 11. (Table 13, page 36.)

Figure 24. STAAR End of Course Level III Advanced performance for 11th grade U.S. History students who enrolled in AVID and their non-AVID peers by grade level, 2013–2014



Do 2013–2014 students in AVID score higher on ReadiStep exams than their non-AVID counterparts?

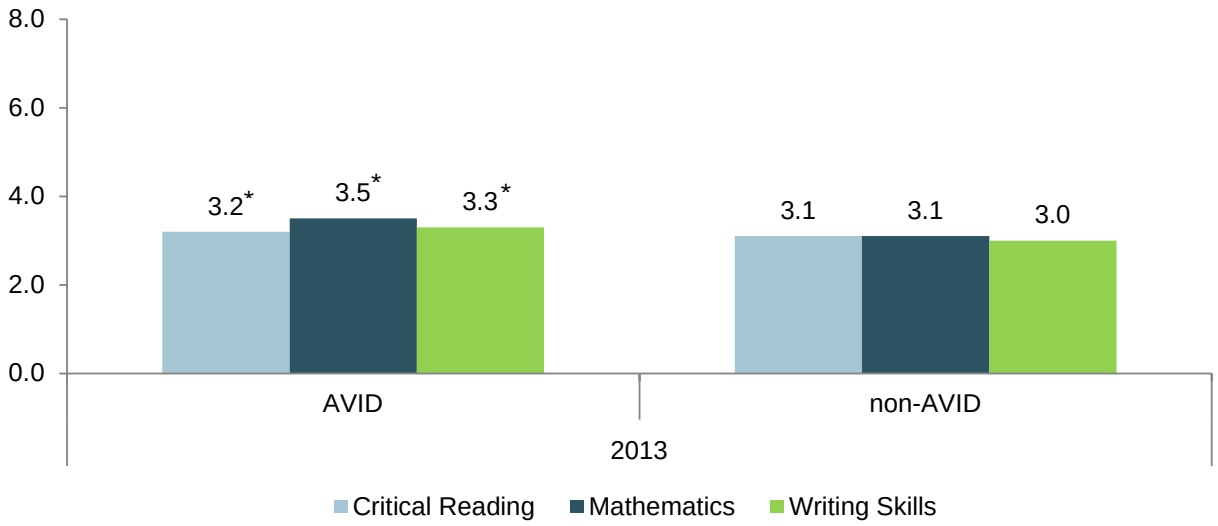
- The College Board ReadiStep critical reading, mathematics, and writing skills exams are given at grade 8 to indicate students' readiness for the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) and for the SAT Reasoning Test. Scores are reported on a scale of 1–8 points.

- **Figure 25** shows AVID students scored 0.1 to 0.4 points higher than their non-AVID peers in 2013, with the largest gaps in mathematics. The differences between the groups were statistically significant. However, neither group's mean scores scored 4.0 points, half of the maximum score of 8 points.

- The national percentile ranks (NPRs) presented in **Table 14** (page 37) show AVID students reached the 40th percentile in writing and the 45th percentile in mathematics. This constituted 9.0 and 12.1 percentage points, respectively, higher than their non-AVID peers.

- Analyses of program effects on student performance on the ReadiStep exams revealed the performance differences were substantially significant (i.e. effect size ≥ 0.25 standard deviations) with the exception of critical reading (0.19 effect size). The other effect sizes were 0.49 for math and 0.40 for writing. (**Table 15**, page 37.)

Figure 25. ReadiStep performance for 2013–2014 8th grade AVID students and their non-AVID peers, fall 2013



Note:*Indicates statistical significance, $p \leq 0.05$.

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 38.4 percent from 2011–2012 to 2013–2014, but decreased 10.9 percent from 2012–2013 to 2013–2014. Moreover, from the 2012–2013 school year to the 2013–2014 school year, AVID participation decreased 25.5 percent at the middle school level and increased 3.9 percent at the high school level. A greater proportion of AVID students (84.1 percent) was economically disadvantaged than non-AVID students (78.8 percent). In light of the academic support this program provides to the district's "middle" performing, economically-disadvantaged students who are enrolled in regular education classes and who are underrepresented in four-year colleges, it is important to carefully assess reasons for the decline in program enrollment among middle school students and to systemically address challenges that may negatively impact student participation in the AVID program, in general.

