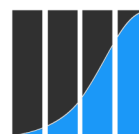


November 2016

Austin Partners in Education

Annual Evaluation Report, 2015–2016



Department of
Research and Evaluation
AUSTIN INDEPENDENT SCHOOL DISTRICT

Table of Contents

Purpose Statement 3

Results for Classroom Coaching: 8th-grade Math 4

Results for College Readiness..... 10

Conclusion 16

Appendix A: APIE Evaluation Methodology 19

Appendix B: Middle School Student Survey Instrument 23

Appendix C: Demographics of APIE and Comparison Groups by Program..... 24

Appendix D: College Readiness Exam Results.....28

Table of Figures

Figure 1. APIE provided academic support programs for students in...schools..... 3

Figure 2. A total of 666 students participated in APIE’s Math...Program 4

Figure 3. In 2016, a significantly greater percentage of APIE math students than 4

Figure 4. In 2016, a significantly greater percentage of APIE 8th-grade math students 5

Figure 5. APIE 8th-grade math students had significantly greater growth between 5

Figure 6. APIE students overall met the STAAR passing standard at significantly 6

Figure 7. A significantly greater percentage of LEP students in the APIE math program 6

Figure 8. Participants in the Math Classroom Coaching Program reported..... 7

Figure 9. Most Math Classroom Coaching Program students agreed or strongly agreed 8

Figure 10. APIE volunteers found registration easy, found communication with APIE 8

Figure 11. APIE volunteers understood their role in the program 8

Figure 12. APIE volunteers believed their time was used effectively..... 9

Figure 13. APIE volunteers believed students enjoyed participating 9

Figure 14. A total of 467 students participated in APIE’s College Readiness Program..... 10

Figure 15. Significantly greater percentages of APIE...took college admissions exams.....11

Figure 16. Significantly greater percentages of APIE...met the college readiness standards 11

Figure 17. Across all college readiness assessments (SAT, ACT, and TSI), seniors 12

Figure 18. Most seniors understood why they were in the program 13

Figure 19. Most seniors provided positive ratings of their College Readiness Program advocates 13

Figure 20. Most seniors reported always or often spending their time 14

Figure 21. Most seniors perceived positive academic outcomes..... 14

Figure 22. Most seniors perceived positive college preparation outcomes..... 14

Figure 23. Significantly greater percentages of APIE...completed Apply Texas and FAFSA.....15



Purpose

The Austin Independent School District (AISD) Department of Research and Evaluation (DRE) staff conducted this program evaluation to provide information about program effectiveness to Austin Partners in Education (APIE) and its stakeholders to help them facilitate decisions about program implementation and improvement. APIE designed its programs to improve students' academic outcomes and promote their enjoyment of learning. Thus, this evaluation report describes the academic outcomes for students in each APIE program, as well as factors that may have influenced their learning.

In the 2015–2016 school year, two of APIE's academic support programs, which served approximately 666 AISD middle school math students and 468 high school students working toward college readiness, were evaluated. These programs were tailored to meet students' academic needs, to model desired academic behaviors, and to encourage students' engagement.

Figure 1

APIE provided academic support programs for students in middle and high schools.

APIE Programs for Direct Student Support, 2015-2016	
Classroom Coaching	College Readiness
Middle School Math Grades 7 and 8 1x/week for all students in class Small groups (3:1 or below)	Scheduled APIE class or In-subject area class Grade 12 2-3 x/week One-on-one and small group (3-5 students)

Source. APIE program records

In 2015–2016, the annual program evaluation focused on these major questions:

What were the academic outcomes for APIE participants, and how did the outcomes compare with those for similar nonparticipants?

Were APIE programs implemented effectively, as evidenced by volunteers' preparation and satisfaction?

Did students' academic self-confidence change as a result of their participation in APIE programs?

Did APIE participation improve students' engagement?

Did APIE students and volunteers believe the program was effective?

Detailed information about the evaluation methodology used in this report is provided in Appendix A.

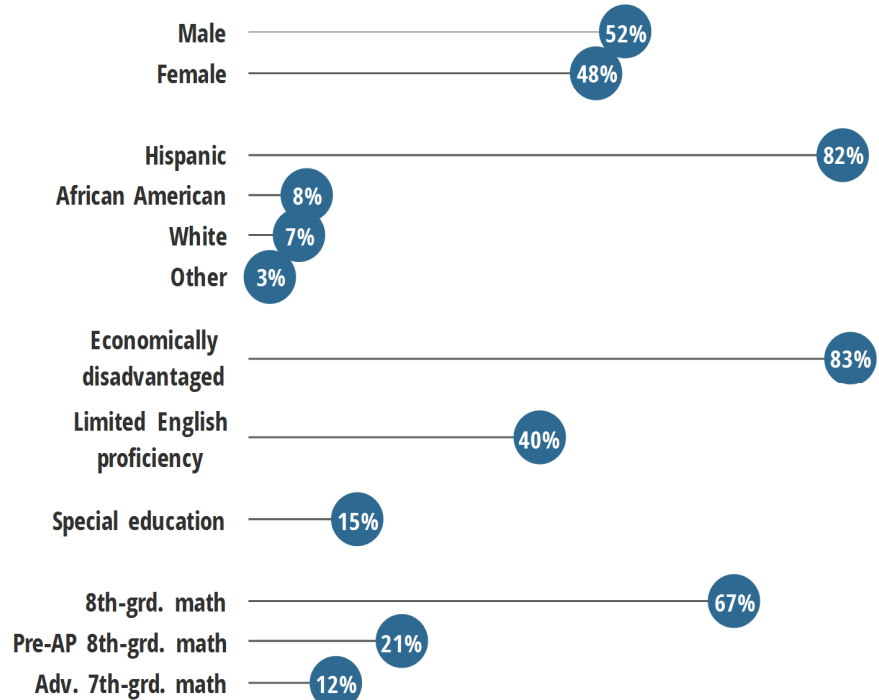
Results for Classroom Coaching: Eighth-Grade Math

Who participated in APIE's 8th-grade Math Classroom Coaching Program?

Eighth-grade students from Burnet, Covington, Martin, Mendez, and Webb Middle Schools participated in APIE's 8th-grade Math Classroom Coaching Program (Figure 2).

Figure 2

A total of 666 students participated in APIE's Math Classroom Coaching Program.



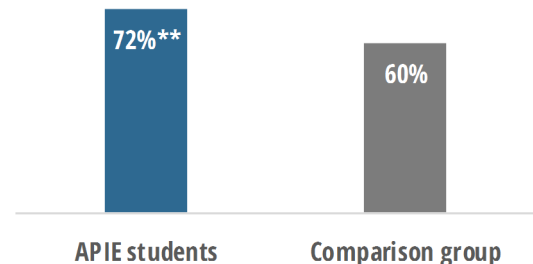
Source. AISD student enrollment records, 2015–2016

Note. AP is advanced placement; grd. is grade; adv. is advanced.

APIE participants and a matched comparison group differed significantly in meeting the passing standard for 8th-grade State of Texas Assessment of Academic Readiness (STAAR) math, with 72% and 60% passing, respectively (Figure 3).

Figure 3

In 2016, a significantly greater percentage of APIE math students than of the matched comparison group met the STAAR passing standard.

