

National Alliance for Partnership in Equity (NAPE) Student Outcomes: 2016-2017





Executive Summary

The purpose of this report is to examine how the National Alliance for Partnerships in Equity's (NAPE) Micromessaging to Reach and Teach Every Student™ professional development training program may have influenced students' achievement and interest in the science, technology, engineering, and math (STEM) fields.

The impact of NAPE was assessed using State of Texas Assessments of Academic Readiness (STAAR), end-of-course (EOC), course enrollment, Student Climate Survey, and high school endorsement selection data. Because the intention of NAPE's training is to decrease student academic gaps seen in the STEM fields, only students who were enrolled in a science, math, or STEM-related career and technical education (CTE) course with a teacher trained by NAPE were considered students influenced by NAPE. Each outcome was examined according to race, gender, limited English proficiency (LEP), special education, and economic disadvantaged status to assess performance by various underserved groups in the STEM field. Differences were examined in relation to district average results; however, these comparisons are descriptive only. Math STAAR normal curve equivalent score (NCE) results were examined in relation to NCE growth from the 2015–2016 to the 2016–2017 academic year and NCE growth from the 2014–2015 to the 2015–2016 academic year as well.

Both NAPE-influenced students and district students showed positive math STAAR growth, compared with growth the year immediately prior. NAPE-influenced 8th-grade students had higher science STAAR NCE scores than did district 8th-grade students overall; NAPE-influenced students in underrepresented subgroups in the STEM field (i.e., female, Black, Hispanic, LEP, and economically disadvantaged) had lower average science STAAR NCE scores than did comparable overrepresented subgroups (i.e., male, White, not LEP, and not economically disadvantaged). Similar to science STAAR results, aside from gender, NAPE-influenced students in the majority of underrepresented subgroups in the STEM field (i.e., Black, Hispanic, LEP, and economically disadvantaged) had lower passing rates than did similar overrepresented subgroups (i.e., White, not LEP, and not economically disadvantaged).

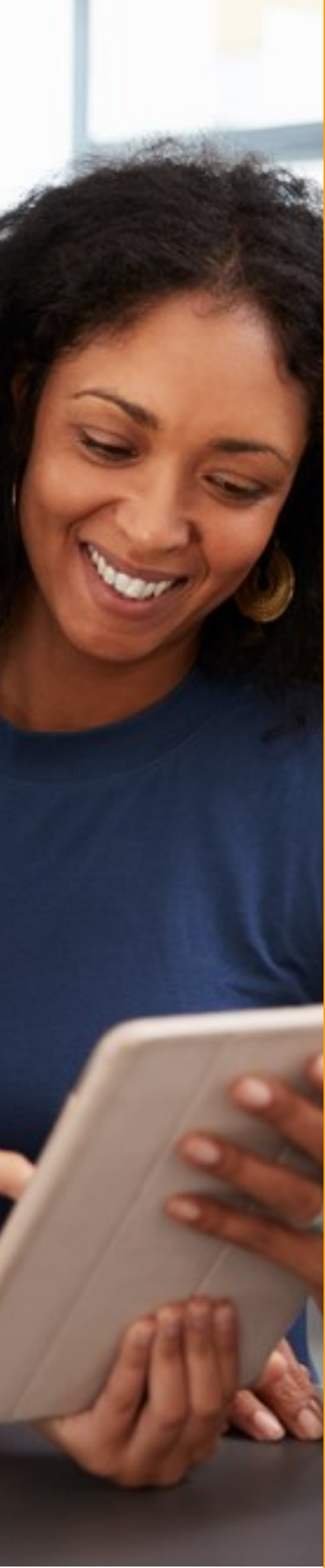
Most enrollment gains in elective math courses for NAPE-influenced students were from overrepresented subgroups in the STEM field (i.e., male, White, not LEP, not economically disadvantaged, and not receiving special education services); similar results were seen in enrollment changes for STEM-related CTE courses. However, advanced science course enrollment gains were better for the NAPE-influenced underrepresented subgroups than for the comparable overrepresented subgroups. For middle school students, the AISD student group was more likely to indicate plans for taking a pre-advanced-placement (AP) math or science or CTE class(es) in the following year than was the NAPE-influenced student group. A larger percentage of NAPE-influenced 8th-grade students than of district 8th-grade students selected the STEM high school endorsement. NAPE-influenced students in overrepresented subgroups in the STEM field tended to select the high school STEM endorsement at higher rates than did students in underrepresented subgroups in the STEM field.

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Introduction

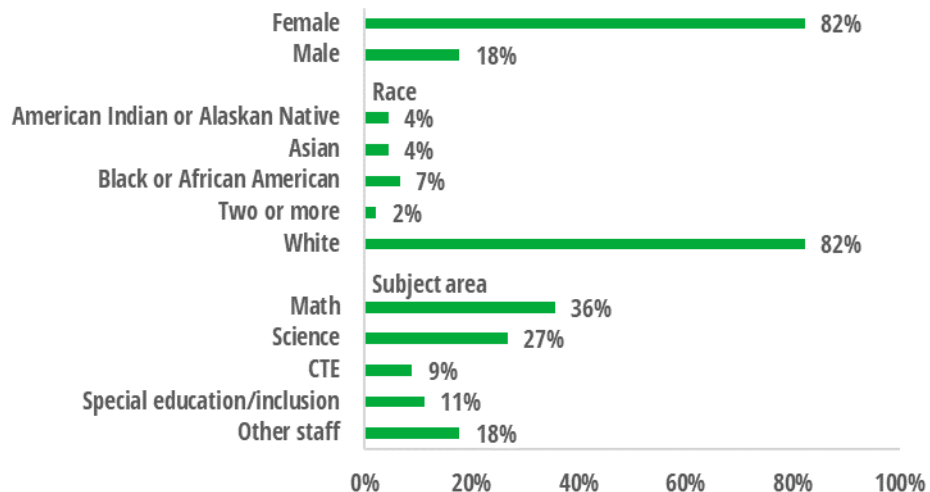
Beginning in 2014–2015, the Austin Independent School District (AISD) collaborated with the National Alliance for Partnerships in Equity (NAPE) to provide AISD staff with NAPE’s professional development program, Micromessaging to Reach and Teach Every Student™. This program addresses the influence of small and often subconscious cues (e.g., tone of voice, word choice, and bodily gesture) individuals send and receive, due to implicit bias, with the intention of increasing micro-affirmation (positive micromessages) and decreasing micro-inequalities (negative micromessages) (NAPE, 2015). Within the classroom structure, decreased micro-inequalities may encourage students to pursue nontraditional career paths. The goal of the training at AISD is to increase enrollment and achievement and to decrease the gap between historically underserved groups (e.g., female, Hispanic, and economically disadvantaged students) in science, technology, engineering, and math (STEM) fields.

Each year, a new cohort of staff attends the NAPE professional development sessions. In the 2016–2017 school year, NAPE provided training to staff at eight schools. The current report provides an overview of the staff who completed the 2016–2017 NAPE professional development sessions and students who were enrolled in a STEM course instructed by those teachers in the 2016–2017 academic year.

Which teachers received NAPE training?

NAPE staff recruited principals, who then recruited teachers to participate in NAPE’s professional development program. Of the 45 staff who completed the NAPE training in 2016–2017, the majority were female or White (Figure 1). Most trained staff were teachers who taught math (36%). While the majority of trained staff taught a STEM subject, an assistant principal, a choir teacher, special education teachers, and several instructional coach/specialists also completed the NAPE training. The average years of AISD employment for NAPE participants ranged from 0 years to a total of 17 years, with an average of 9 years of experience.

Figure 1.
The majority of NAPE-trained teachers were female or White in the science field.



Source. AISD staff records

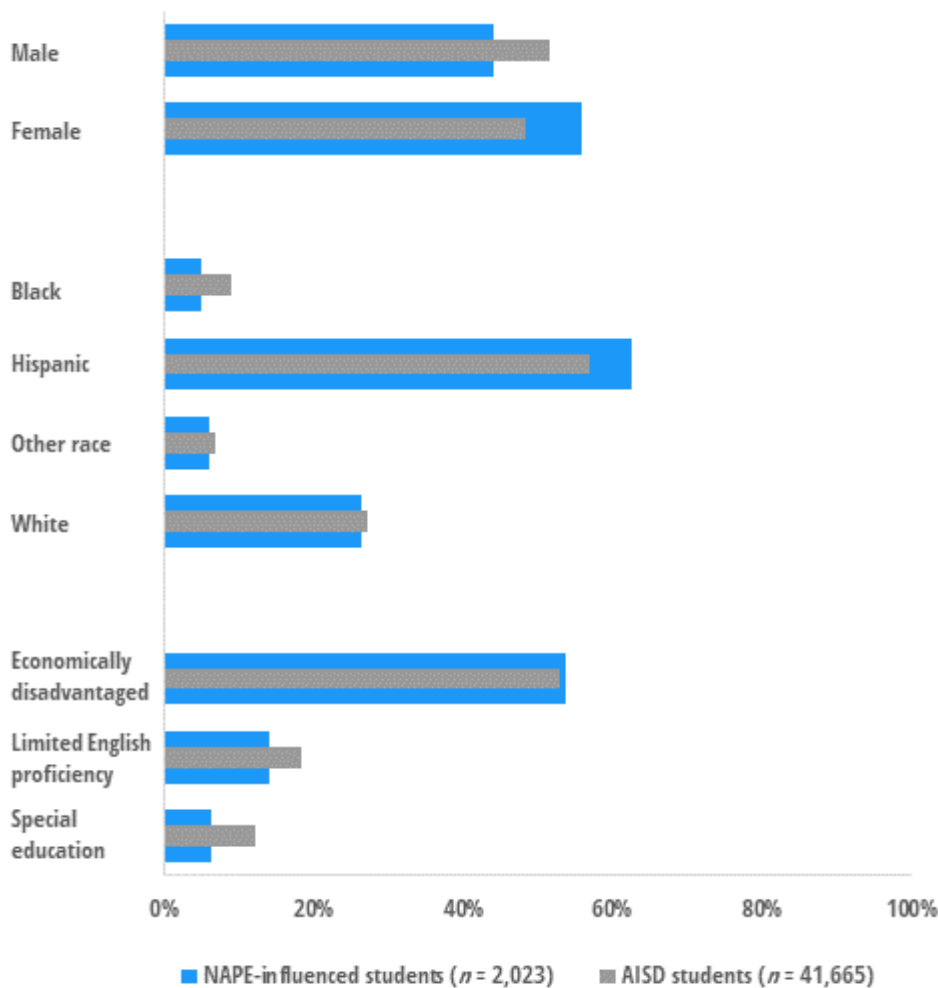
Note. Percentages may not total 100 due to rounding. Staff who attended the NAPE training may have taught more than one subject.

Who were the students included in the analysis?

Middle and high school students who were enrolled in a STEM course for more than 7 months with a teacher who completed the NAPE professional development training in 2016–2017 (NAPE-influenced students) were included in the analyses. Middle school NAPE-influenced students included students with 2014–2015 to 2016–2017 State of Texas Assessments of Academic Readiness (STAAR) records who were not enrolled in a NAPE-trained teacher’s course in a prior academic year. High school students who were not enrolled in a NAPE-trained teacher’s course in a prior academic year were included in the analysis.

The majority of students who enrolled in a course instructed by a NAPE-influenced teacher were Hispanic or economically disadvantaged (Figure 2). Special education, male, and limited English proficiency (LEP) students were underrepresented in the NAPE-influenced student group, compared with the AISD student population.

Figure 2. The majority of NAPE-influenced students were Hispanic or economically disadvantaged.



Source. AISD student records

Note. NAPE-influenced students includes middle and high school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year. Other race includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, two or more races, and Asian students.