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. The 63.5 percent rate of enrollment in pre-AP courses among students in AVID was more than twice the enrollment rate among non-AVID students (24.2 percent). In addition, 19.1 percent of AVID students and 7.9 percent of non-AVID students enrolled in AP courses and 12.6 percent of high school AVID students and 0.5 percent of non-AVID high school students enrolled in dual credit courses. Considering the decline in the total pre-AP course enrollment for students in AVID from 2012–2013 (72.4 percent) to 2013–2014 (63.5 percent) and the enrollment growth in AP and dual credit course, it seems necessary to identify strategies to improve AVID students' pre-AP enrollment and to continue strategies that contribute to improved enrollment rates in advanced placement and dual credit courses among AVID students.

Overall, AVID students' average course enrollment per student was higher than non-AVID students in pre-AP and dual credit course, but slightly lower in AP courses. However, students in AVID achieved higher average grades in pre-AP and AP classes, but lower average course grades than their non-AVID peers in dual credit courses. Although the performance differences in students' Pre-AP and AP course grades were statistically significant ($p \leq 0.05$), program effects revealed they were not substantially significant (i.e. effect size not ≥ 0.25 standard deviations). This finding supports the need to explore instructional improvements to further enhance student learning and achievement in all advanced courses and particularly in dual credit courses.

Though the number of AVID students taking AP exams increased 5.0 percent from 2012–2013 (262 students) to 2013–2013 (275 students), the number of exams taken by students in AVID decreased 20.3 percent from 2012–2013 (418 exams) to 2013–2014 (333 exams), and the percentage of exams on which students scored 3 or more points was 7.6 percentage points higher among non-AVID than AVID students; the percentage of AP exams on which AVID students scored 3 or higher increased slightly from 2012–2013 (13.9 percent) to 2013–2013 (15.0 percent). Proactive steps to identify gaps in teaching and

learning in pre-AP and AP courses may help improve future findings regarding AVID student performance on AP exams. ReadiStep may be used to assess achievement gaps so that educators are able to help students to perform better in advanced courses and on associated exams, as well as to graduate from high school collegeready.

Generally, students in AVID outperformed their non-AVID peers on the standardized assessments (STAAR, STAAR EOC, and ReadiStep). Analyses of program effects on STAAR performance differences between AVID and non-AVID students were mixed, but were substantially significant for each ReadiStep and STAAR EOC exam on which AVID students outperformed their non-AVID peers, with exception of the STAAR EOC U.S. History. Therefore, the results of this report support previous research findings that indicate students in an AVID program show higher mean scores than non-AVID students on state-mandated assessments of reading, mathematics, and science (Murray, 2012). Nonetheless, the lacking performances of AVID students in dual credit courses, on AP exams (outperformed by their non-AVID peers), and on ReadiStep exams (scored less than one-half the maximum points) may highlight crucial areas for program improvements.

To better prepare more students in AVID for greater levels of success in advanced courses and associated assessments, program administrators may consider confirming program adherence to the eleven 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., 2007). 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.