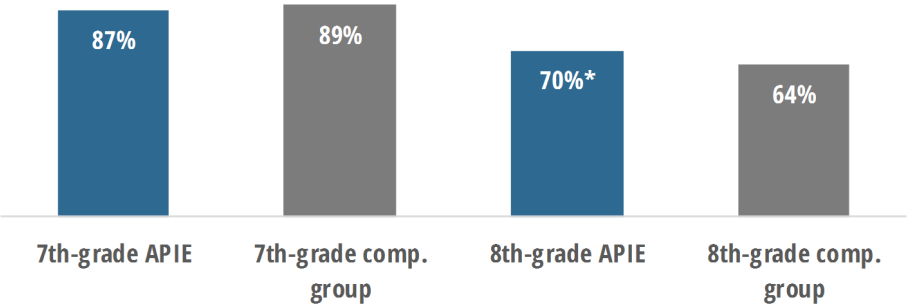


Source. District STAAR math test files, 2015 and 2016

** Statistically significant ($p < .01$)

When APIE participants and the matched comparison group were separated by grade, the results showed a different picture. At the 8th grade, 70% of APIE participants passed advanced math, compared with only 64% of the matched group, while at the 7th grade, 87% of APIE participants passed and 89% of the matched group passed. The differences in meeting the passing standard differed significantly for 8th-grade math students but not for the 7th graders in advanced math (Figure 4)

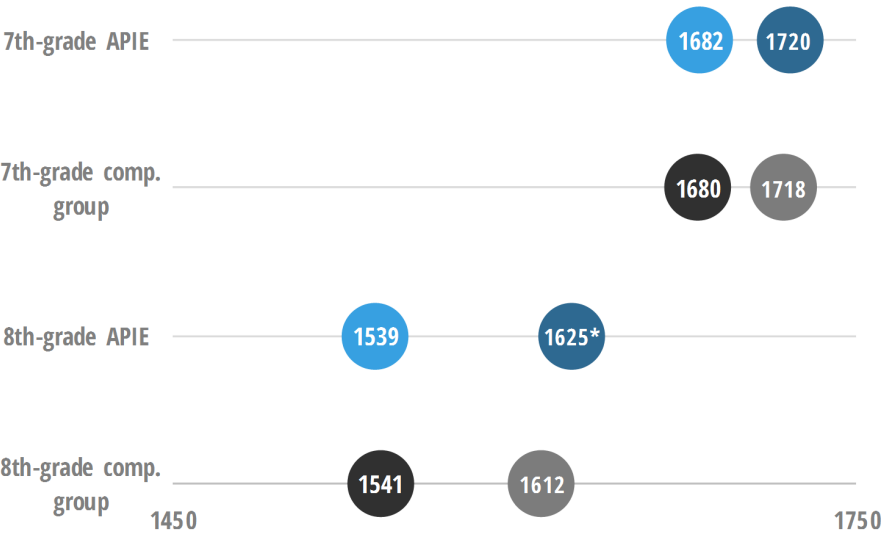
Figure 4
In 2016, a significantly greater percentage of APIE 8th-grade math students than of the matched comparison group met the STAAR passing standard.



Source. District STAAR math test files, 2015 and 2016
Note. Comp. is matched comparison.
* Statistically significant ($p < .05$)

The change in math scores was greater for 8th-grade APIE students than for the comparison group. No significant change was found between APIE students and those in the comparison group for 7th-grade advanced math (Figure 5). Linear regression analyses confirmed that APIE program participation did influence a change in STAAR scores at the 8th grade but not at the 7th grade.

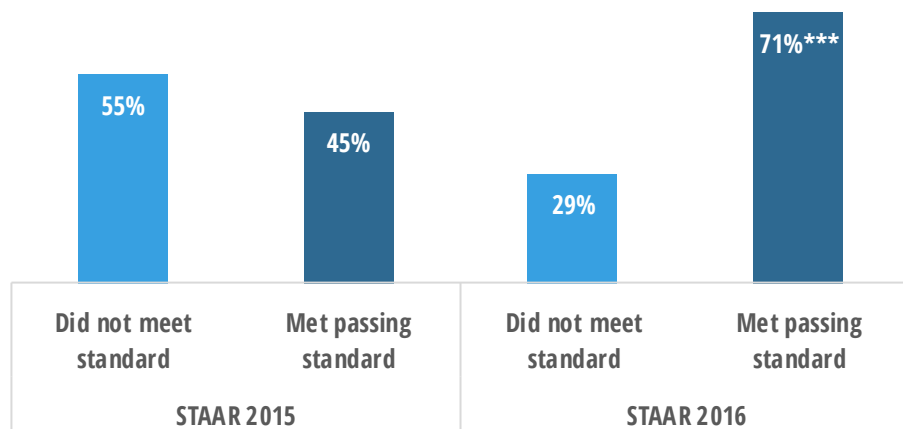
Figure 5
APIE 8th-grade math students had significantly greater growth between last year and this year on their STAAR scale scores than did the matched comparison group.



Source. District STAAR math test files, 2015 and 2016
Note. Comp. is matched comparison.
* Statistically significant ($p < .05$)

Figure 6

APIE students overall met the STAAR passing standard at significantly higher rates in 2016 than they did the prior year.



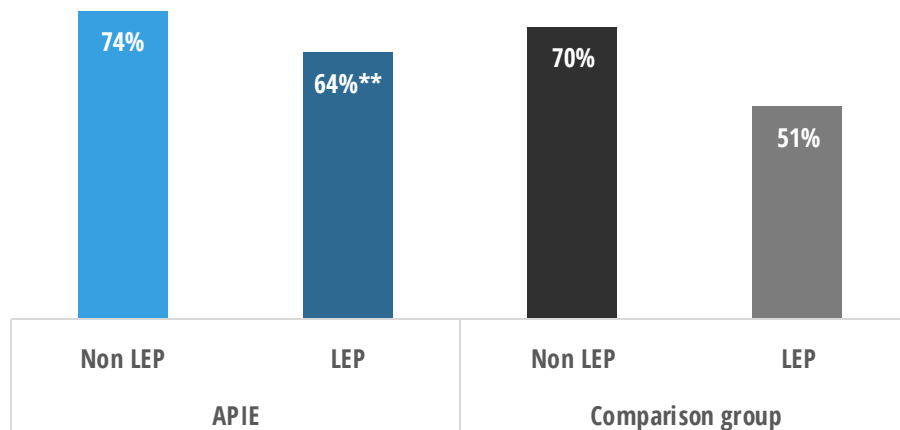
Source. District STAAR math test files, 2015 and 2016

*** Statistically significant ($p < .001$)

Because a high proportion of APIE students have limited English proficiency (LEP), evaluators conducted an additional analysis to evaluate whether APIE had an impact on these students.

Figure 7

A significantly greater percentage of LEP students in the APIE math program than in the matched comparison group met the STAAR passing standard.



Source. District STAAR math test files, 2015 and 2016

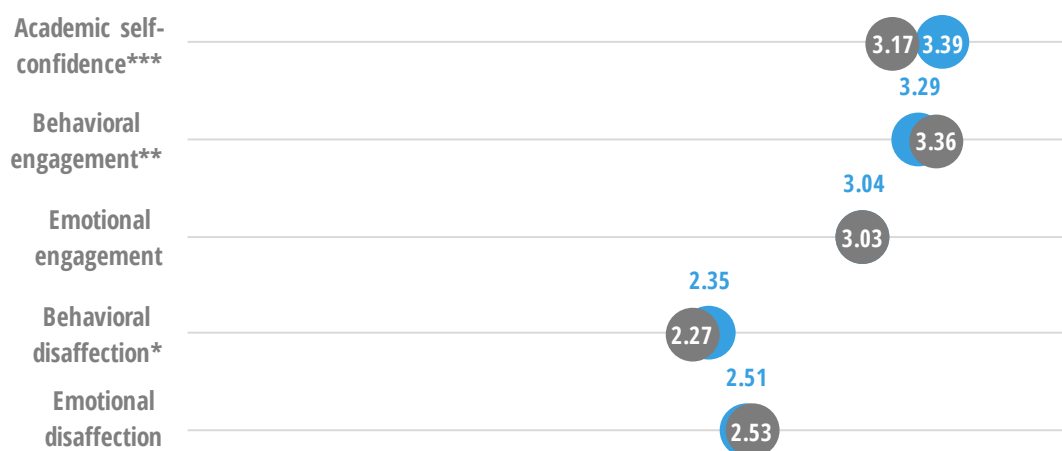
** Statistically significant ($p < .01$)

What did APIE’s 8th-grade math students report about their academic self-confidence, school engagement, and experiences with the program?