Math STAAR

Differences in math STAAR growth the year following enrollment in a course with a NAPE-trained teacher and the year immediately prior were analyzed using math STAAR normal curve equivalent (NCE) scores.

Science STAAR

2016–2017 science STAAR NCE scores were analyzed to compare 8th-grade NAPE-influenced students and the district averages.

End-of-Course (EOC) Performance

2016–2017 biology EOC performance and algebra EOC performance were analyzed to compare NAPE-influenced students and the district averages.

Course Enrollment

The percentage change in enrollment in math and science advanced core courses and enrollment in elective math, science, and STEM-related career and technical education (CTE) courses in the 2016–2017 academic year (enrollment prior to completing a course with a NAPE-trained teacher) and the 2017–2018 academic year (enrollment following completing a course with a NAPE-trained teacher) were examined.

Endorsement Selection

The percentage of 8th-grade NAPE-influenced students who enrolled in the 9th grade in 2017–2018 (academic year immediately following enrollment in a course instructed by a NAPE-trained teacher) and selected the STEM endorsement were examined in comparison with the district average.

Student Climate Survey

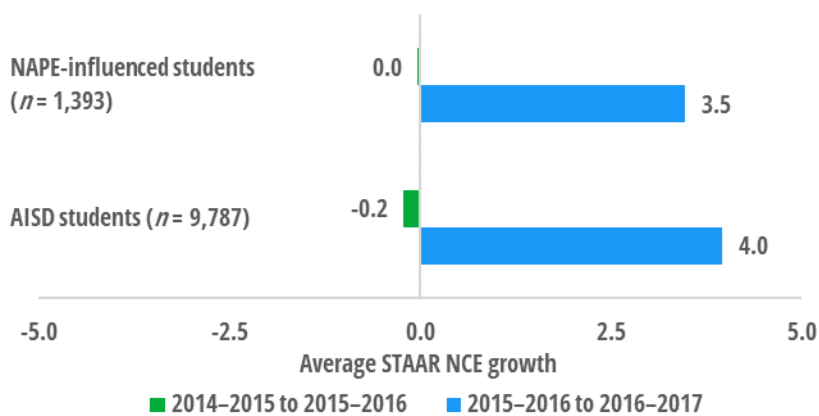
The percentage of middle school students who indicated they plan to take a pre-advanced-placement (AP) science or math class or CTE class the following year was examined in comparison with the district average.

The NCE was generated for students' STAAR scores. Similar to percentile ranks, numbers range from 0 to 100 on the NCE line, with a standard deviation of 21.06 (Central Rivers Area Education Agency 267, 2017). The advantages of NCE scores include allowing scores to be averaged, compared across time, and tested for significance. For the purposes of this report, average STAAR NCE scores were used to assess gains/losses in math achievement by subgroups (e.g., race, gender). In regard to gains/losses, a 0 is interpreted as students making the expected amount of progress during an academic year. Students who make more than 1 year of progress have positive scores, showing a net gain in NCE scores, while students who make less than a year of progress have negative scores, showing a net loss in NCE scores.

How did NAPE-influenced students perform on the math STAAR?

A total of 1,393 students had 2014–2015 to 2016–2017 STAAR records and were included in the analysis pertaining to math growth. Math growth was determined by subtracting 2016–2017 NCE scores from 2015–2016 NCE scores and 2015–2016 NCE scores from 2014–2015 NCE scores. Figure 3 shows that NAPE-influenced students showed a 0.0 average STAAR NCE score growth from 2014–2015 to 2015–2016, indicating they showed the expected progress in math the year immediately prior to completing a course instructed by a NAPE-trained teacher. NAPE-influenced students showed a 3.5 gain from 2015–2016 to 2016–2017, indicating students made more than a year of expected progress in math the year when completing a STEM-related course with a NAPE-trained teacher. However, similar results were seen for AISD students who had STAAR math scores in the same time frame, indicating the gains seen were a district trend and not directly related to the NAPE professional development training. (See Appendix A for math STAAR performance for various subgroups.) Trends were similar between the NAPE-influenced student group and the AISD student group, with the AISD student subgroups showing greater gains than the NAPE-influenced students subgroups from the 2015–2016 to the 2016–2017 academic year.

Figure 3.
NAPE-influenced and AISD students showed more than a year of expected progress in math from the 2015–2016 to the 2016–2017 academic year.



Source. AISD STAAR records

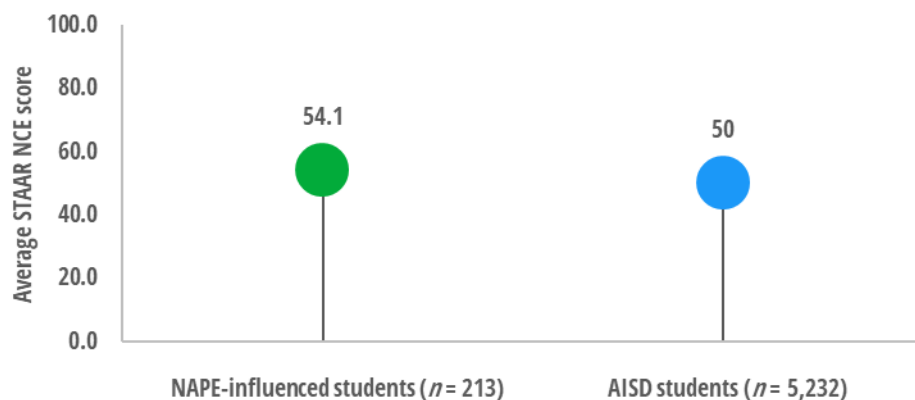
Note. NAPE-influenced students includes middle school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year. STAAR scores were converted to NCE scores. Growth was computed by subtracting 2016–2017 NCE scores from 2015–2016 math STAAR NCE scores and subtracting 2015–2016 NCE scores from 2014–2015 NCE scores.

How did NAPE-influenced students perform on the science STAAR?

The science STAAR is only taken by students enrolled in the 5th or 8th grade; therefore, a number of students did not have science STAAR records, and growth could not be computed for them. Instead, 8th-grade NAPE-influenced students' average science STAAR NCE scores were compared relative to all 8th-grade students in the district with STAAR records in the 2016–2017 academic year, which included NAPE-influenced students in the sample. A total of 213 NAPE-influenced students (15% of the analysis group) had science

STAAR NCE scores and were included in the analysis. As seen in Figure 4, NAPE-influenced students had higher average science STAAR NCE scores than did the AISD 8th-grade group. (See Appendix B for average science STAAR NCE scores for various subgroups.) Various NAPE-influenced student subgroups underrepresented in the STEM field had higher average science STAAR NCE scores than did the AISD 8th-grade student group. However, NAPE-influenced subgroups overrepresented in the STEM field (i.e., male, White, not LEP, and not economically disadvantaged) continued to have higher average science STAAR NCE scores than did NAPE-influenced subgroups underrepresented in the STEM field (i.e., female, Black, Hispanic, LEP, and economically disadvantaged).

Figure 4.
NAPE-influenced students had higher average science STAAR NCE scores than did **AISD students**.



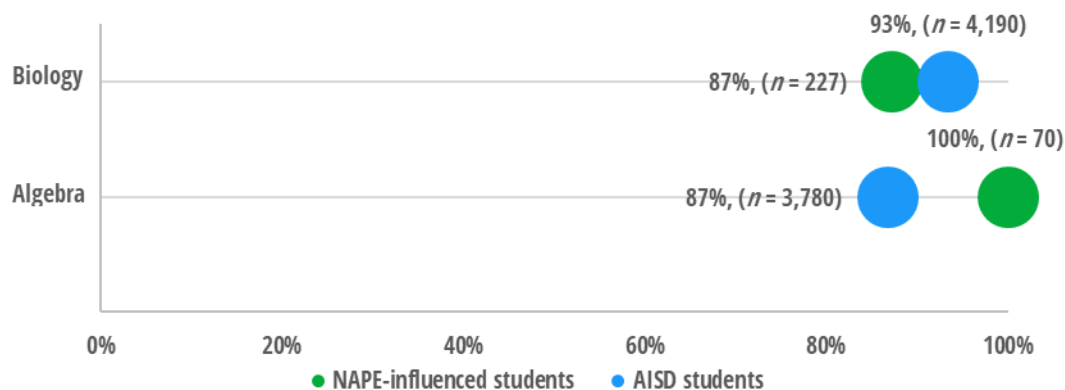
Source. AISD STAAR records

Note. NAPE-influenced students includes 8th-grade students with 2016–2017 science STAAR records who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year.

How did NAPE-influenced students perform on the EOC exams?

Six hundred and thirty high school students from one high school were enrolled in a STEM-related course with a teacher who completed the NAPE professional development training in the 2016–2017 academic year; only one high school had staff who participated in the NAPE professional development training. While courses included electives (e.g., aquatic science), only students who were enrolled in an algebra or biology course with a NAPE-trained teacher and had EOC records were included in this analysis; 70 NAPE-influenced students were enrolled in an algebra course and 227 NAPE-influenced students were enrolled in a biology course and took the EOC exam for that subject in the 2016–2017 academic year. Additionally, only 9th-grade NAPE-influenced students were included in the analysis as the majority of students with biology or algebra EOC records were enrolled in the 9th-grade; district averages were only included for 9th-grade students as well. Figure 5 displays the passing rates for the EOC exams for the NAPE-influenced student group and the district averages. All students who were enrolled in an algebra course with a NAPE-trained teacher passed the algebra EOC, and this passing rate was greater than that of the district group (87%). AISD students (93%) had higher passing rates than did NAPE-influenced students (87%) on the biology EOC. See Appendix C for passing rates for the biology EOC for various subgroups; passing rates for algebra subgroups are not displayed in the appendix as all NAPE-influenced students passed the algebra EOC. The majority of NAPE-influenced subgroups overrepresented in the STEM field (i.e., White, not LEP, and not economically disadvantaged) continued to perform better than subgroups underrepresented in the STEM field (i.e., Black, Hispanic, LEP, and economically disadvantaged) on the biology EOC; only female NAPE-influenced students showed higher passing rates on the biology EOC than did male students.

Figure 5.
NAPE-influenced students had a higher passing rate than **AISD students** on the algebra EOC.



Source. AISD EOC records

Note. NAPE-influenced students includes 9th-grade students with EOC records and were enrolled in the EOC subject course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year.

Did enrollment in STEM classes increase for NAPE-influenced students?

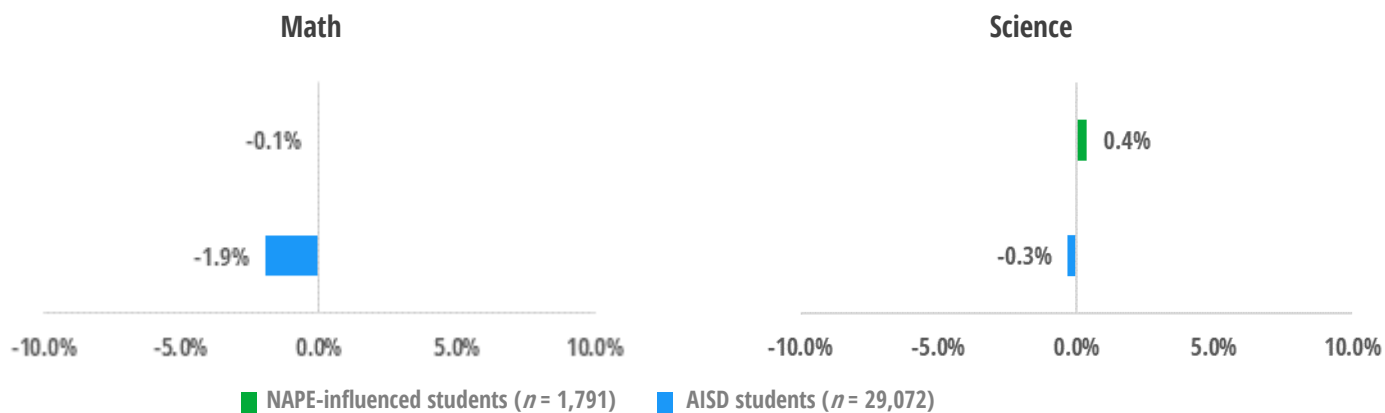
Although 45 staff completed the NAPE professional development training, some did not teach a STEM course in the 2016–2017 academic year. NAPE-trained staff who did not teach a STEM course mainly held school leadership positions (i.e., assistant principal, instructional coach). A total of 106 STEM-related courses were taught by 33 NAPE-trained teachers, and of these, seven were CTE electives. Among the 59 math courses taught by a NAPE-trained teacher, 88% were core math courses. A total of 40 science courses were taught by a NAPE-trained teacher, and of these, 88% were core science courses. Finally, 32% of these were advanced classes (i.e., honors, pre-AP, AP, or international baccalaureate [IB] course) relative to the student’s grade level.