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Table 1: Number of AVID Students by Grade Level and School, 2013–2014								
School Name	**Grade Level**							**Total**
	6th	**7th**	**8th**	**9th**	**10th**	**11th**	**12th**	
Henry MS	35	43	49	-	-	-	-	**127**
Holland MS	-	23	21	-	-	-	-	**44**
Jackson MS	47	-	-	-	-	-	-	**47**
McReynolds MS	72	46	57	-	-	-	-	**175**
Ortíz MS	27	54	66	-	-	-	-	**147**
Revere MS	-	44	33	-	-	-	-	**77**
Middle School Subtotal	**181**	**210**	**226**	-	-	-	-	**617**
Advanced Virtual Academy HS	-	-	-	-	-	-	1*	**1**
Furr HS	-	-	-	16	-	-	-	**16**
Hope Academy HS	-	-	-	1*	-	-	-	**1**
Houston Academy for International Studies HS	-	-	-	118	114	-	-	**232**
Madison HS	-	-	-	48	56	-	-	**104**
Milby HS	-	-	-	95	26	3*	1*	**125**
Sharpstown HS	-	-	-	65	32	26	15	**138**
Sterling HS	-	-	-	1*	-	-	-	**1**
Westbury HS	-	-	-	-	-	1*	-	**1**
Westside HS	-	-	-	1*	-	-	-	**1**
Worthing HS	-	-	-	44	37	48	17	**146**
Yates HS	-	-	-	43	5	18	8	**74**
High School Subtotal	-	-	-	**432**	**270**	**96**	**42**	**840**
Combined-level School	-	-	-	-	-	-	-	-
Beechnut Academy	-	-	-	5	-	-	-	**5**
Combined-level School Subtotal	-	-	-	**5**	-	-	-	**5**
Total	**181**	**210**	**226**	**437**	**270**	**96**	**42**	**1,462**

Source: November 21, 2014 Chancery Student Information System

Note: *Schools and grade levels with fewer than 5 students were not matched with non-AVID students at the schools grade levels and were not included in student performance analyses, which resulted in 9 student omissions (*) and 1,453 student inclusions.

Table 2: Number of Non-AVID Students by Grade Level and School, 2013–2014								
School Name	**Grade Level**							**Total**
	6th	**7th**	**8th**	**9th**	**10th**	**11th**	**12th**	
Henry MS	283	296	314	-	-	-	-	**893**
Holland MS	-	266	268	-	-	-	-	**534**
Jackson MS	286	-	-	-	-	-	-	**286**
McReynolds MS	169	183	196	-	-	-	-	**548**
Ortíz MS	312	337	299	-	-	-	-	**948**
Revere MS	-	426	432	-	-	-	-	**858**
Middle School Subtotal	**1,050**	**1,508**	**1,509**	-	-	-	-	**4,067**
Advanced Virtual Academy HS	-	-	-	-	-	-	-	**0**
Furr HS	-	-	-	275	-	-	-	**275**
Hope Academy HS	-	-	-	-	-	-	-	**0**
Houston Academy for International Studies HS	-	-	-	^	^	-	-	**0**
Madison HS	-	-	-	737	490	-	-	**1,227**
Milby HS	-	-	-	601	530	-	-	**1,131**
Sharpstown HS	-	-	-	482	420	345	238	**1,485**
Sterling HS	-	-	-	-	-	-	-	**0**
Westbury HS	-	-	-	-	-	-	-	**0**
Westside HS	-	-	-	-	-	-	-	**0**
Worthing HS	-	-	-	241	166	81	143	**631**
Yates HS	-	-	-	307	299	187	253	**1,046**
High School Subtotal	-	-	-	**2,643**	**1,905**	**613**	**634**	**5,795**
Combined-level School	-	-	-	-	-	-	-	-
Beechnut Academy	-	-	-	288	-	-	-	**288**
Combined-level School Subtotal	-	-	-	**288**	-	-	-	**288**
Total	**1,050**	**1,508**	**1,509**	**2,931**	**1,905**	**613**	**634**	**10,150**

Source: November 21, 2014 Chancery Student Information System

Note: ^No data available for non-AVID students at grade level of AVID participants.

Table 3. Characteristics of AVID Participants and Non-AVID Students, 2013–2014				
	AVID Students (N=1,453)*		Non-AVID Students (N=10,150)	
	N	%	N	%
Grade				
6	181	12.5	1,050	10.3
7	210	14.5	1,508	14.9
8	226	15.6	1,509	14.9
9	434	29.9	2,931	28.9
10	270	18.6	1,905	18.8
11	92	6.3	613	6.0
12	40	2.8	634	6.2
Total	**1,453**	**100.0**	**10,150**	**100.0**
Gender				
Male	636	43.8	5,543	54.6
Female	817	56.2	4,607	45.5
Total	**1,453**	**100.0**	**10,150**	**100.0**
Race/Ethnicity				
Asian/Pacific Islander	26	1.8	124	1.3
African American	471	32.4	3,537	34.8
Hispanic	921	63.4	6,222	61.3
American Indian/Alaska Native	5	0.3	18	0.2
White	24	1.7	210	2.1
Two or more	6	0.4	39	0.4
Total	**1,453**	**100.0**	**10,150**	**100.1**
Economic Disadv.	1,222	84.1	7,995	78.8
At-Risk	937	64.5	8,039	79.2
Special Ed.	69	4.7	1,397	13.8
Gifted/Talented	181	12.5	580	5.7