Three hundred and eighty-three 8th-grade, 8th-grade pre-AP, and 7th-advanced Math Classroom Coaching Program participants took both the pre- and post-APIE student surveys, a response rate of 74%. Academic self-confidence and behavioral engagement scores were at desirable levels (i.e., 3.0 or higher) at the beginning and end of the school year. Participants reported a significant increase in academic self-confidence; however, behavioral engagement decreased and behavioral disaffection increased significantly. When asked about the effects of the math program, most students reported the support helped them in math (Figures 8 and 9). Although the percentages of participants reporting positive outcomes increased for all three questions from 2015 to 2016, only the percentage for “I am better at math” differed significantly between 2015 and 2016.

Figure 8

Participants in the Math Classroom Coaching Program reported a significant increase in academic self-confidence from the beginning to the **end** of the school year; however, behavioral engagement decreased and behavioral disaffection increased significantly.



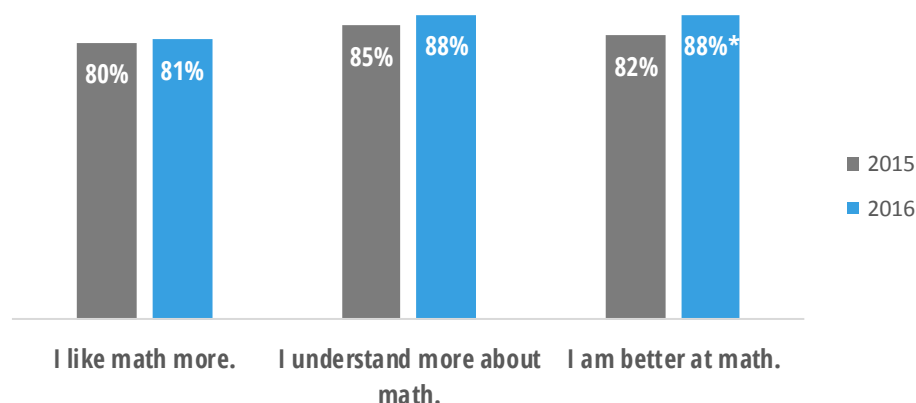
Source. APIE Student Survey, 2015–2016

Note. In the areas of behavioral and emotional disaffection, scores are preferably as low as possible, indicating students are less disaffected. Interpret survey results with caution because no survey results are available for a comparison group to determine whether to attribute outcomes to the program.

* Statistically significant ($p < .05$) ** Statistically significant ($p < .01$) ***Statistically significant ($p < .001$)

Figure 9

Most Math Classroom Coaching Program students agreed or strongly agreed that they liked, understood, or were better at math because of APIE.



Source. APIE Student Survey, 2015–2016

* Statistically significant ($p < .05$)

What did volunteers say about the 8th-grade Math Classroom Coaching Program?

One hundred and twelve volunteers from APIE’s 8th-grade Math Classroom Coaching Program participated in the end-of-year survey, a response rate of 43% (Figures 10 through 13). Volunteers responded favorably to survey questions at a rate exceeding APIE’s goal of 90% for every item.

Figure 10

APIE volunteers found registration easy, found communication with APIE timely, and were satisfied with the placement pro-

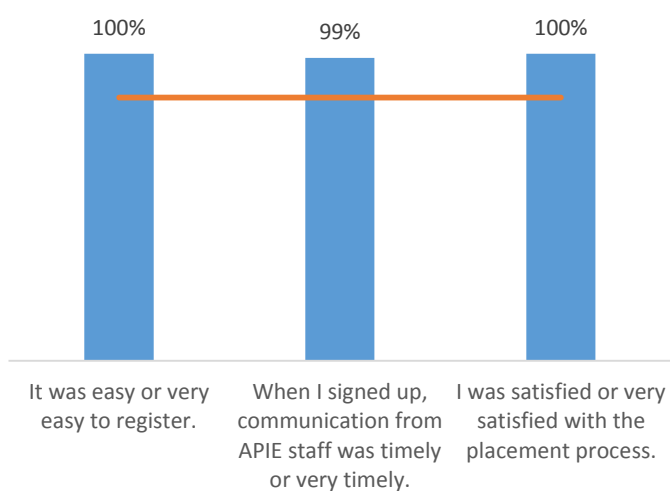
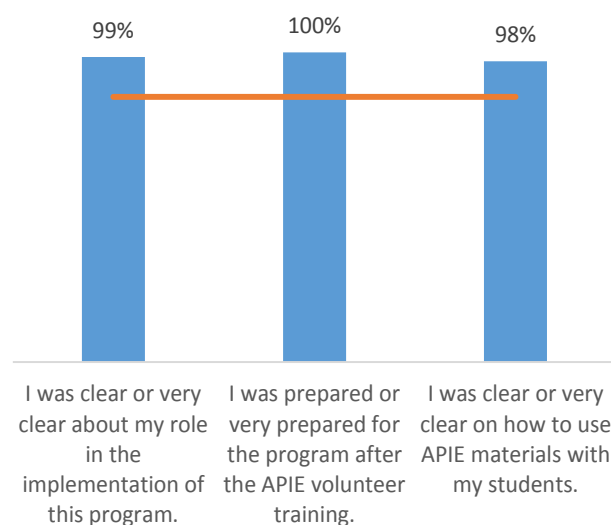


Figure 11

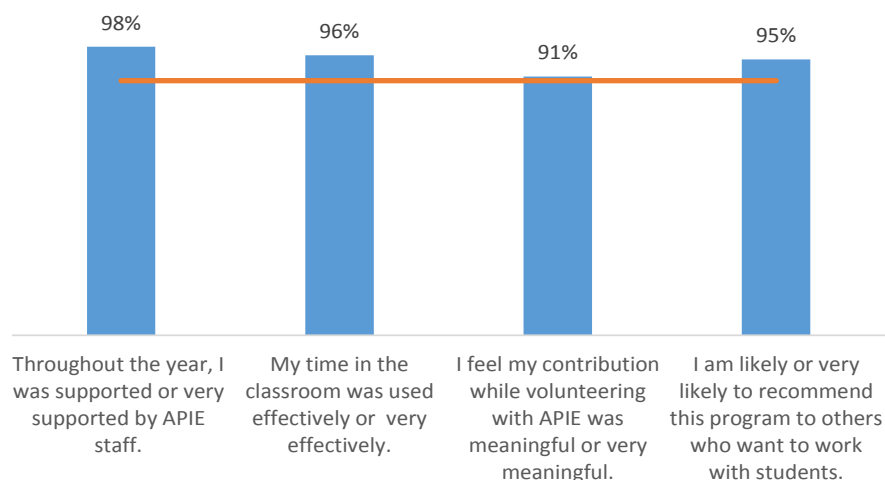
APIE volunteers understood their role in the program, felt prepared, and understood how to use APIE materials.



Source. APIE Volunteer Survey, 2015–2016

Figure 12

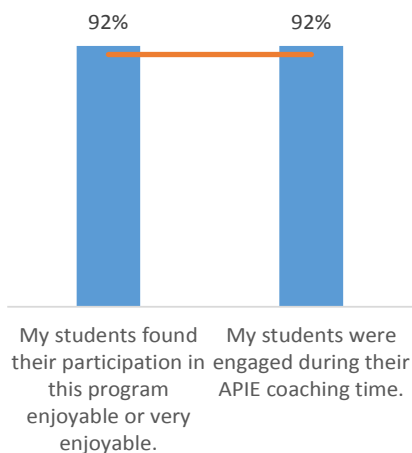
APIE volunteers believed their time was used effectively, felt their contribution was meaningful, and were likely to recommend APIE.



Source. APIE Volunteer Survey, 2015–2016

Figure 13

APIE volunteers believed students enjoyed participating in the program.