The following analysis examined differences in math, science, and STEM CTE course enrollment from the 2016–2017 to the 2017–2018 academic year. The analysis differentiated between elective and core math and science courses, as well as CTE courses. Although most schools typically offered an advanced version of core classes (i.e., classes students are required to complete), this was not the case for elective courses. Elective and CTE courses and enrollment in those courses are determined by availability, based on students’ schedules after considering core classes, students’ interest in the course, and students’ academic performance. A total of 1,791 NAPE-influenced students from the sample remained in the school district and had course enrollment records from the 2016–2017 to the 2017–2018 academic year.

Advanced Core Math and Science Course Enrollment

Figure 6 displays changes in the percentage of NAPE-influenced students and AISD students enrolled in an advanced math and science course from the 2016–2017 to the 2017–2018 academic year. A 0.4% change in enrollment was seen in advanced core science course enrollment, and a –0.1% change was seen in advanced core math course enrollment for NAPE-influenced students. (See Appendix D for enrollment in advanced core math and science classes for various student subgroups.) NAPE-influenced students in several underrepresented subgroups in the STEM field (i.e., female, Hispanic, LEP, and economically disadvantaged) showed higher enrollment rates in advanced science and math core classes than did their overrepresented counterparts in the STEM field (i.e., male, White, not LEP, and not economically disadvantaged).

Figure 6.
Changes in Advanced Core Math and Science Course Enrollment From 2016–2017 to 2017–2018



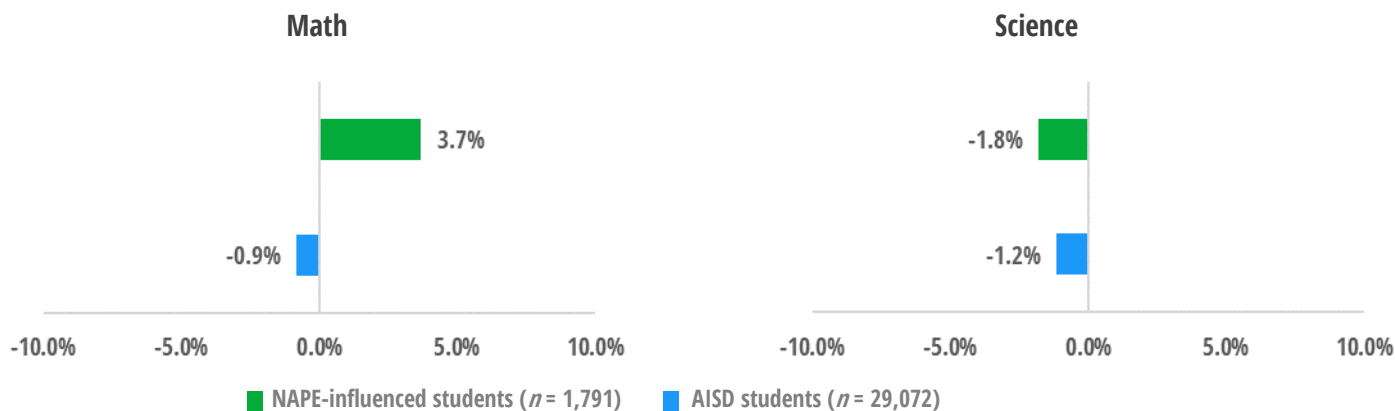
Source. AISD student records

Note. Elective courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

Elective Math and Science Course Enrollment

Figure 7 displays changes in the percentages of NAPE-influenced students and AISD students enrolled in an elective math and science course from the 2016–2017 to the 2017–2018 academic year. A –1.8% change in enrollment was seen in elective science course enrollment, and a 3.7% increase in enrollment was seen in elective math course enrollment for NAPE-influenced students. (See Appendix E for enrollment in elective math and science courses for various subgroups.) NAPE-influenced students in overrepresented subgroups in the STEM field (i.e., male, White, not LEP, not economically disadvantaged, and not receiving special education services) showed the largest increases in elective math enrollment the year immediately following enrollment in a class with a NAPE-trained teacher; aside from the female subgroup, NAPE-influenced students in underrepresented subgroups in the STEM field showed little to no change in elective math enrollment. The majority of NAPE-influenced students showed decreased or no enrollment change in elective science courses from the 2016–2017 to the 2017–2018 academic year. NAPE-influenced student subgroups that are underrepresented in the STEM field showed larger decreases in elective science courses enrollment, compared with the district average enrollment of similar subgroups in elective science courses.

Figure 7.
Changes in Elective Math and Science Course Enrollment From 2016–2017 to 2017–2018



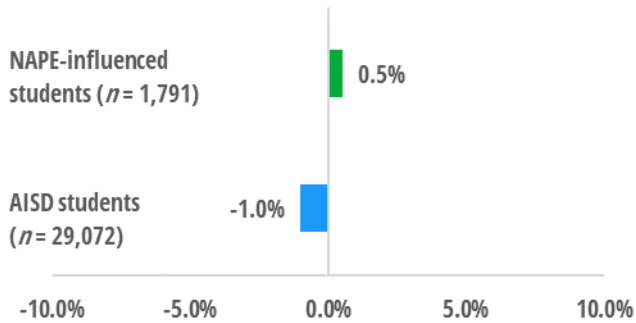
Source. AISD student records

Note. Elective courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

STEM-Related CTE Course Enrollment

Figure 8 displays changes in the percentage of NAPE-influenced students enrolled in a STEM-related CTE course from the 2016–2017 to the 2017–2018 academic year; STEM-related CTE course enrollment increased by 0.5% for NAPE-influenced students. (See Appendix F for changes in STEM-related CTE course enrollment for various subgroups.) The majority of NAPE-influenced underrepresented groups in the STEM field (i.e., female, Hispanic, Black, LEP, economically disadvantaged, and receiving special education services) showed a decrease in enrollment in STEM-related CTE courses.

Figure 8.
Changes in STEM-Related CTE Course Enrollment From 2016–2017 to 2017–2018



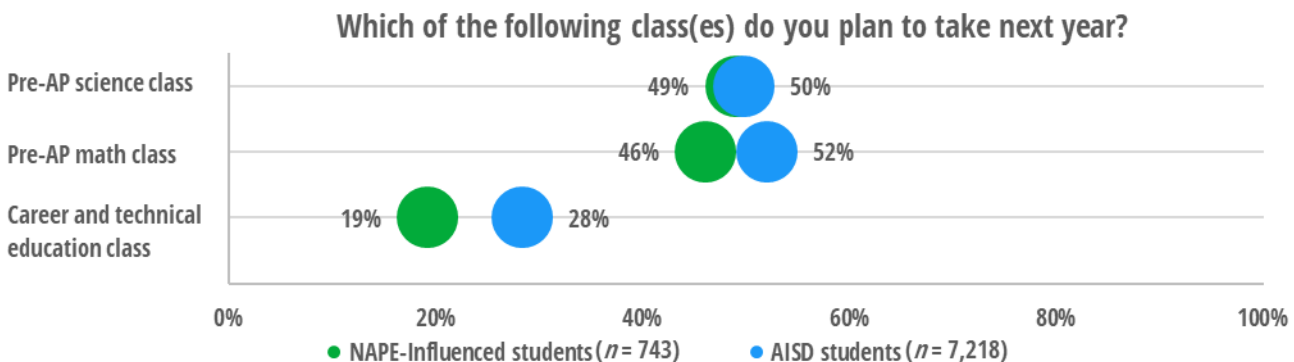
Source. AISD student records

Note. CTE courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. NAPE-influenced students includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

Did NAPE-influenced students plan to take CTE or pre-AP math or science class(es) next year?

Middle school students were asked, “Which of the following class(es) do you plan to take next year?” on the 2016–2017 Student Climate Survey. Options included pre-AP math class, pre-AP science class, CTE class, and “I do not plan to take any of these classes.” A similar percentage of NAPE-influenced students and AISD students indicated they planned to take a pre-AP science class the following year. The greatest difference was seen when students indicated whether they planned to take a CTE class; only 19% of NAPE-influenced students indicated they planned to take a CTE class the next year, whereas, 28% of AISD students indicated this (Figure 9). Results were limited to students who responded to the Student Climate Survey and provided an identification number.

Figure 9.
A similar percentage of NAPE-influenced and AISD students indicated they planned to take a pre-AP science class next year.



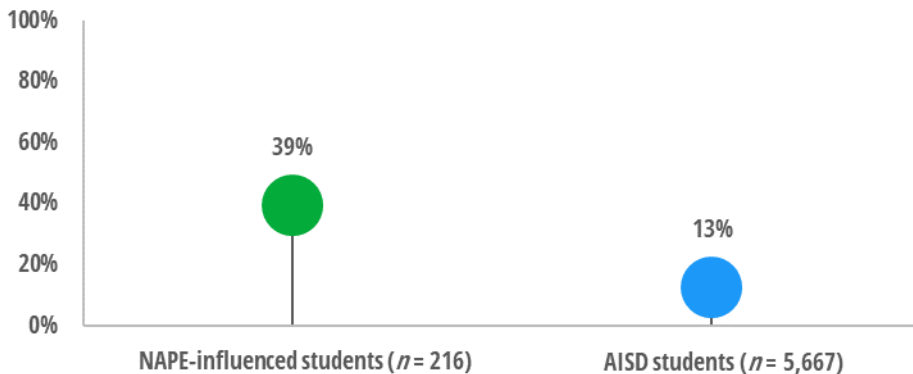
Source. Student Climate Survey, 2016–2017

Note. NAPE-influenced students includes middle school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year.

High School Endorsement Selection

The majority of rising 8th-grade AISD students select a minimum of one of the five high school graduation endorsement plans available. Because the goal of NAPE training is to increase STEM course enrollment by student groups underserved in the STEM field, the focus of this analysis was on students' selection of the STEM endorsement. Only 8th graders were included in the analysis because this group chose an endorsement in the year immediately following the NAPE professional development sessions. A total of 216 students of the original NAPE-influenced sample had records and were enrolled in the 9th grade in 2017–2018 and were included in the analyses exploring endorsement selection. Of these, 39% of NAPE-influenced students chose the STEM endorsement, whereas 13% of rising 8th-grade AISD students who reenrolled in 9th grade in 2017–2018 chose the STEM endorsement (Figure 10). (See Appendix G for percentages of students who selected the STEM endorsement for various subgroups.) Although NAPE-influenced student subgroups selected STEM endorsements at higher rates than did similar subgroups of all AISD 8th-graders, the NAPE-influenced students in underrepresented subgroups (i.e., female, Black, Hispanic, LEP, economically disadvantaged, and receiving special education services) in the STEM field continued to select the STEM endorsement less often than did their overrepresented counterparts.