Note: *Counts represent students included in student performance analyses. Economic Disadvantaged, At-Risk, Special Ed., and Gifted/Talented numbers represent duplicated counts.

Table 4. Number of Pre-AP, AP, and Dual Credit Courses and AVID and Non-AVID Students Enrolled by Course Type, School Level, and School, 2013–2014						
	Pre-AP		AP		Dual Credit	
	AVID	Non-AVID	AVID	Non-AVID	AVID	Non-AVID
Students						
Middle School Students	324	929	-	-	-	-
High School Students	597	1,494	276	794	183	54
Combined School Students	1	33	1	9	-	1
Total Students	**922**	**2,456**	**277**	**803**	**183**	**55**
Courses						
Middle School Courses						
Henry MS	232	691	-	-	-	-
Holland MS	190	479	-	-	-	-
Jackson MS	8	223	-	-	-	-
McReynolds MS	90	117	-	-	-	-
Ortíz MS	365	617	-	-	-	-
Revere MS	118	651	-	-	-	-
Middle School Total Courses	**1,003**	**2,778**	**-**	**-**	**-**	**-**
High School Courses						
Furr HS	71	565	10	103	-	4
Houston Academy for International HS	1,722	-	243	-	445	-
Madison HS	379	821	115	381	4	4
Milby HS	290	2,160	24	206	-	6
Sharpstown HS	342	1,812	78	766	3	61
Worthing HS	265	202	127	123	-	3
Yates HS	101	530	21	232	-	3
High School Total Courses	**3,170**	**6,090**	**618**	**1,811**	**452**	**81**
Combined School Courses						
Beechnut Academy	3	77	1	9	-	1
Combined School Total	**3**	**77**	**1**	**9**	**-**	**1**
Total Courses	**4,176**	***8,945**	**619**	**1,820**	**^452**	**^82**

Note: Beechnut courses were taken at grade 9 and included in the high school graphs in the body of this report. *Scores unavailable for three non-AVID courses. ^Scores unavailable for two AVID courses and one non-AVID course.

Table 5. Results of Statistical Analyses of Differences Between of AVID and Non-AVID Students' Average Course Grades by Course Type, 2013–2014

Course Type		N	Mean	Std. Dev.	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Effect Size
Pre-AP	AVID	4,176	81.03	9.83	11.239	0.001	4.348	8706.861	0.000	0.820	0.08
	Non-AVID	8,942	80.21	10.56							
AP	AVID	619	77.42	10.10	2.828	0.093	2.765	2437.000	0.006	1.387	0.13
	Non-AVID	1,820	76.03	11.00							
Dual Credit	AVID	450	81.71	12.82	0.507	0.477	-1.257	529.000	0.209	-1.956	-0.15
	Non-AVID	81	83.67	13.28							

Note: Scores unavailable for three non-AVID pre-AP courses, two AVID dual credit courses, and one non-AVID dual credit course.

Table 6. AP Examination Participation and Performance Results for AVID Students, 2012–2013 and 2013–2014

	2012–2013 (N=1,641)		2013–2014 (N=1,462)		
	N	%	N	%	Change
Students Taking Exams	262	16.0	275	18.8	5.0*
Exams Taken	418	-	333	-	-20.3*
Exams Scored 3 or Higher	58	13.9	50	15.0	1.1 ppts.
Average Number of Exams per student	1.6	-	1.2	-	-0.4 exams

Note: *Percent change in number of students or exams. “ppt.” means percentage point.