Source. APIE Volunteer Survey, 2015–2016

Overall, volunteers reported they enjoyed their experience with students and helping them “get it.” They reported the materials and lessons were appropriate and engaged students. They appreciated receiving the materials in advance and spoke highly about the APIE coordinator. As for the things they would change, they suggested smaller groups based on student ability, better communication between APIE and schools, and more practical activities.

“I like receiving the materials a few days ahead of time for review. Also like the quick meeting [APIE staff] would hold prior to our tutoring. Great working with the kids.”

APIE Volunteer, Spring 2016



Results for College Readiness

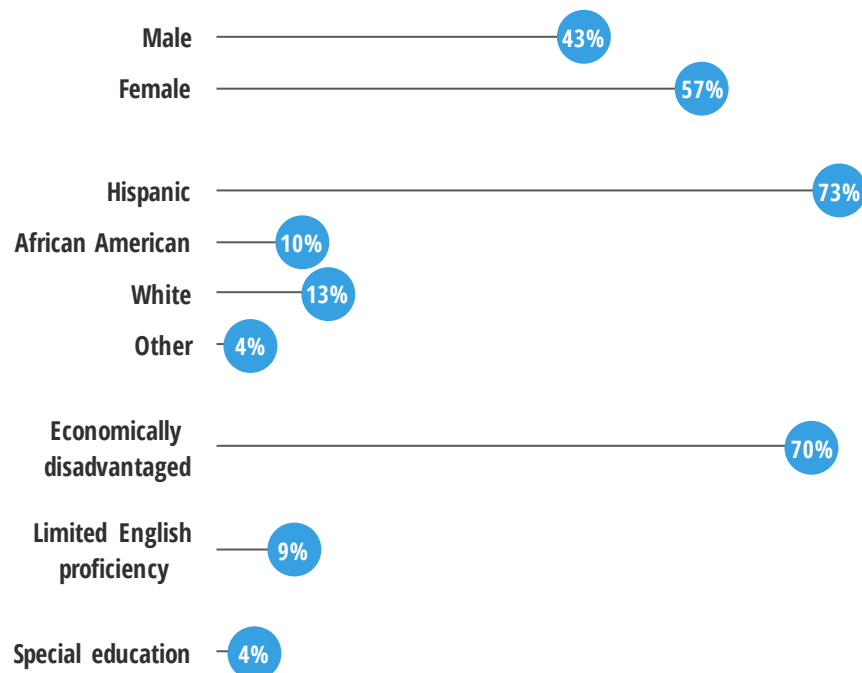
APIE's academic support focused on preparing program participants to meet college readiness standards on the Texas Success Initiative (TSI) exam. For the Class of 2016, seniors may have taken college admissions exams, such as the TSI, SAT, and/or ACT as they neared graduation to meet college admissions requirements. The APIE College Readiness Program focused on high school seniors who were eligible to graduate but may have been struggling to meet the more stringent college readiness standards on college admissions assessments. In some cases, they may not have taken any type of college admissions exams prior to program participation.

Who participated in APIE's College Readiness Program?

The APIE College Readiness Program served high school seniors who were eligible to graduate but may have been struggling to meet the more stringent college readiness standards on college admissions assessments. Overall, 492 seniors from nine high schools participated in APIE's College Readiness Coaching Program: Akins, Austin, Anderson, Crockett, Eastside, Lanier, McCallum, Reagan, and Travis High Schools (Figure 14). Of those participants, a total of 467 students completed the program.

Figure 14

A total of 467 students participated in APIE's College Readiness Program.



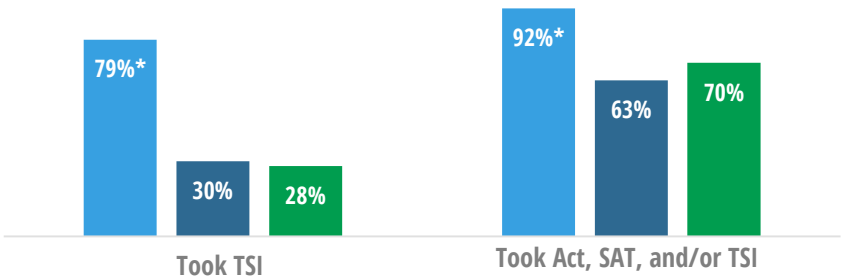
Source. AISD student enrollment records, 2015–2016

APIE college readiness participants differed demographically compared with seniors districtwide. They were more likely to be Hispanic and categorized as economically disadvantaged than were seniors across all high schools. A detailed demographic comparison of APIE college readiness program participants, a matched comparison group, and all AISD seniors is provided in Appendix C.

What were the outcomes for College Readiness Program participants?

APIE program participants were working towards meeting college readiness standards on the TSI, and they may have taken the TSI, ACT or SAT exams. Overall, significantly greater percentages of APIE college readiness program participants took one or more college admissions tests than did the matched comparison group and seniors across the district (Figure 15) . Ninety-five percent of APIE participants reported they felt well prepared for the exam.

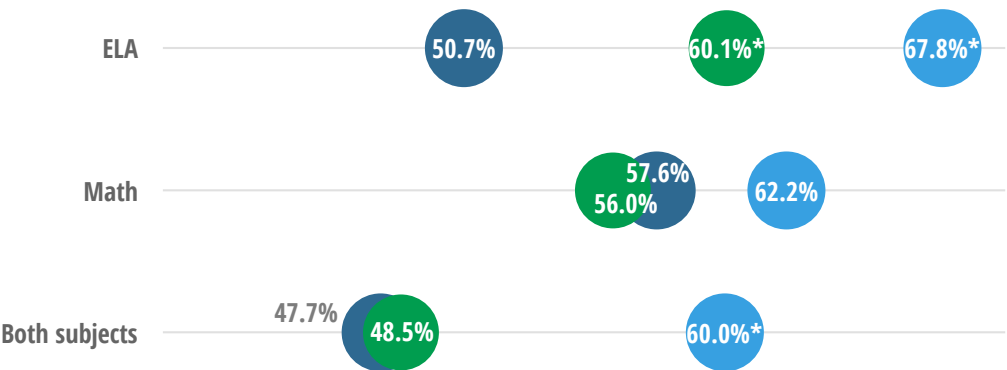
Figure 15
Significantly greater percentages of APIE college readiness program participants took college admissions tests than did the matched comparison group and seniors across the district.



Source. District SAT, ACT, and TSI testing records provided by College Board and ACT, Inc.

On the TSI, significantly higher percentages of APIE participants than of the matched comparison group and of seniors across the district met the college readiness standards in English language arts (ELA) and in both subjects (Figure 16). APIE program participation was a positive and predictive factor in whether a student met the college readiness standard on the TSI in ELA, math, and both subject areas.

Figure 16
Significantly greater percentages of APIE participants than of a matched comparison group and of seniors across the district met the college readiness standards on the TSI assessments in ELA and in both subjects.



Source. AISD TSI testing records provided by the College Board, August 2016

Note. Refer to Appendix D for counts of students in each group and numbers of test-takers.