Figure 10.
STEM-Related High School Endorsement Selection



Source. AISD student records

Note. NAPE-influenced students includes 8th-grade students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 only and reenrolled as a 9th-grade student in 2017–2018.

Conclusion

The goal of providing the NAPE professional development training to AISD teachers is to decrease participation and performance gaps seen between various student groups in STEM fields. Differences in science STAAR and EOC results, STEM course enrollment, plans to enroll in pre-AP or CTE class(es), and endorsement selection were examined in relation to district results and between various subgroups; however, these comparisons were descriptive, and significance testing was not conducted.

The NAPE-influenced group and subgroups underrepresented in the STEM field showed approximately the expected progress in math from the 2014–2015 to the 2015–2016 academic year and greater than the expected amount of progress from the 2015–2016 to the 2016–2017 academic year. However, this trend was seen for AISD students as well, with AISD students showing larger gains in math than did NAPE-influenced students. NAPE-influenced students had higher average science STAAR NCE scores than did the AISD student group. NAPE-influenced students in underrepresented subgroups in the STEM field (i.e., female, Black, Hispanic, LEP, and economically disadvantaged) had lower average science STAAR NCE scores than did comparable overrepresented subgroups (i.e., male, White, not LEP,



and not economically disadvantaged). Examining biology EOC results, AISD students had better passing rates than did the NAPE-influenced student group. However, 100% of NAPE-influenced students passed the algebra EOC, as compared with 87% for the district. Similar to science STAAR performance, aside from gender, NAPE-influenced students in underrepresented subgroups in the STEM field (i.e., Black, Hispanic, LEP, and economically disadvantaged) had lower passing rates than did comparable overrepresented subgroups (i.e., White, not LEP, and not economically disadvantaged).

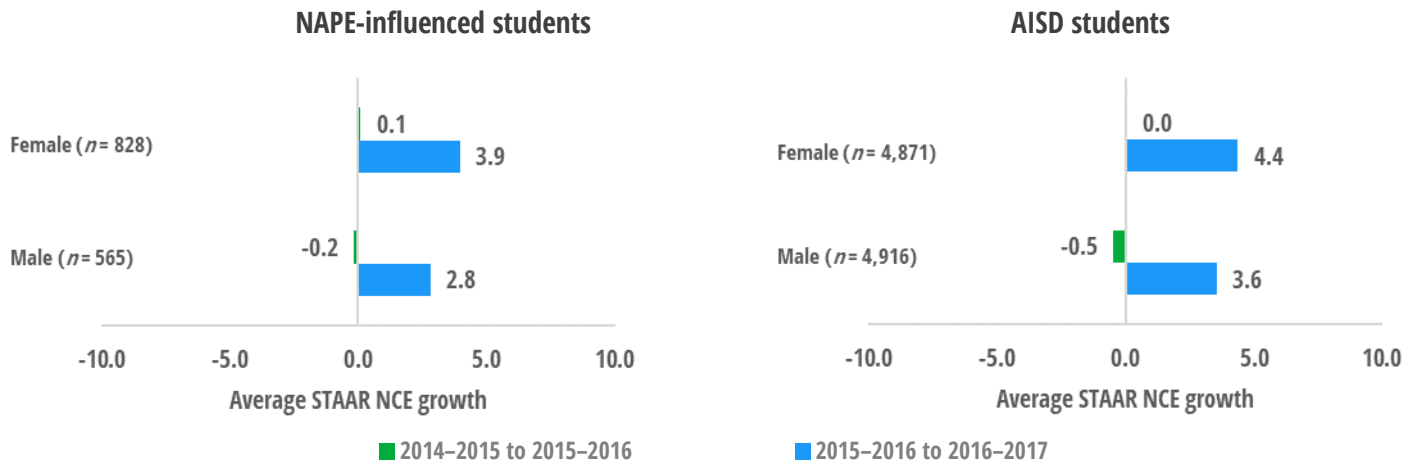
Examining course enrollment, gains were seen in elective math enrollment for NAPE-influenced students. However, examined by subgroups, most enrollment gains in elective math for NAPE-influenced students were from overrepresented subgroups in the STEM field (i.e., male, White, not LEP, not economically disadvantaged, and not receiving special education services). Similar results were seen in enrollment changes for STEM-related CTE courses. Enrollment in advanced math or science classes overall remained similar from the 2016–2017 to the 2017–2018 academic year. Examined by subgroups, advanced science course enrollment was greater for the NAPE-influenced underrepresented subgroups than for comparable overrepresented subgroups. However, it is important to note that aside from teachers, guidance counselors also may play a role in determining students' schedules, which could have influenced STEM course enrollment changes. In middle school students, the AISD student group was more likely to indicate plans of taking a CTE or pre-AP math or science class(es) in the following year than was the NAPE-influenced student group.

A larger percentage of NAPE-influenced 8th-grade students than of AISD students selected the STEM high school endorsement. NAPE-influenced students in overrepresented subgroups in the STEM field tended to select the high school STEM endorsement at higher rates than did students in underrepresented subgroups in the STEM field. Although the endorsement analysis only examined whether a student selected the STEM endorsement, it should be noted that the business/industry endorsement offered at AISD also included STEM topics, such as information technology and technology applications.

Although this report examined the impact of the NAPE professional development training through students' STEM academic performance, course enrollment, and high school endorsement selection, other factors should be considered when evaluating the impact of NAPE's professional development training. For example, because the intent of the training is to address micromessages and decrease micro-inequalities in the classroom, an impact may also occur in non-STEM fields. A number of NAPE-trained staff hold leadership positions in the school (e.g., assistant principal and instructional coach) and they may have influenced a greater subset of students. Additionally, because the training addresses micromessages that may have negatively influenced students over the course of their school experience, the impact may take longer than a year to exhibit the expected results.

Appendix A

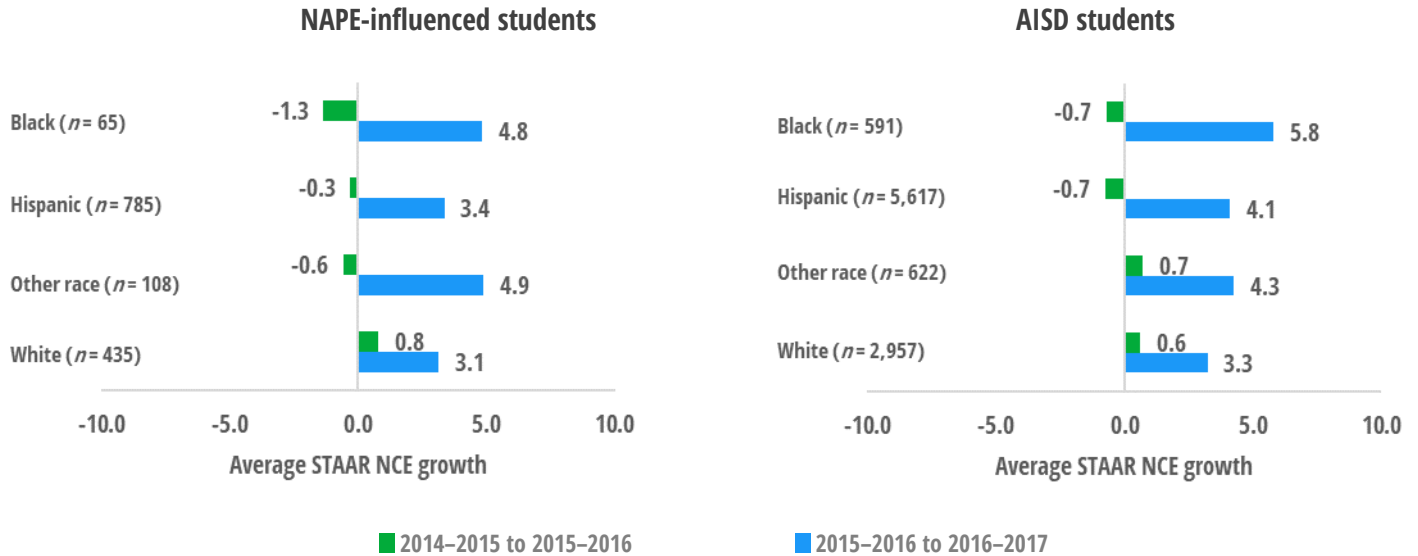
Math STAAR NCE Results, by Gender



Source. AISD STAAR records

Note. NAPE-influenced students includes middle school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016-2017 academic year. STAAR scores were converted to NCE scores. Growth was computed by subtracting 2016-2017 NCE scores from 2015-2016 math STAAR NCE scores and subtracting 2015-2016 NCE scores from 2014-2015 NCE scores.

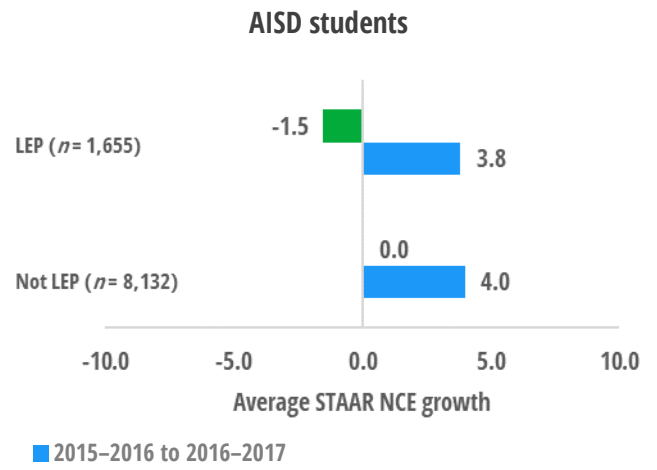
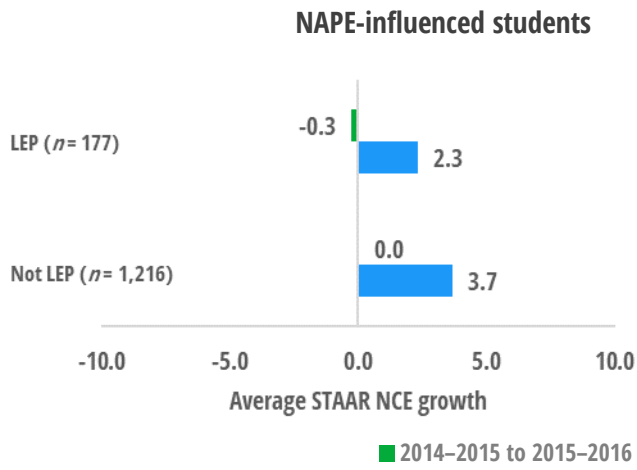
Math STAAR NCE Results, by Race



Source. AISD STAAR records

Note. NAPE-influenced students includes middle school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016-2017 academic year. STAAR scores were converted to NCE scores. Growth was computed by subtracting 2016-2017 NCE scores from 2015-2016 math STAAR NCE scores and subtracting 2015-2016 NCE scores from 2014-2015 NCE scores. Other race includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, two or more races, and Asian students.