Table 7. AP Examination Participation and Performance Results for AVID and Non-AVID Students, 2013–2014

	AVID Participants		Non-AVID Students	
	N	%	N	%
Students Enrolled in AP Courses	277	-	803	-
Students Taking Exams	275	99.3	754	93.9
Exams Taken	333	-	956	-
Exams Scored 3 or Higher	50	15.0	216	22.6
Average Number of Exams per student	1.2	-	1.3	-

Table 8. STAAR Results of Statistical Analyses of Differences Between AVID and Non-AVID Students' Scale Scores by Subject and Grade Level, 2013–2014

Test	Subject and Grade	N	Mean	Std. Dev.	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Effect Size
	Reading Scale Scores										
AVID	6	181	1638.19	356.329	.348	.555	.558	1073	.577	17.249	0.05
Non-AVID	6	894	1620.94	383.331							
AVID	7	209	1649.02	206.458	12.144	.001	.599	414.832	.550	10.244	0.03
Non-AVID	7	1,229	1638.78	330.066							
AVID	8	224	1705.26	256.618	8.609	.003	-.018	369.642	.986	-.354	-0.00
Non-AVID	8	1,248	1705.62	330.453							
	Math Scale Scores										
AVID	6	181	1658.99	328.318	.307	.580	.389	1075	.698	10.932	0.03
Non-AVID	6	896	1648.06	348.390							
AVID	7	209	1670.18	196.063	6.943	.009	1.799	421.873	.073	29.357	0.10
Non-AVID	7	1,230	1640.82	318.415							
AVID	8	155	1727.10	275.430	1.369	.242	.939	1233	.348	24.632	0.08
Non-AVID	8	1,080	1702.47	309.340							
	Writing Scale Scores										
AVID	7	209	3686.05	393.276	7.660	.006	7.653	316.457	.000	231.778	0.51
Non-AVID	7	1,229	3454.28	466.654							
	Science Scale Scores										
AVID	8	225	3877.23	548.179	.063	.802	7.789	1452	.000	315.058	0.56
Non-AVID	8	1,229	3562.17	559.558							
	Social Studies Scale Scores										
AVID	8	226	3513.03	395.256	.125	.724	5.685	1473	.000	166.053	0.56
Non-AVID	8	1,249	3346.97	405.677							

Table 9. STAAR Results of Statistical Analyses of Differences Between AVID and Non-AVID Students' Scale Scores by Subject, 2013–2014

	Subject	N	Mean	Std. Dev.	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Effect Size
	Reading Scale Scores										
AVID		614	1666.35	276.754	14.950	.000	.596	999.310	.551	7.554	0.02
Non-AVID		3,371	1658.79	346.959							
	Math Scale Scores										
AVID		545	1682.65	269.535	5.394	.020	1.477	837.867	.140	19.041	0.06
Non-AVID		3,206	1663.61	325.214							

Table 10. Results of AVID and Non-AVID Students' STAAR Level III Advanced Performances by Subject and Grade Level, 2013–2014

Test	Subject and Grade	N	Number Advanced	Percent Advanced	Percentage Point Difference
STAAR	**Reading**				
AVID	6	181	8	4.4	0.6
Non-AVID	6	894	34	3.8	
AVID	7	209	23	11.0	6.3
Non-AVID	7	1,229	58	4.7	
AVID	8	224	32	14.3	4.6
Non-AVID	8	1,248	121	9.7	
STAAR	**Math**				
AVID	6	181	15	8.3	0.5
Non-AVID	6	896	70	7.8	
AVID	7	209	22	10.5	5.8
Non-AVID	7	1,230	58	4.7	
AVID	8	155	19	12.3	9.1
Non-AVID	8	1,080	35	3.2	
STAAR	**Writing**				
AVID	7	209	4	1.9	0.3
Non-AVID	7	1,227	20	1.6	
STAAR	**Science**				
AVID	8	225	45	20.0	12.9
Non-AVID	8	1,229	87	7.1	
STAAR	**Social Studies**				
AVID	8	226	11	4.9	2.1
Non-AVID	8	1,249	35	2.8	