* Statistically significant ($p < .05$)

College Readiness Criteria

To be considered college ready, a senior must have met college-ready criteria on the SAT, ACT, and/or TSI test. The criteria for each are as follows:

ELA

SAT: ≥ 500 on critical reading and ≥ 1070 total

or

ACT: ≥ 19 on English and ≥ 23 composite

or

TSI: ≥ 351 on reading and ≥ 363 on writing and ≥ 4 on essay or ≥ 351 on reading and ≥ 5 on essay

Math

SAT: ≥ 500 on math and ≥ 1070 total

or

ACT: ≥ 19 on math and ≥ 23 composite

or

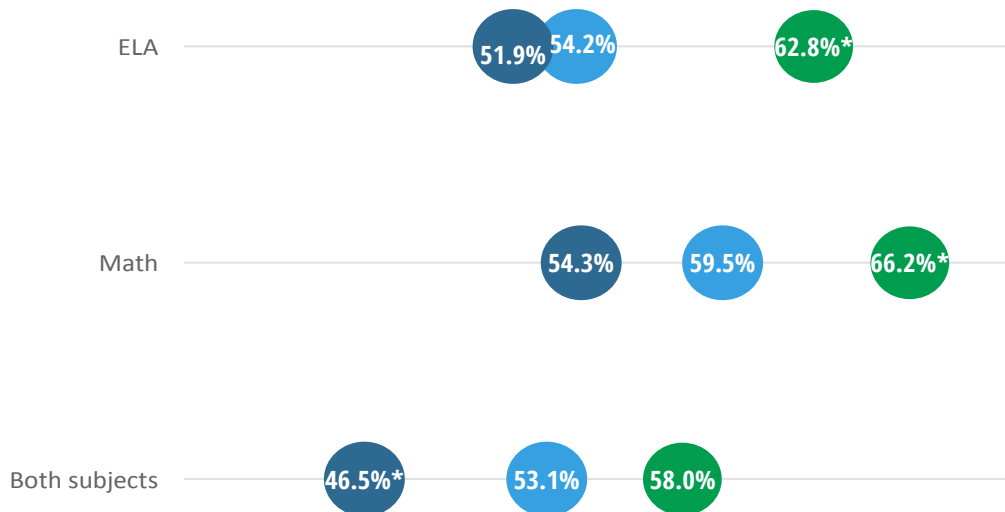
TSI: ≥ 350 on math

In past years, students also could be identified as college ready based on their performance on the Texas Assessment of Knowledge and Skills (TAKS) in ELA or math. However, the TAKS was phased out and replaced by the STAAR end-of-course (EOC) exams in accordance with Texas Senate Bill 1031. At this time, college readiness measures are not included in the EOC exams required for graduation: English I, English II, algebra I, biology, and US history.

Although APIE services focused on preparation for the TSI tests, students may have taken other college readiness assessments. Therefore, SAT and ACT results also were included in the analysis to determine whether there were differences in students' overall college readiness status (Figure 17). Across all college readiness assessments (i.e., SAT, ACT, and TSI tests), seniors across the district met the college readiness standards at significantly higher rates in ELA and math than did APIE and comparison group students. However, higher percentages of APIE participants than of students in the matched comparison group met the college readiness standards in ELA, math, and both subjects. Notably, significantly lower percentages of the matched comparison groups students than of APIE participants and seniors across the district met the college readiness standards in both subjects.

Figure 17

Across all college readiness assessments (SAT, ACT, and TSI), higher percentages of **APIE** participants than of students in the **matched comparison group** met the college readiness standard in ELA, math, and both subjects. **Seniors across the district** met the college readiness standards at significantly higher rates in ELA and math than did **APIE** and **comparison group** students.



Source. District SAT, ACT, and TSI testing records provided by College Board and ACT, Inc.

Note. Refer to Appendix D for counts of students in each group and numbers of test-takers.

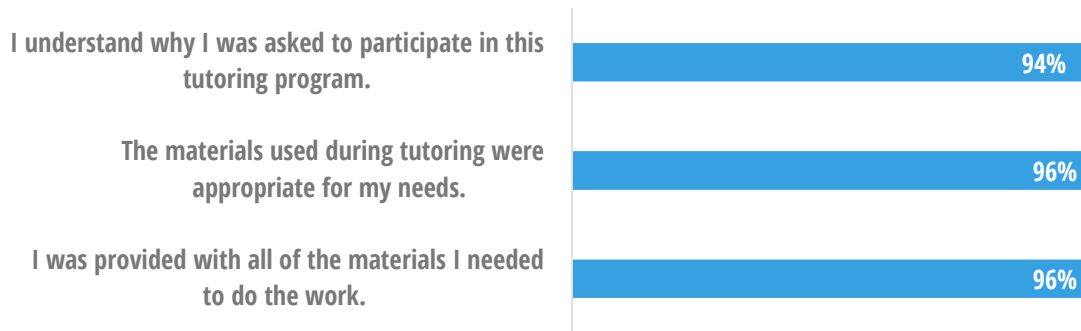
* Statistically significant ($p < .05$)

What did seniors say about the College Readiness Program?

Upon their completion of the college readiness tutoring, all APIE college readiness participants were asked to complete a survey to elicit their perceptions of program helpfulness and college readiness outcomes, and 77% completed the survey. The survey results were highly positive (Figures 18 through 22).

Figure 18

Most seniors understood why they were in the program and believed they had appropriate materials for their work.

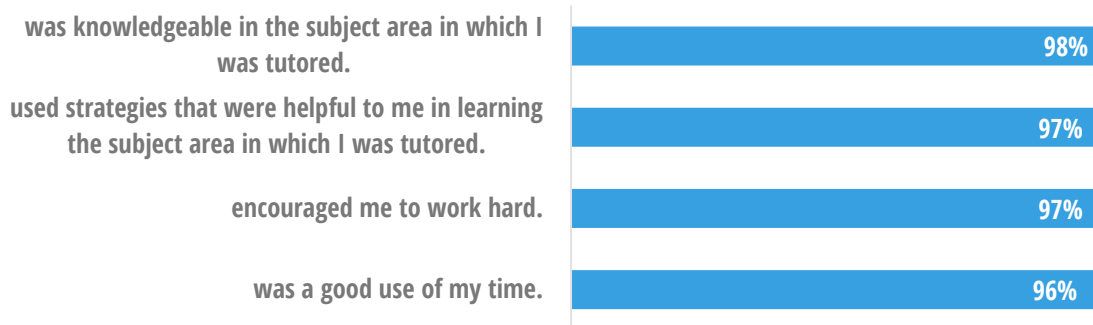


Source. APIE College Readiness student survey, 2015–2016

Figure 19

Most seniors provided positive ratings of their College Readiness Program advocates.

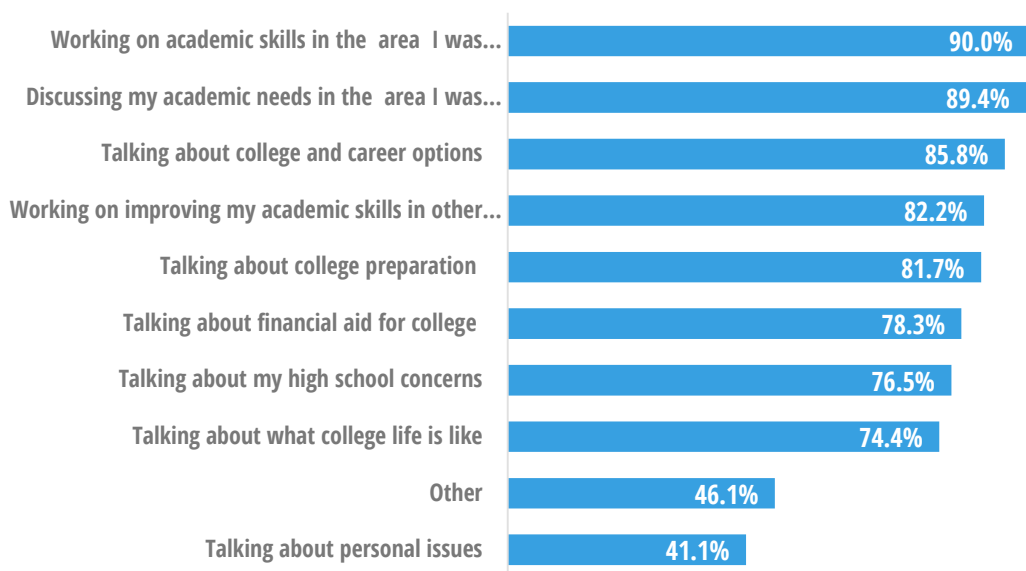
My College Readiness advocate...