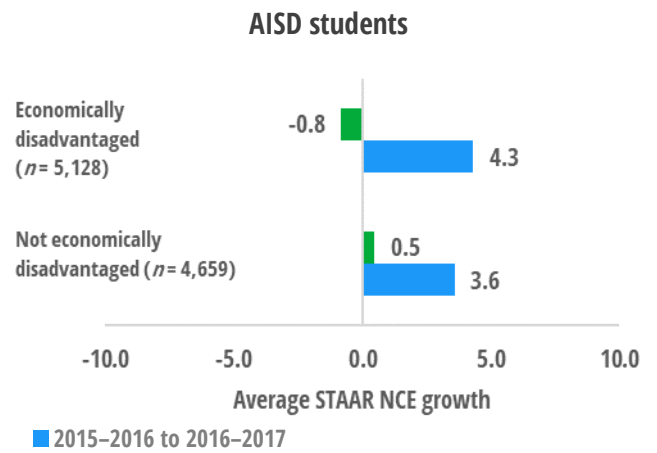
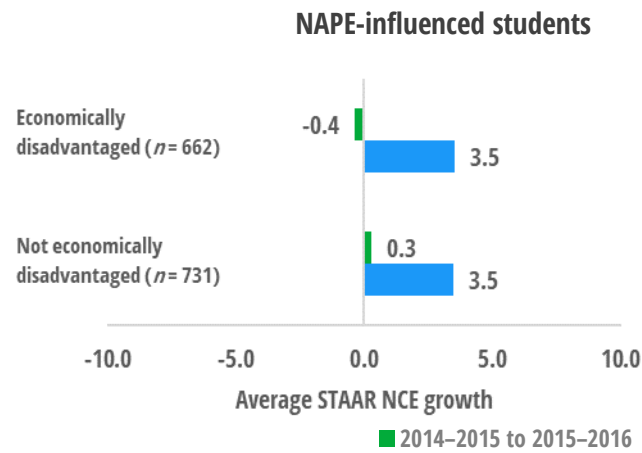
Math STAAR NCE Results, by LEP Status



Source. AISD STAAR records

Note. NAPE-influenced students includes middle school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year. STAAR scores were converted to NCE scores. Growth was computed by subtracting 2016–2017 NCE scores from 2015–2016 math STAAR NCE scores and subtracting 2015–2016 NCE scores from 2014–2015 NCE scores.

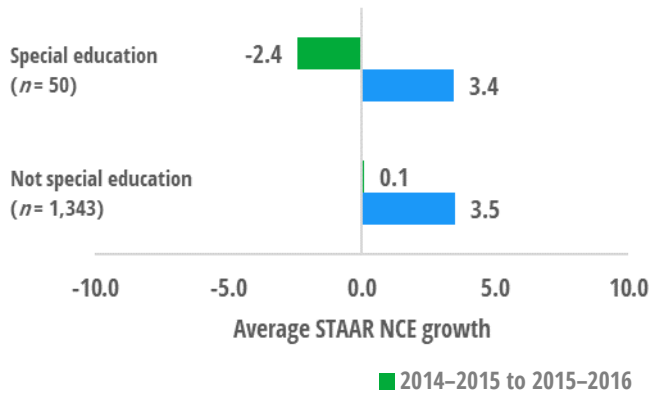
Math STAAR NCE Results, by Economically Disadvantaged Status



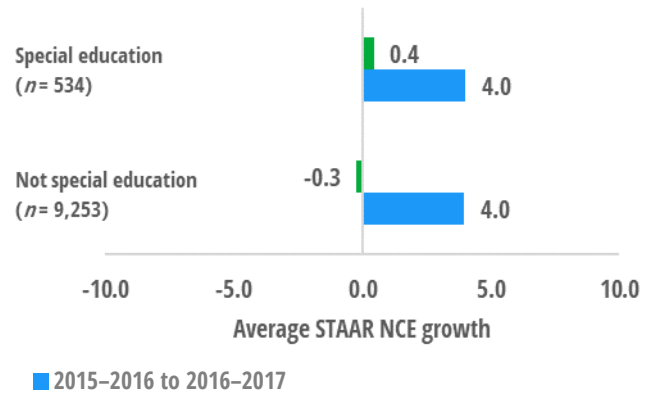
Source. AISD STAAR records

Note. NAPE-influenced students includes middle school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year. STAAR scores were converted to NCE scores. Growth was computed by subtracting 2016–2017 NCE scores from 2015–2016 math STAAR NCE scores and subtracting 2015–2016 NCE scores from 2014–2015 NCE scores.

Math STAAR NCE Results, by Special Education Status
NAPE-influenced students



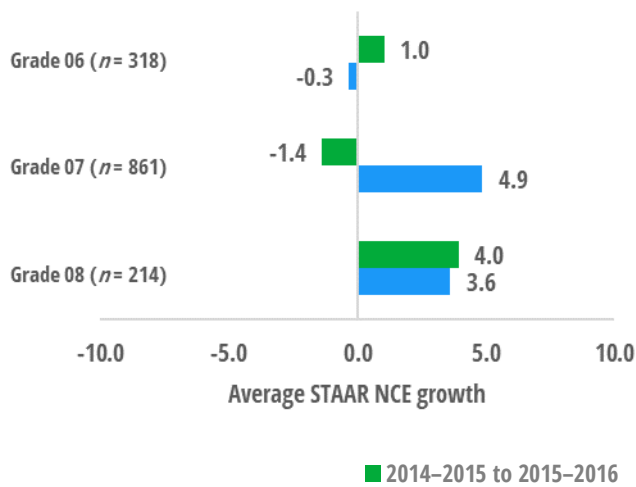
AISD students



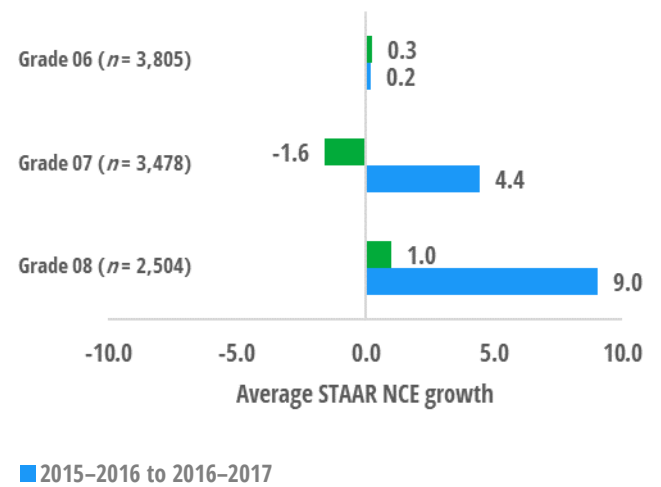
Source. AISD STAAR records

Note. NAPE-influenced students includes middle school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016-2017 academic year. STAAR scores were converted to NCE scores. Growth was computed by subtracting 2016-2017 NCE scores from 2015-2016 math STAAR NCE scores and subtracting 2015-2016 NCE scores from 2014-2015 NCE scores.

Math STAAR NCE Results, by Grade
NAPE-influenced students



AISD students

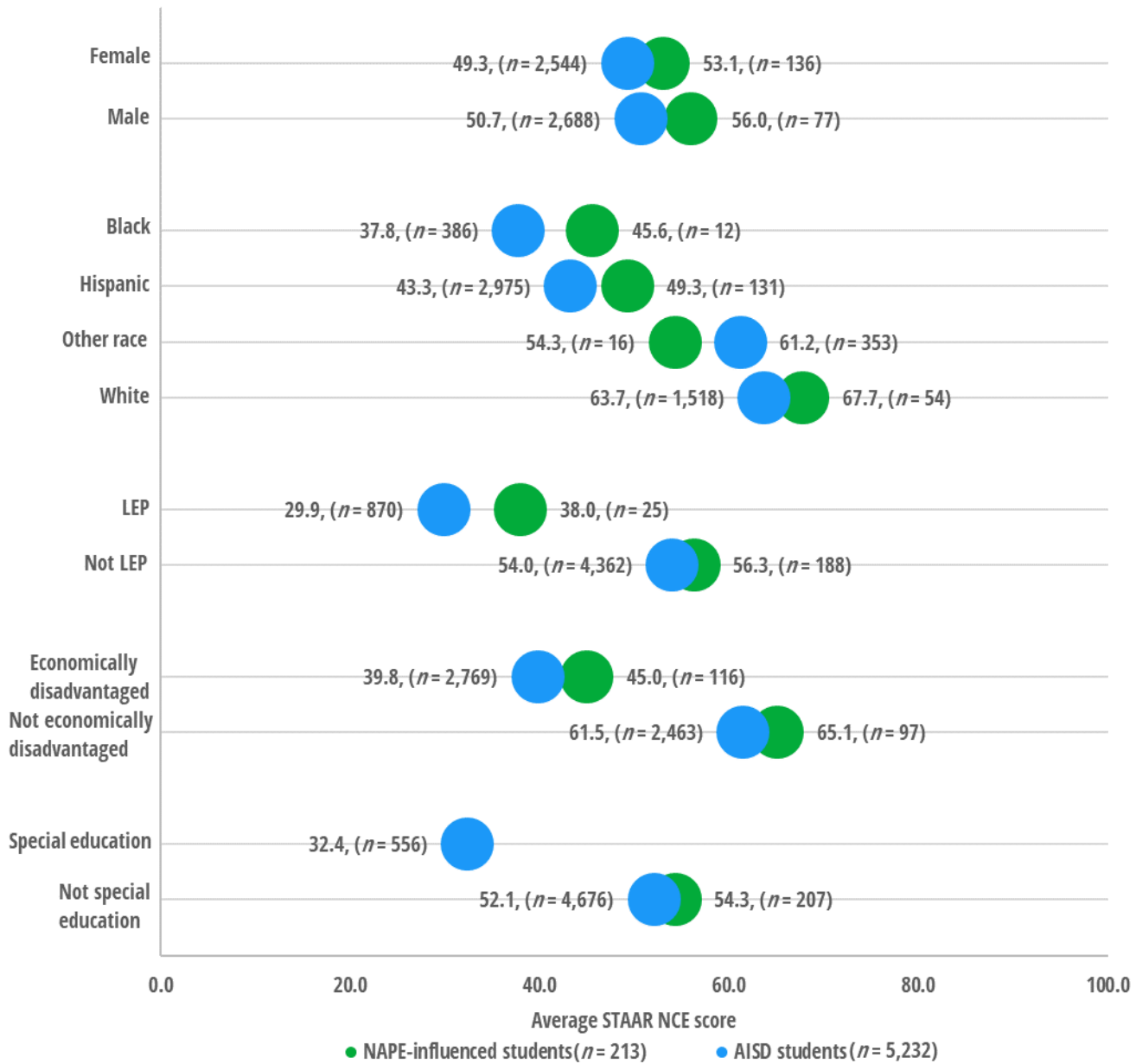


Source. AISD STAAR records

Note. NAPE-influenced students includes middle school students who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016-2017 academic year. STAAR scores were converted to NCE scores. Growth was computed by subtracting 2016-2017 NCE scores from 2015-2016 math STAAR NCE scores and subtracting 2015-2016 NCE scores from 2014-2015 NCE scores.