Table 11. STAAR EOC Results of Statistical Analyses of AVID and Non-AVID Students' Performances, 2013–2014

	Subject	N	Mean	Std. Deviation	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Effect Size
STAAR EOC	**English I Scale Scores**										
AVID		467	3795.32	348.696	5.516	.019	13.846	727.983	.000	250.574	0.63
Non-AVID		2,422	3544.75	403.236							
STAAR EOC	**English II Scale Scores**										
AVID		286	3941.22	414.330	2.869	.090	11.544	2029.000	.000	331.550	0.74
Non-AVID		1,745	3609.67	455.808							
STAAR EOC	**Algebra I Scale Scores**										
AVID		423	3846.72	390.794	2.979	.084	11.983	2584.000	.000	273.246	0.64
Non-AVID		2,163	3573.47	435.959							
STAAR EOC	**Biology Scale Scores**										
AVID		409	3876.22	343.567	11.911	.001	11.804	683.038	.000	229.149	0.55
Non-AVID		2,076	3647.08	427.974							
STAAR EOC	**U.S. History Scale Scores**										
AVID		85	3841.29	301.199	2.112	.147	.688	621.000	.492	28.798	0.08
Non-AVID		538	3812.50	366.826							

Table 12. STAAR EOC Results of Statistical Analyses of AVID and Non-AVID Students' Performances, 2013–2014

	Subject and Grade	N	Mean	Std. Deviation	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Effect Size
STAAR EOC	**English I Scale Scores**										
AVID	9	409	3820.93	354.831	7.502	0.006	13.611	666.551	0.000	271.145	0.66
Non-AVID	9	1,989	3549.79	420.712							
AVID	10	43	3636.65	231.540	3.591	0.059	2.197	386.000	0.029	109.984	0.36
Non-AVID	10	345	3526.67	317.693							
AVID	11	15	3551.80	238.914	2.020	0.158	0.608	97.000	0.544	46.848	0.17
Non-AVID	11	84	3504.95	280.337							
STAAR EOC	**English II Scale Scores**										
AVID	9	6	3579.50	373.791	0.057	0.811	1.220	228.000	0.224	243.183	0.50
Non-AVID	9	224	3336.32	483.867							
AVID	10	257	3994.31	385.694	5.939	0.015	11.961	387.325	0.000	319.995	0.75
Non-AVID	10	1,373	3674.32	433.478							
AVID	11	23	3442.35	363.764	0.237	0.627	0.242	165.000	0.809	22.098	0.05
Non-AVID	11	144	3420.25	413.468							
STAAR EOC	**Algebra I Scale Scores**										
AVID	8	73	4073.49	289.280	3.018	0.084	-0.279	240.000	0.780	-15.306	-0.04
Non-AVID	8	169	4088.80	427.899							
AVID	9	332	3817.29	391.023	1.277	0.259	10.601	2071.000	0.000	263.483	0.63
Non-AVID	9	1,741	3553.81	419.455							
AVID	10	12	3444.92	191.432	0.329	0.567	1.125	239.000	0.262	84.183	0.33
Non-AVID	10	229	3360.73	255.150							
AVID	11	6	3519.33	396.966	0.172	0.681	0.754	28.000	0.457	118.542	0.34
Non-AVID	11	24	3400.79	331.842							
STAAR EOC	**Biology Scale Scores**										
AVID	8	1	No analysis due to group size < 5.								
Non-AVID	8	20									
AVID	9	400	3884.11	339.916	12.564	0.000	11.628	690.522	0.000	227.963	0.55
Non-AVID	9	1,897	3656.15	425.609							
AVID	10	5	3457.00	191.542	0.891	0.347	0.124	144.000	0.902	17.851	0.06
Non-AVID	10	141	3439.15	320.475							
AVID	11	3	No analysis due to group size < 5.								
Non-AVID	11	18									
STAAR EOC	**U.S. History Scale Scores**										
AVID	9	0	No analysis due to group size < 5.								
Non-AVID	9	10									
AVID	10	1	No analysis due to group size < 5.								
Non-AVID	10	121									
AVID	11	84	3844.61	301.446	0.576	0.448	0.117	482.000	0.907	4.620	0.01
Non-AVID	11	400	3839.99	335.108							