Source. APIE College Readiness student survey, 2015–2016

Figure 20

Most seniors reported always or often spending their time focused on their academic needs and college preparation topics when working with their advocates.

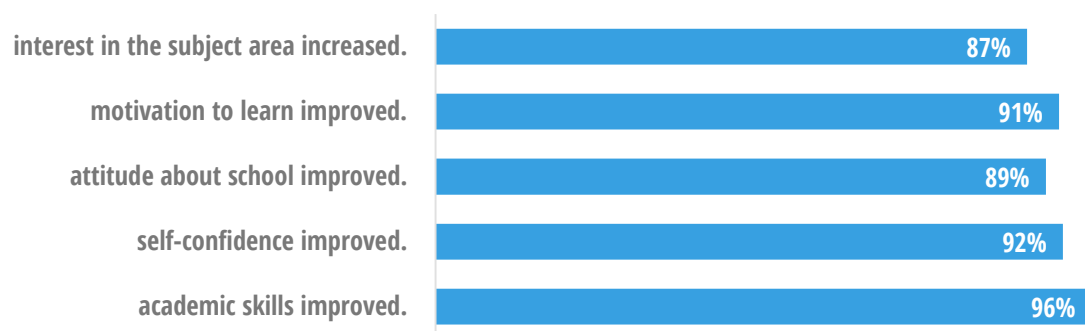


Source. APIE College Readiness Student Survey, 2015–2016

Figure 21

Most seniors perceived positive academic outcomes as a result of the program.

As a result of this program, and in the subject area in which I was tutored, my...

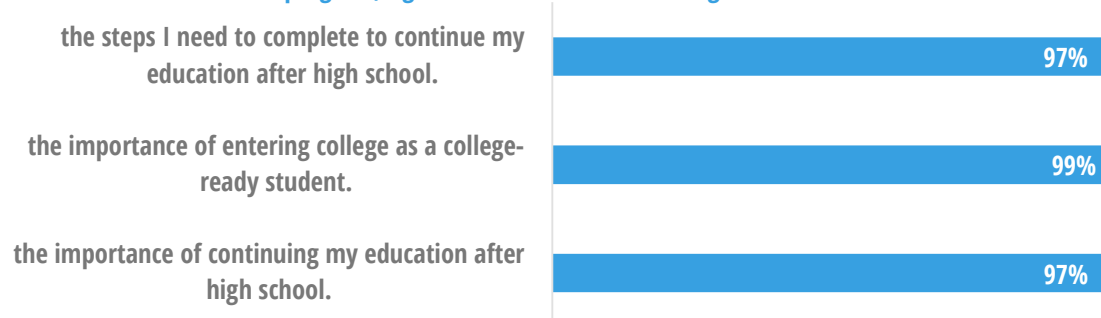


Source. APIE College Readiness Student Survey, 2015–2016

Figure 22

Most seniors perceived positive college preparation outcomes as a result of the program.

As a result of the program, I gained a better understanding of...



Source. APIE College Readiness Student Survey, 2015–2016

In open-ended survey responses, most seniors reported a highly positive experience of the program. They appreciated their one-on-one time with their tutor and the tutors themselves. They liked that they were prepared, understood the material, and met the standard for the assessment. They liked the overall preparation for college and appreciated being motivated by the program.

"I really liked the fact of being one-on-one with my tutor. She encouraged me a lot and made sure I understood everything she was helping me with."

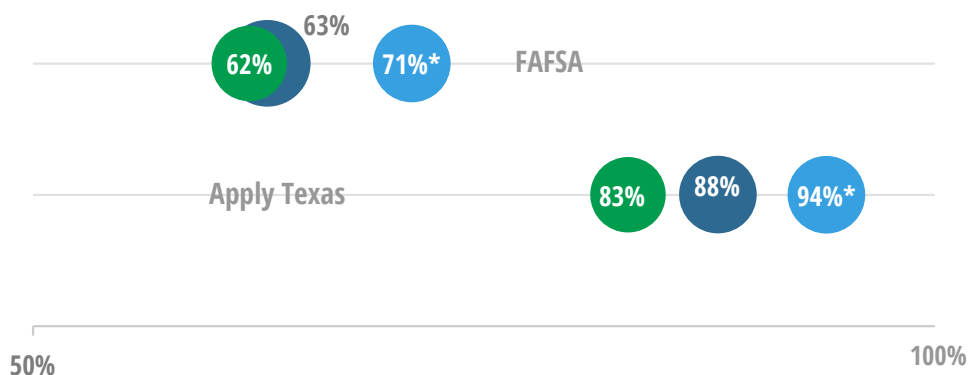
APIE College Readiness Student, Spring 2016

Did APIE College Readiness Program participants complete other steps in preparation for postsecondary enrollment?

While APIE staff focused on preparing program participants to meet college readiness standards on college admissions exams, conversations also may have included discussion of other college preparation steps such as completing applications to college and for financial aid. These conversations also supported the district's Direct to College Initiative (DTC) that assisted students to complete the Apply Texas application for postsecondary enrollment in Texas and the Free Application for Federal Student Aid (FAFSA). Ninety-seven percent of APIE survey respondents indicated the program provided them with a better understanding of other college preparation steps. Analysis of Apply Texas and FAFSA applications revealed significantly greater percentages of APIE college readiness program participants completed these applications compared with the matched comparison group and seniors districtwide.

Figure 23

Significantly greater percentages of **APIE college readiness program participants** completed these applications than did the **matched comparison group** and **seniors districtwide**.



Source. District Apply Texas and FAFSA records provided by The Apply Texas Counselors' Suite, 2015–2016



Conclusion

Program evaluation is a systematic method for collecting, analyzing, and using information to answer questions about programs, particularly about their effectiveness. In this case, three major questions were answered.

Was the program implemented well?

Across all APIE programs, it was determined that APIE staff effectively implemented APIE programs. Volunteers serving as classroom coaches rated program implementation attributes highly and reported positive program experiences. Most believed students were making academic progress as a result of the program. APIE provided program participants opportunities to engage with caring and supportive adults, and most students reported positive experiences.

Did changes occur in students' academic self-confidence and school engagement?

The average academic self-confidence and behavioral engagement scores for program participants were at desirable levels at both the beginning and the end of the school year. Consistent with results in prior school years, participants in the Math Classroom Coaching Program reported a significant increase in academic self-confidence from the beginning to the end of the school year. APIE college readiness participants also perceived greater academic confidence as a result of the program.

Did participants experience positive academic outcomes as a result of their participation?

Eighth-grade students participating in APIE's Math Classroom Coaching Program had significantly greater academic outcomes than did the matched comparison group. Additionally, significantly greater percentages of APIE participants than of a matched comparison group and seniors across the district met the college readiness standards on the TSI assessments in ELA and in both subjects. When looking at college readiness over multiple assessments, APIE's College Readiness Program participants met college readiness standards in both subjects at rates similar to those of students across the district, and at significantly higher rates than those of the matched comparison group. They also submitted college and FAFSA applications at higher rates than did the matched comparison group and seniors across the district.

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November 2016

Publication 15.77

APPENDICES

Appendix A

APIE Evaluation Methodology

Data Collection

To assess the processes and impact of APIE programs, DRE staff conducted qualitative and quantitative analyses using various forms of data. Staff used district information systems to obtain students' demographic, course enrollment, and testing history records. APIE staff collected program participation information. Students, teachers, and volunteers submitted surveys about their experiences with APIE.

Participation Records

APIE staff tracked participating classrooms in the 2015–2016 school year. At the end of the year, DRE reviewed cumulative student participation records with APIE staff to ensure the accuracy of student lists.

Assessments

In this evaluation, DRE staff used multiple assessments to determine academic outcomes for APIE participants and matched comparison groups. Descriptions of the assessments are as follows.