Appendix B

Science STAAR NCE Results, by Subgroups

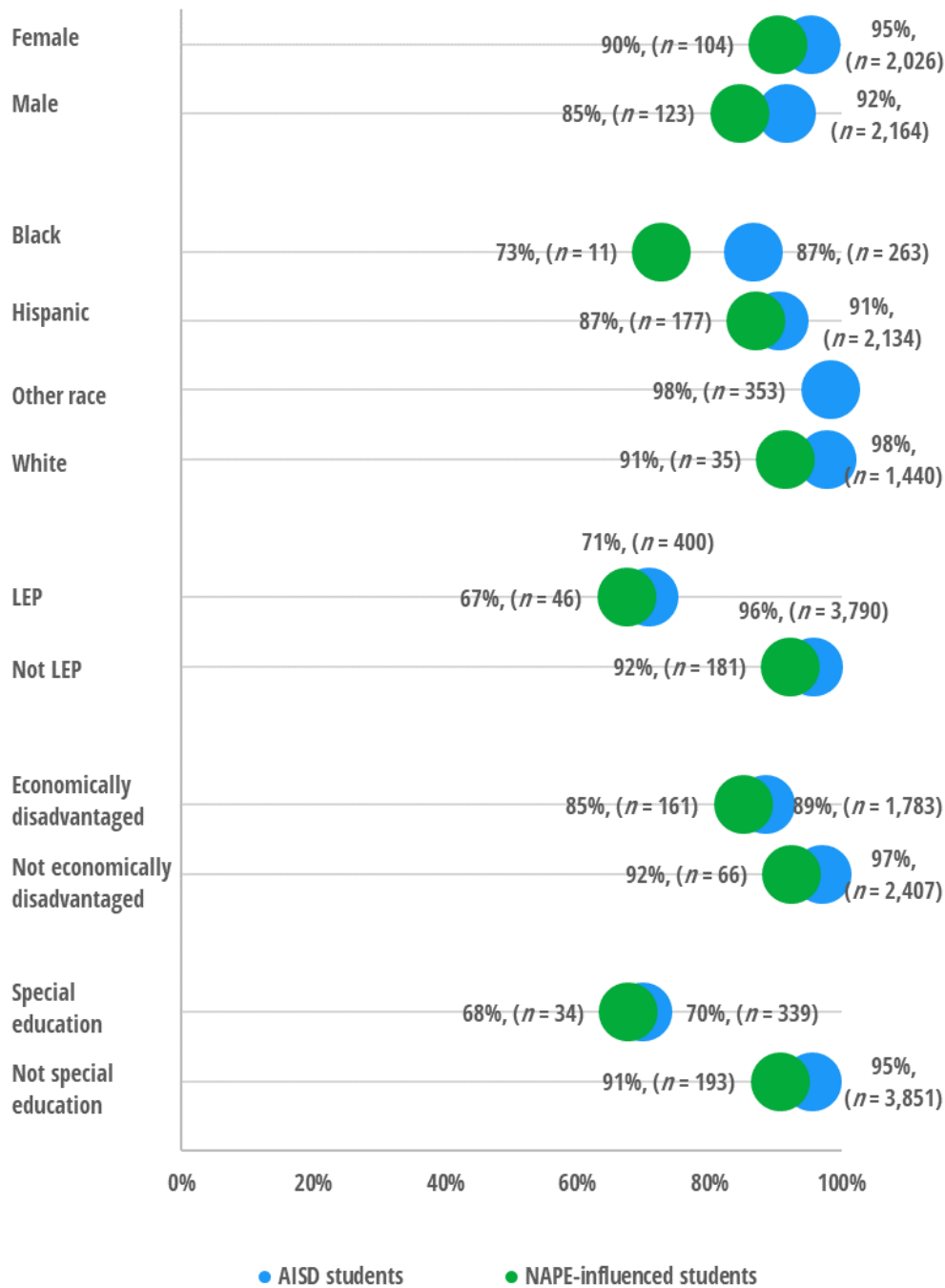


Source: AISD STAAR records

Note: NAPE-influenced students includes 8th-grade students with 2016–2017 science STAAR records who were enrolled in a course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year. Student groups with fewer than 10 students were excluded from analyses. Other race includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, two or more races, and Asian students.

Appendix C

Biology EOC results, by Subgroups

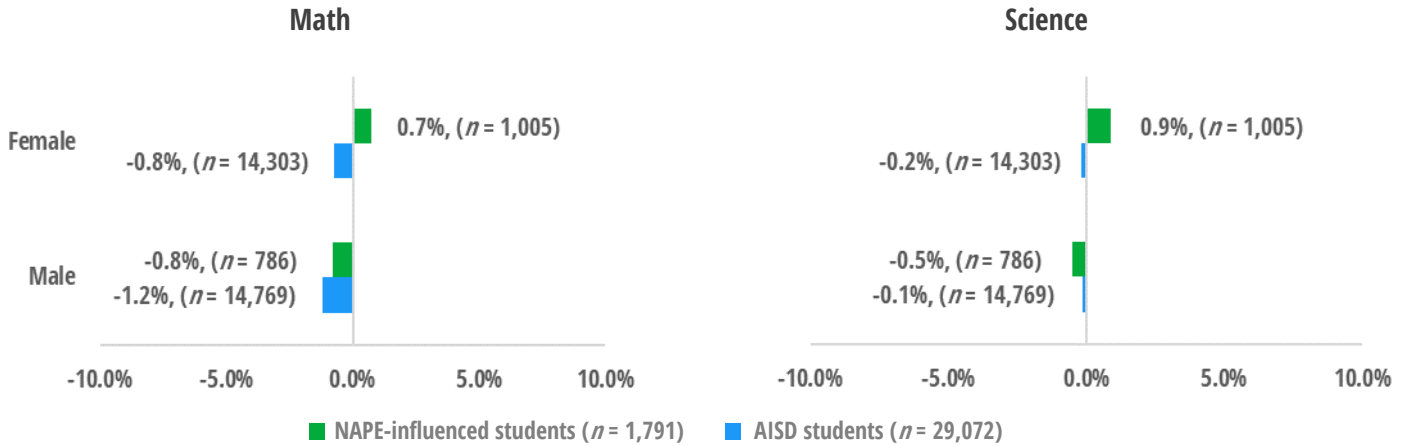


Source. AISD EOC records

Note. NAPE-influenced students includes 9th-grade students with EOC records and were enrolled in the EOC subject course taught by a teacher who completed the NAPE professional development training in the 2016–2017 academic year. Student groups with fewer than 10 students were excluded from analyses. Other race includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, two or more races, and Asian students.

Appendix D

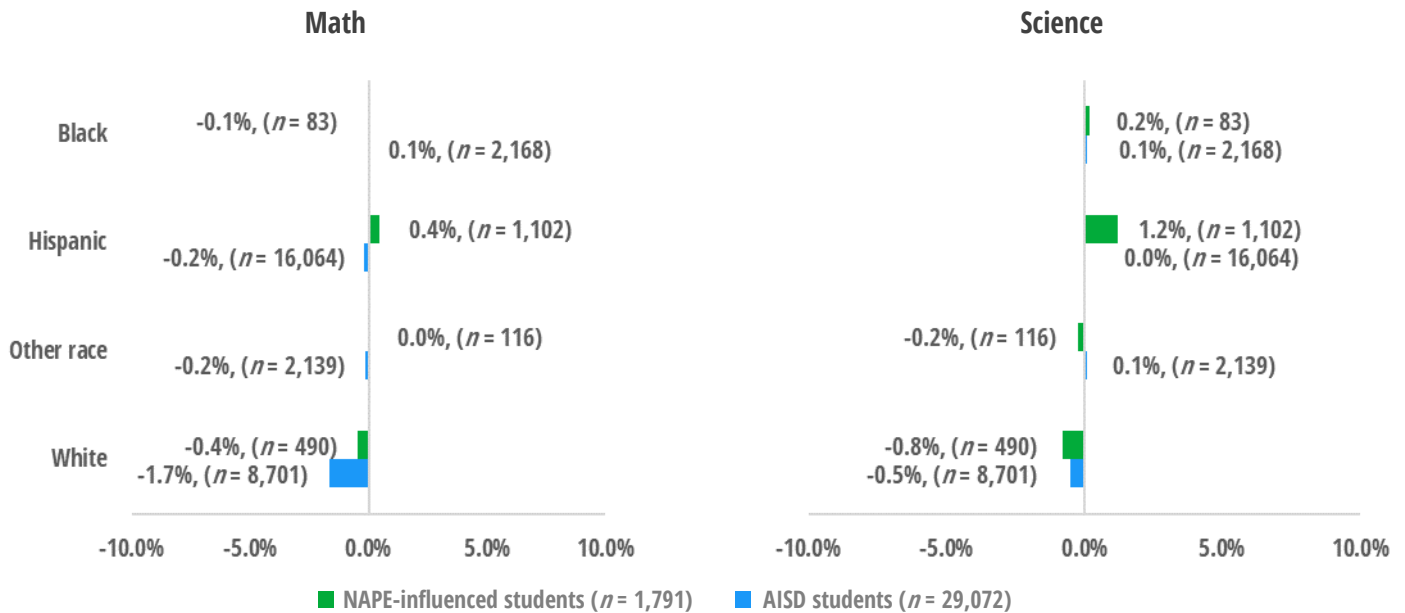
Changes in Advanced Core Course Enrollment, by Gender



Source. AISD student records

Note. Core courses are classes all students are required to complete. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

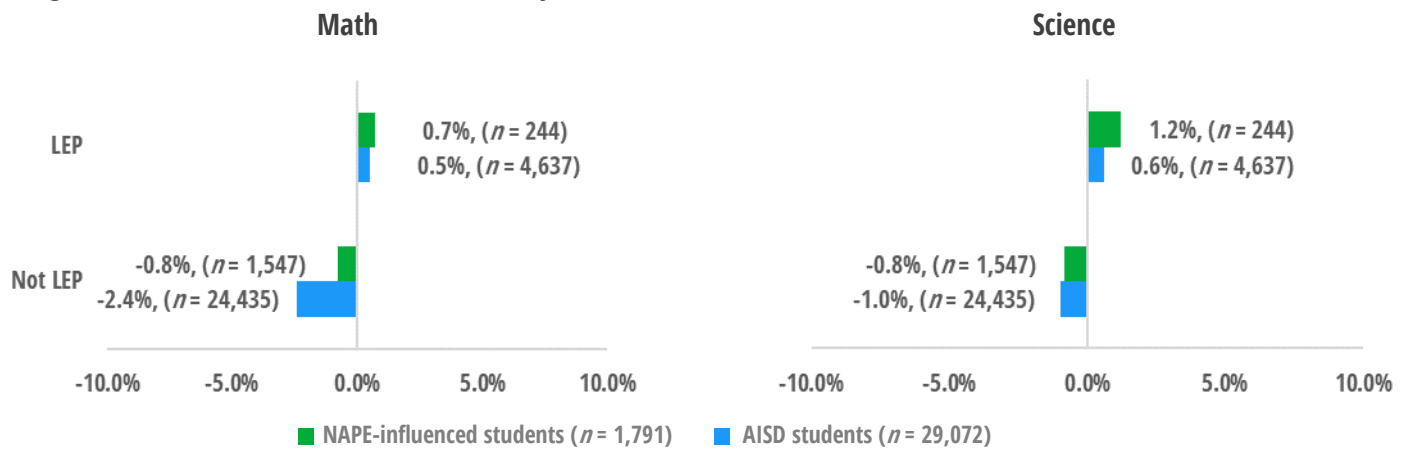
Changes in Advanced Core Course Enrollment, by Race



Source. AISD student records

Note. Core courses are classes all students are required to complete. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018. *Other race* includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, two or more races, and Asian students.