Table 13. Results of AVID and Non-AVID Students' STAAR EOC Level III Advanced Performances, 2013–2014					
	Subject and Grade	**N**	**Number Advanced**	**Percent Advanced**	**Percentage Point Difference**
	English I				
AVID	9	409	6	1.5	
Non-AVID	9	1,989	17	0.9	0.6
AVID	10	43	0	0.0	
Non-AVID	10	345	0	0.0	0.0
AVID	11	15	0	0.0	
Non-AVID	11	84	0	0.0	0.0
Total AVID		**467**	**6**	**1.3**	
Total Non-AVID		**2,418**	**17**	**0.7**	**0.6**
	English II				
AVID	9	6	0	0.0	
Non-AVID	9	224	1	0.4	-0.4
AVID	10	257	7	2.7	
Non-AVID	10	1,373	15	1.1	1.6
AVID	11	23	0	0.0	
Non-AVID	11	144	1	0.7	-0.7
Total AVID		**586**	**7**	**1.2**	
Total Non-AVID		**1,741**	**17**	**1.0**	**0.2**
	Algebra I				
AVID	8	73	17	23.3	
Non-AVID	8	169	38	22.5	0.8
AVID	9	332	34	10.2	
Non-AVID	9	1,741	54	3.1	7.1
AVID	10	12	0	0.0	
Non-AVID	10	229	1	0.4	-0.4
AVID	11	6	0	0.0	
Non-AVID	11	24	1	4.2	-4.2
Total AVID		**423**	**51**	**12.1**	
Total Non-AVID		**2,163**	**94**	**4.3**	**7.8**
	Biology				
AVID	8	1	*	*	
Non-AVID	8	20	6	30.0	*
AVID	9	400	12	3.0	
Non-AVID	9	1,897	38	2.0	1.0
AVID	10	5	0	0.0	
Non-AVID	10	141	0	0.0	0.0
AVID	11	3	*	*	
Non-AVID	11	18	0	0.0	*
Total AVID		**405**	**12**	**3.0**	
Total Non-AVID		**2,038**	**44**	**2.2**	**0.8**
	U.S. History				
AVID	9	0	*	*	
Non-AVID	9	10	1	10.0	*
AVID	10	1	*	*	
Non-AVID	10	121	7	5.8	*
AVID	11	84	1	1.2	
Non-AVID	11	400	15	3.8	-2.6
Total AVID		**84**	**1**	**1.2**	
Total Non-AVID		**400**	**23**	**5.8**	**-4.6**

Note: *Results not presented for AVID groups of ≤5 students and related outcomes.

Table 14. ReadiStep Performance Results of 2013–2014 AVID and Non-AVID Students, Fall 2013

	AVID Participants (n=166)		Non-AVID Students (n=990)	
Subject	**Mean**	**NPR**	**Mean**	**NPR**
Critical Reading	3.2	27.8	3.1	25.9
Mathematics	3.5	45.8	3.1	33.7
Writing Skills	3.3	40.6	3.0	31.6

Note: All AVID and non-AVID participants who took the ReadiStep assessment were 8th graders. NPRs are based on a national sample of eighth and ninth graders.

Table 15. Results of Statistical Analyses of Differences Between of AVID and Non-AVID Students' Average ReadiStep Scores by Subject, Fall 2013

2013		N	Mean	Std. Dev.	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Effect Size
Critical Reading	AVID	165	3.193	.6460	4.071	0.044	2.559	249.347	0. 011	0.1432	0.19
	Non-AVID	978	3.050	.7688							
Math	AVID	165	3.469	.7187	1.376	.241	5.769	1141	0.000	0.3719	0.49
	Non-AVID	978	3.097	.7736							
Writing Skills	AVID	165	3.290	.6266	6.496	0.011	5.382	246.078	0.000	0.2912	0.40
	Non-AVID	981	2.999	.7333							
	Non-AVID	837	2.952	.6964							