STAAR. The State of Texas Assessments of Academic Readiness (STAAR) includes annual tests in reading and math for 3rd through 8th grade, writing tests for 4th and 7th grade, science assessments for 5th and 8th grade, a social studies test for 8th graders, and EOC assessments for 9th through 11th graders in English I, English II, algebra I, biology, and US history. For more information, refer to <http://www.tea.state.tx.us/student.assessment/staar/>

TSI. The Texas Success Initiative (TSI) assessment is used to gauge whether high school students are ready for college-level material in the areas of reading, writing, and math. The TSI assessment also provides information on what type of intervention would help a student prepare for college-level coursework. For more information, refer to <http://www.thecb.state.tx.us/index.cfm?objectid=233A17D9-F3D3-BFAD-D5A76CDD8AADD1E3>

SAT. The SAT is a college admission test that measures knowledge in the areas of reading, writing, and math. The SAT also offers optional subject tests in various areas. For more information, refer to <http://sat.collegeboard.org/home>

ACT. The ACT is a college readiness assessment that tests English, math, reading, and science reasoning. It also includes an optional writing section. For more information, refer to <http://www.actstudent.org/>

Surveys

Students, teachers, and volunteers completed surveys to describe program implementation, participants' attitudes, and perceived outcomes. In addition, student participants' pre- and post-surveys measured their academic self-confidence and engagement and disaffection with learning. General information about each program survey is provided in the following paragraphs.

Middle School Surveys. Students who participated in APIE's Math Classroom Coaching Program completed program surveys in the fall and spring semesters that measured their academic self-confidence, emotional and behavioral engagement, and disaffection. The academic self-confidence survey questions were those used in the AISD Student Climate Survey, administered annually to all district students from 3rd through 11th grade. Additional survey items from the Engagement vs. Disaffection With Learning Survey also were used.¹ All APIE survey items were validated for use with 3rd through 6th graders.

High School Surveys. Students who participated in the APIE College Readiness program took an exit survey after completing the program. Students responded to questions about program implementation, program activities, and overall results, and they commented on what they liked best and what they would like to change about the program.

Volunteer Surveys. This survey asked volunteers for their views on registration and placement, training and classroom materials, overall experience, and perceived student outcomes. As part of the survey, volunteers were asked two open-ended questions about what they most liked and what they would like to change about their APIE program.

Data Analysis

DRE staff used a mixed-methods approach to determine outcomes for APIE programs. Quantitative data (e.g., test scores and surveys) were summarized using descriptive statistics (e.g., numbers and percentages). Inferential statistics (e.g., tests of statistical significance, and linear and logistic regression analyses) were used to make judgments of the probability that an observed difference between groups might have happened as a result of the program, rather than by chance. Qualitative data were analyzed using content analysis techniques to identify important details, themes, and patterns within survey responses. Results from all analyses were triangulated, or cross-examined, to determine the consistency of results and provide a more detailed and balanced picture of program outcomes.

To calculate academic progress for APIE participants and their comparison groups, DRE staff followed the Texas Education Agency's (TEA) criteria and methodology. The TEA measures academic progress on the STAAR exam in each content area from year to year for students who meet certain criteria, such as taking the test in the same language and test version from one year to the next. The agency publishes a STAAR Progress Measure or a Texas English Language Learner (ELL) Progress Measure for those students. These progress measures indicate whether students did or did not meet an expected level of progress, as defined by the TEA. Only students with a TEA progress measure were included in the APIE academic growth analyses.

Linear regression analyses were used to determine whether APIE program participation influenced a change in STAAR scores from the 2014–2015 school year to the 2015–2016 school year. The dependent variable in the linear regression analysis was students' 2015–2016 STAAR scores. The independent variables in the models were variables that might directly or indirectly influence STAAR scores. These variables included students' previous year scores, race/ethnicity, economic status, ELL status, attendance, gender, and APIE program participation. In some instances, the small number of students within a group prevented the use of linear regression, and the difference in mean scores for both APIE participants and a comparison group were analyzed using *t*-tests to see whether a significant difference existed between them.

Selection of Comparison Groups

To determine whether academic outcomes were related to program participation, a matched student comparison group was selected using propensity score matching. This statistical technique considers variables that may influence program participation (e.g., prior test scores, attendance, gender, economic disadvantage status) when matching APIE program participants to students with very similar observable characteristics. This technique is useful when there are numerous characteristics on which to match students, and a sufficient number of possible comparison students from which to choose. The procedure also is used to achieve a high level of rigor when it is impossible to conduct a random

¹Skinner, E., Kindermann, T., & Furrer, C. (2008). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, 69(3), 493–525.

experiment.

Multiple variables were used in the selection of the matched comparison groups. The variables included gender, ethnicity, economic status, English proficiency status, special education status, school attendance, and prior-year test scores before program implementation. Different assessments were used for matched comparison group selection and were program dependent.

Comparison groups were primarily selected from students attending APIE schools who were not receiving APIE services. In some cases, students from non-APIE schools were included in the comparison group because a larger group of students with similar characteristics was needed to ensure an appropriate match. For the College Readiness Program, a stratified random sampling process was used due to the lack of additional schools needed for propensity score matching.

Limitations

The lack of comparison groups in some instances limited what could be concluded from results presented in this report. Because only APIE participants were surveyed, it was not possible to compare their results with those of similar students in the district.

Appendix B

Middle School Student Survey Instrument

The APIE survey of middle school program participants included questions from the Engagement vs. Disaffection With Learning Survey and the AISD Climate Survey. The survey had a total of 25 items, and three additional items about their experience with APIE were asked in the spring only. Surveys were administered in both English and Spanish.

To interpret the results of the survey, it is important to understand the constructs of engagement and disaffection that are measured. Engagement has both behavioral and emotional aspects. Engaged behaviors include persistence, attention, and concentration. Engaged emotions include enthusiasm, interest, and enjoyment. The term *disaffection* is used in this survey to describe not only behaviors and emotions opposite those of engagement (e.g., passivity, lack of initiation, discouragement, and apathy), but also behaviors and emotions designed to adapt to that environment, such as going through the motions; disruptive noncompliance; giving up; and feeling frustrated, bored, tired, or sad (Skinner et al., 2008).

Interpret average scores on the survey with care. For most items, it is desirable to have an average response of at least 3.0. For items addressing disaffection, scores should be as low as possible. A decrease in disaffection scores is desirable. The following is a key to which questions were included in the indexes for each survey, and the list of survey question asked for the middle school reading and math participants are provided on the following page.

Academic self-confidence: Questions 1–5

Behavioral engagement: Questions 6, 11, 13, 22, 25

Emotional engagement: Questions 7, 10, 15, 17, 20

Behavioral disaffection: Questions 9, 16, 19, 21, 24

Emotional disaffection: Questions 8, 12, 14, 18, 23

APIE Middle School Math Student Survey

Please choose the answer that fits the way you feel.