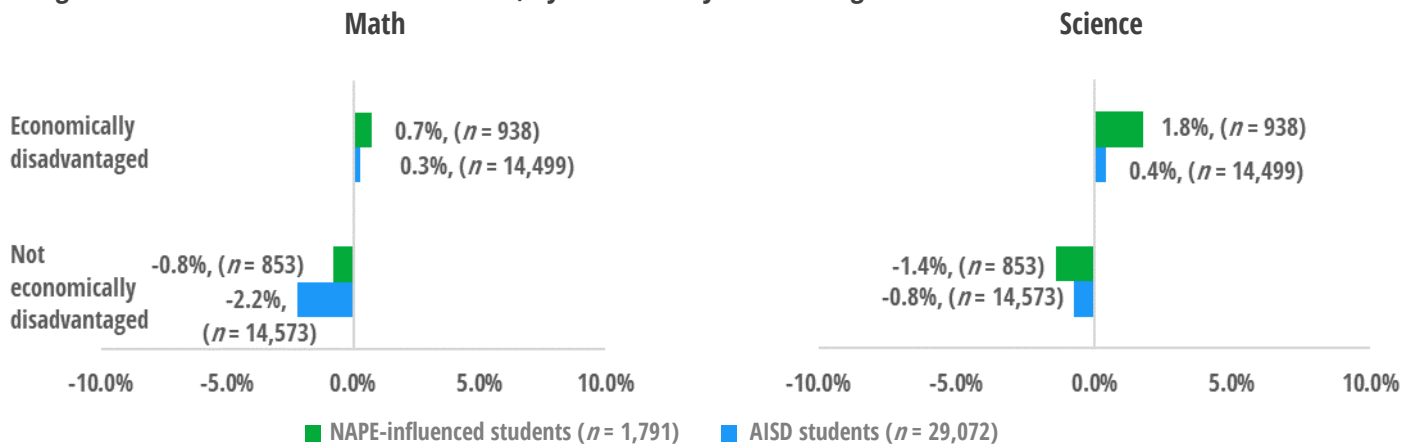
Changes in Advanced Core Course Enrollment, by LEP Status



Source. AISD student records

Note. Core courses are classes all students are required to complete. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

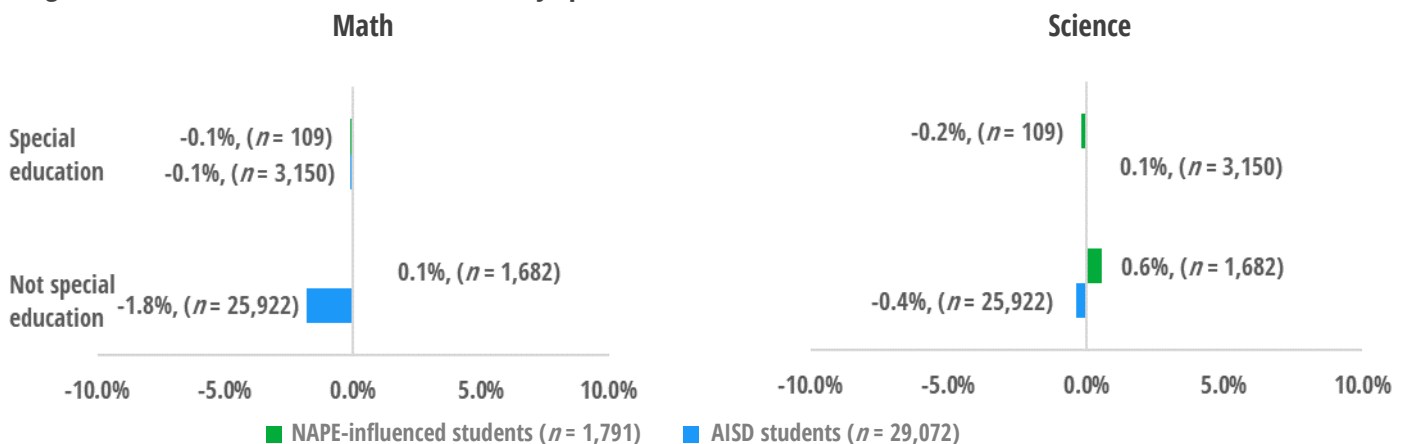
Changes in Advanced Core Course Enrollment, by Economically Disadvantaged Status



Source. AISD student records

Note. Core courses are classes all students are required to complete. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

Changes in Advanced Core Course Enrollment, by Special Education Status

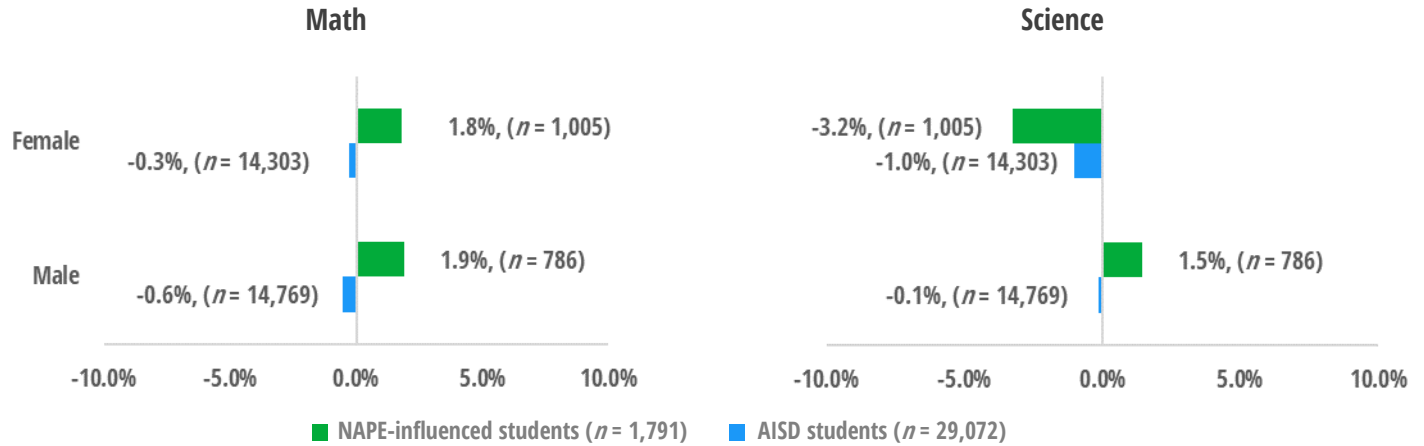


Source. AISD student records

Note. Core courses are classes all students are required to complete. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

Appendix E

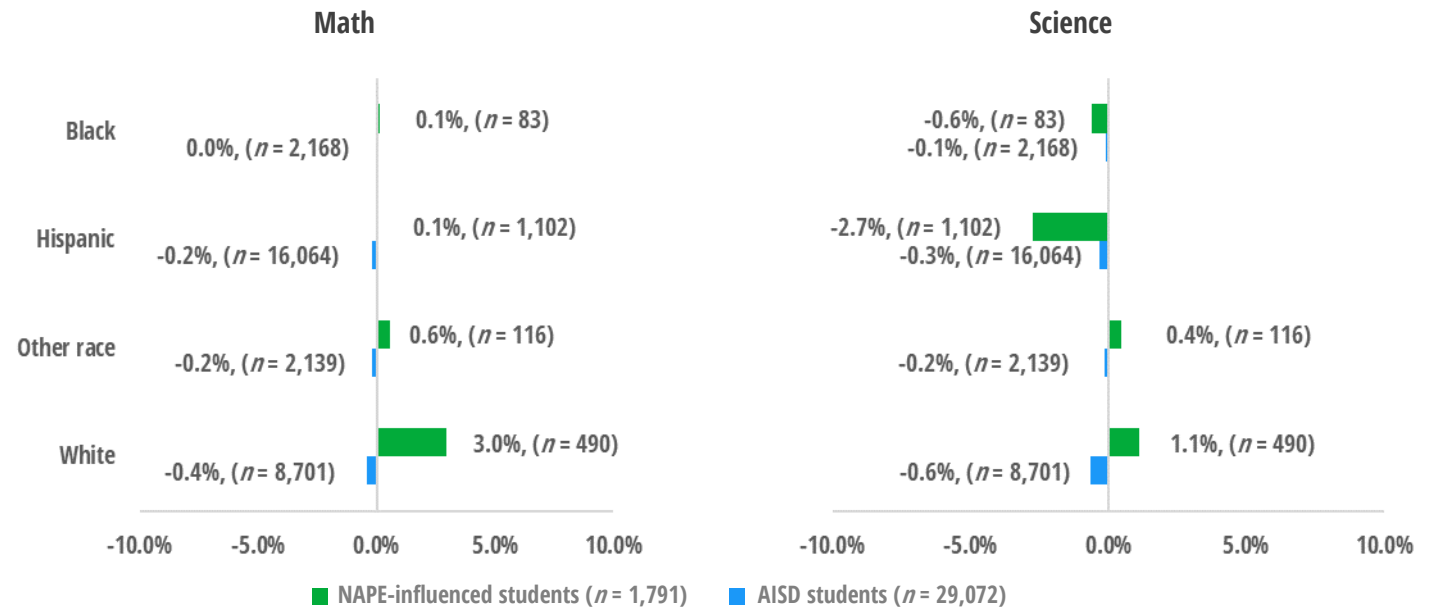
Changes in Elective Course Enrollment, by Gender



Source. AISD student records

Note. Elective courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

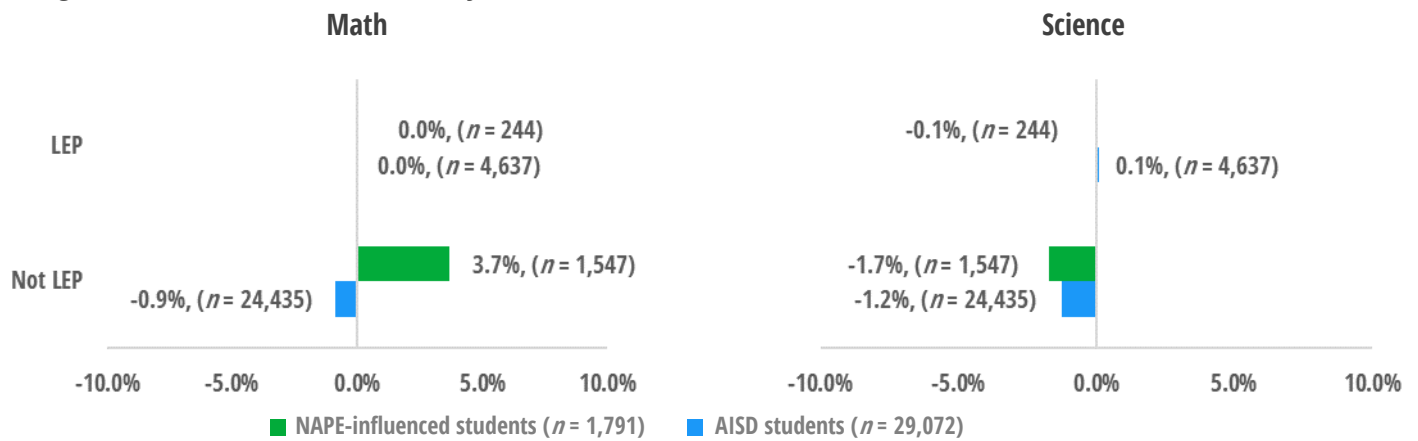
Changes in Elective Course Enrollment, by Race



Source. AISD student records

Note. Elective courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018. *Other race* includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, two or more races, and Asian students.