	Never	Not a lot	Sometimes	Always	Don't know
1. I can do even the hardest schoolwork in math if I try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I felt well prepared for the STAAR exam in math.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. In my math class, I try hard to do my best work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I feel successful in my math schoolwork.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I can reach the goals I set for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Not at all true	Not very true	Sort of true	Very true	
6. I try hard to do well in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
7. I enjoy learning new things in math class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
8. When we work on something in math class, I feel discouraged.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
9. In math, I do just enough to get by.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
10. Math class is fun.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
11. In math class, I work as hard as I can.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
12. When I can't answer a question in math class, I feel frustrated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
13. When I'm in math class, I listen very carefully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
14. When we start something new in math class, I feel nervous.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
15. When we work on something in math class, I get involved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
16. When I'm in math class, I think about other things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
17. When we work on something in math class, I feel interested.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
18. Math class is not all that fun for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
19. When I'm in math, I just act like I'm working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
20. When I'm in math class, I feel good.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
21. When I'm in math class, my mind wanders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
22. When I'm in math class, I participate in class discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
23. When we work on something in math class, I feel bored.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
24. I don't try very hard at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
25. I pay attention in math class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	Strongly disagree	Disagree	Agree	Strongly agree	
26. I like math more because of my math coach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
27. I understand more about math because of my math coach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
28. I am better at math because of my math coach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Appendix C

Demographics of APIE and Comparison Groups, by Program

APIE Eighth-Grade Math* Classroom Coaching Program Demographics and Grade-Level Achievement for Participants and Comparison Group

Middle schools	APIE Group		Comparison group	
	Burnet, Covington, Martin, Mendez, Webb		Bailey, Bedichek, Burnet, Covington, Dobie, Fulmore, Garcia YMLA, Gorzycki, Kealing, Lamar, Martin, Mendez, Muchison, OHenry, Paredes, Sadler Means, Small, Webb	
	Frequency	Percentage	Frequency	Percentage
Gender				
Male	278	54%	289	56%
Female	238	46%	227	44%
Race/Ethnicity				
Black or African American	59	11%	65	13%
Hispanic	422	82%	420	81%
White	23	4%	16	3%
Other	12	2%	15	3%
Economically disadvantaged				
No	53	10%	44	9%
Yes	463	90%	472	91%
English language learner				
No	313	61%	328	64%
Yes	203	39%	188	36%
Special education				
No	424	82%	417	81%
Yes	92	18%	99	19%
Total	516	100%	516	100%
Met 8 th grade STAAR math standard		70%		63%

APIE 8th-grade Math Classroom Coaching participants and comparison students differed significantly in meeting the passing standard for STAAR math.

* The APIE Math Classroom Coaching program included pre-AP math for 8th graders. The Math 8th-grade group composed about 88% of all participants.

APIE Advanced Seventh-Grade Math* Classroom Coaching Program Demographics and Grade-Level Achievement for Participants and Comparison Group

Middle schools	APIE Group		Comparison group	
	Burnet, Covington, Martin, Mendez, Webb		Bailey, Bedichek, Burnet, Covington, Dobie, Fulmore, Garcia YMLA, Gorzycki, Kealing, Lamar, Martin, Mendez, Muchison, OHenry, Paredes, Sadler Means, Small, Webb	
	Frequency	Percentage	Frequency	Percentage
Gender				
Male	48	52%	48	52%
Female	45	48%	45	48%
Race/Ethnicity				
Black or African American	2	2%	4	4%
Hispanic	72	77%	71	76%
White	17	18%	15	16%
Other	2	2%	3	3%
Economically disadvantaged				
No	22	24%	21	23%
Yes	71	76%	72	77%
English language learner				
No	76	82%	70	75%
Yes	17	18%	23	25%
Special education				
No	91	98%	92	99%
Yes	2	2%	1	1%
Total	93	100%	93	100%
Met 7th grade STAAR math standard		87%		87%

The difference in 7th grade STAAR math passing rates between the APIE and comparison group is not statistically significant.

APIE 7th-grade Math Classroom Coaching participants and comparison students met the 8th grade STAAR math passing standard at similar rates. The Math 7th-grade group composed about 12% of all participants.

All APIE Math* Classroom Coaching Program Demographics and Grade-Level Achievement for Participants and Comparison Group

Middle schools	APIE Group		Comparison group Bailey, Bedichek, Burnet, Covington, Dobie, Fulmore, Garcia YMLA, Gorzycki, Kealing, Lamar, Martin, Mendez, Muchison, OHenry, Paredes, Sadler Means, Small, Webb		
	Frequency	Percentage	Frequency	Percentage	
Gender					
	Male	327	54%	324	53%
	Female	283	46%	286	47%
Race/Ethnicity					
	Black or African American	61	10%	65	11%
	Hispanic	494	81%	482	79%
	White	41	7%	45	7%
	Other	14	2%	18	3%
Economically disadvantaged					
	No	76	12%	71	12%
	Yes	534	88%	539	88%
English language learner					
	No	390	64%	377	62%
	Yes	220	36%	233	38%
Special education					
	No	516	85%	522	86%
	Yes	94	15%	88	14%
Total		610	100%	610	100%
Met 8th grade STAAR math standard			72%		60%

All APIE Math Classroom Coaching participants and comparison students differed significantly in meeting the passing standard for 8th grade STAAR math.

* The APIE Math Classroom Coaching program included three different types of math courses in 7th, 8th, and Pre-AP 8th grade. The Math 8th and 7th-grade group composed about 100% of all participants.

**Program Demographics for APIE's College Readiness Participants, Matched Comparison Group,
and Seniors Districtwide**

		APIE Group		Comparison group		All AISD Seniors	
High Schools		Akins, Austin, Anderson, Crockett, Eastside, Lanier, McCallum, Reagan, and Travis High Schools		Akins, Austin, Anderson, Crockett, Eastside, Lanier, McCallum, Reagan, and Travis High Schools		All AISD High Schools	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Gender	Male	201	43%	199	43%	2,536	51%
	Female	266	57%	264	57%	2,621	49%
Race/Ethnicity							
	Black or African American	47	10%	42	9%	471	9%
	Hispanic	341	73%	329	71%	2,786	54%
	White	61	13%	69	15%	1,547	30%
	Other	19	4%	23	5%	303	7%
Economically disadvantaged							
	No	140	30%	134	29%	2,811	55%
	Yes	327	70%	329	71%	2,346	45%
English language learner							
	No	425	91%	407	88%	4,676	91%
	Yes	42	9%	56	12%	481	9%
Special education							
	No	448	96%	421	91%	4,619	90%
	Yes	19	4%	42	9%	538	10%
Total		467	100%	463	100%	5,157	100%

Appendix D

College Readiness Exam Results

A total of 467 seniors completed the college readiness program in 2015-2016. APIE program participants may have received tutoring in ELA, math, or both subjects.

College Readiness on TSI: ELA

<i>Campus</i>	<i># of Seniors</i>	<i># with test scores</i>	<i># college ready</i>	<i>% College ready in ELA</i>
APIE	454	369	250	67.8%
APIE Comp Group	463	140	71	50.7%
District	5,157	1,460	877	60.1%

College Readiness on TSI: Math

<i>Campus</i>	<i># of Seniors</i>	<i># with test scores</i>	<i># college ready</i>	<i>% College ready in Math</i>
APIE	245	196	122	62.2%
APIE Comp Group	463	132	76	57.6%
District	5,157	1,330	745	56.0%

College Readiness on TSI: Both Subjects

<i>Campus</i>	<i># of Seniors</i>	<i># with test scores</i>	<i># college ready</i>	<i>% College ready in both subjects</i>
APIE*	232	170	102	60.0%
APIE Comp Group	463	111	53	47.7%
District	5,157	1,141	553	48.5%

Source. District TSI testing records provided by College Board

College Readiness on SAT, ACT, and/or TSI: ELA

<i>Campus</i>	<i># of Seniors</i>	<i># with test scores</i>	<i># college ready</i>	<i>% College ready in ELA</i>
APIE*	454	430	233	54.2%
APIE Comp Group*	463	291	151	51.9%
District*	5,157	3,620	2,272	62.8%

College Readiness on SAT, ACT, and/or TSI: Math

<i>Campus</i>	<i># of Seniors</i>	<i># with test scores</i>	<i># college ready</i>	<i>% College ready in Math</i>
APIE*	245	222	132	59.5%
APIE Comp Group*	463	276	150	54.3%
District*	5,157	3,468	2,297	66.2%

College Readiness on SAT, ACT, and/or TSI: Both Subjects

<i>Campus</i>	<i># of Seniors</i>	<i># with test scores</i>	<i># college ready</i>	<i>% College ready in both subjects</i>
APIE	245	209	111	53.1%
APIE Comp Group*	463	273	127	46.5%
District	5,157	3,437	1,994	58.0%

Source. District SAT, ACT, and TSI testing records provided by College Board and ACT, Inc.