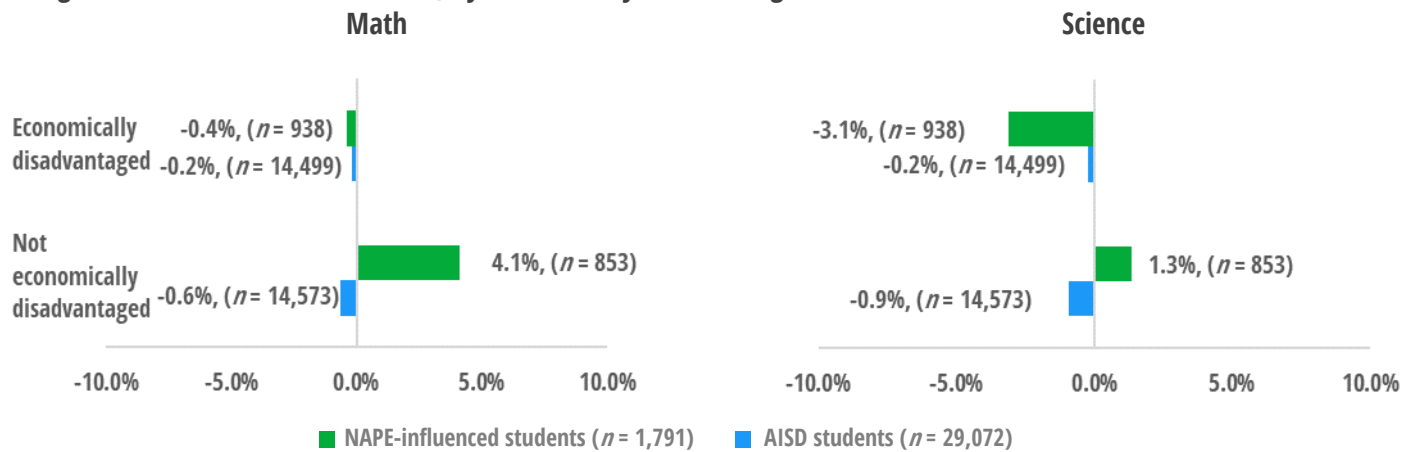
Changes in Elective Course Enrollment, by LEP Status



Source. AISD student records

Note. Elective courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

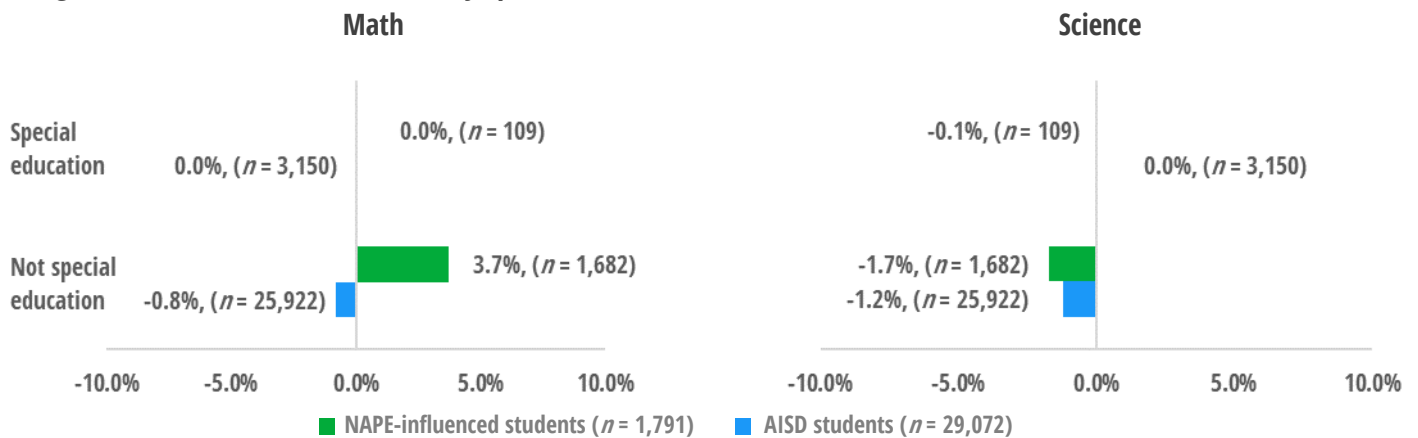
Changes in Elective Course Enrollment, by Economically Disadvantaged Status



Source. AISD student records

Note. Elective courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

Changes in Elective Course Enrollment, by Special Education Status

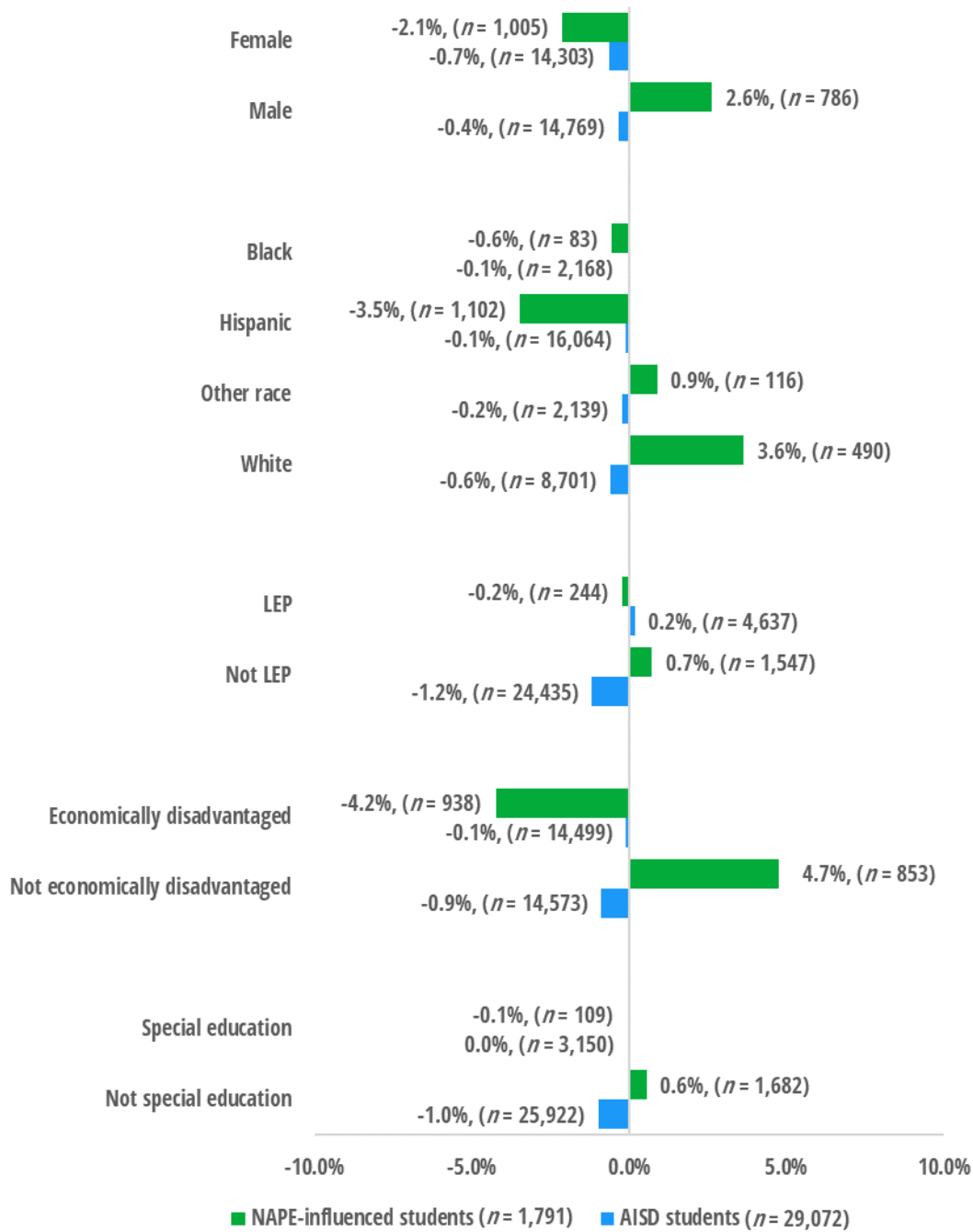


Source. AISD student records

Note. Elective courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018.

Appendix F

Changes in STEM-Related CTE Course Enrollment

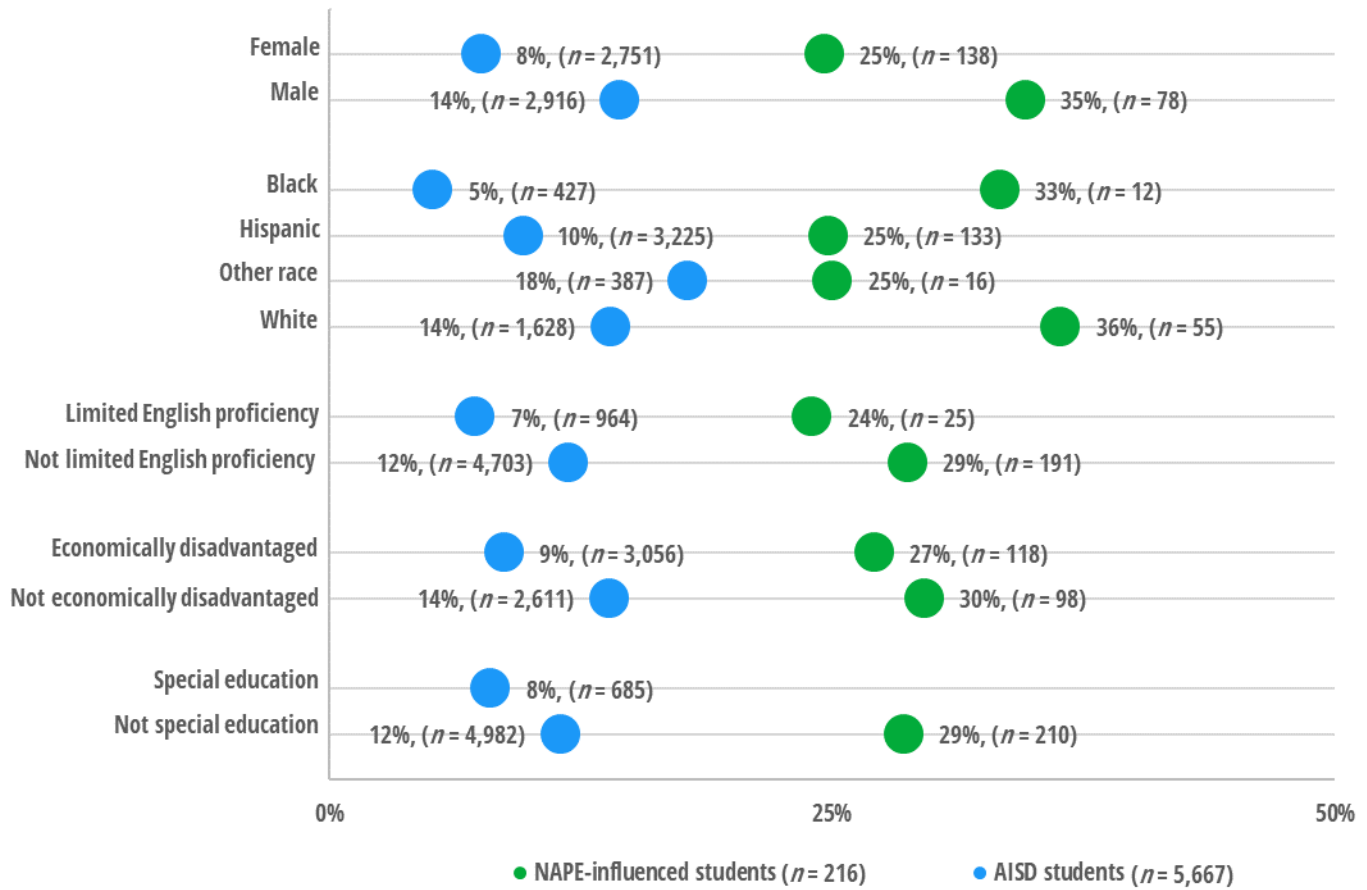


Source. AISD student records

Note. CTE courses and enrollment in those courses are determined by availability, based on students' schedules after considering core classes, students' interest in the course, and students' academic performance. *NAPE-influenced students* includes students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 and reenrolled in AISD in 2017–2018. *Other race* includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, two or more races, and Asian students.

Appendix G

STEM High School Endorsement Selection, by Subgroups



Source. AISD STAAR records

Note. NAPE-influenced students includes 8th-grade students who were enrolled in a course with a teacher who completed the NAPE professional development training in 2016–2017 only and reenrolled as a 9th-grade student in 2017–2018. Student groups with fewer than 10 students were excluded from analyses. Other race includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, two or more races, and Asian students.

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- Central Rivers Area Education Agency 267. (2017). *What is a normal curve equivalent score?* Retrieved from https://www.centralriversaea.org/wp-content/uploads/2017/03/C4_Normal-Curve-Equivalent-NCE-Revised-5.22.17.pdf
- National Alliance for Partnerships in Equity. (2015). *MICROMESSAGING to Reach and Teach Every Student™*. GAP, PA: NAPE. Retrieved from http://www.napequity.org/nape-content/uploads/NAPE-MM-Information-Sheet-Final_-10-16-15.pdf

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