

Texas 21st Century Community Learning Centers Grant Evaluation: Texas Afterschool Centers on Education

Impact Study of the Statewide 21st CCLC
Program, Using 2024–25 Outcomes Across One
and Two Years of Participation

Matt Vinson

American Institutes for Research®

Jayce Warner and Danial Hoepfner

Gibson Consulting Group

Submitted to the Texas Education Agency

August 2026



Contents

Executive Summary.....	1
Objectives	1
Overview of Methods	2
Overall Impact of Texas ACE on Students Who Met Attendance Target (RQs 4.1–4.2).....	4
STAAR Assessments	4
Attendance Rates.....	5
CTE Course Passing Rates	6
Impact of Texas ACE on Students Performing at <i>Did Not Meet Grade Level</i> Prior to Program Participation (RQ 4.3).....	7
STAAR Test Scores.....	7
STAAR Performance Level.....	8
Differential Impacts of Texas ACE by Level of Program Attendance (RQ 4.4).....	9
Introduction	11
Research Questions	11
Methods.....	13
Data Sources	13
Sample	14
Analysis	15
Campus-Level Matching.....	15
Student-Level Matching.....	16
Approach to Estimating Program Impact	17
Results.....	22
STAAR-Mathematics	22
STAAR-Mathematics Scores.....	22
STAAR Performance Level.....	24
Variation in Impact by Level of Program Participation.....	27
STAAR-RLA	29
STAAR-RLA Scores	29
STAAR-RLA Performance Level	32

Variation in Impact by Level of Program Participation	34
STAAR Algebra I EOC Exam	37
STAAR Algebra I EOC Scores	37
STAAR Algebra I EOC Performance Level.....	39
Variation in Impact by Level of Program Participation.....	40
STAAR English I EOC Exam	43
STAAR English I EOC Scores.....	43
STAAR English I EOC Performance Level.....	45
STAAR English II EOC Exam	47
STAAR English II EOC Scores.....	47
STAAR English II EOC Performance Level.....	48
Attendance.....	49
Overall Impact.....	49
Variation in Impact by Level of Program Participation.....	51
Career and Technical Education	54
Overall Impact.....	54
Discussion.....	57
Limitations	58
Conclusion.....	60
Appendix A. Statistical Model Results	A-1
STAAR-Mathematics	A-2
STAAR-RLA	A-11
STAAR Algebra I EOC.....	A-18
STAAR English I EOC.....	A-20
Attendance Rates.....	A-22
CTE Course Passing Rates	A-28

Tables

Table 1. Summary of Data Sources and Elements	13
Table 2. Summary of Analyses Conducted to Answer RQs 4.1 and 4.2.....	17
Table 3. Summary of STAAR Performance Level Analyses Conducted to Answer RQ 4.3	19
Table 4. Summary of Analyses Conducted to Answer RQ 4.4	20
Table 5. Summary of Analytic Samples for STAAR-Mathematics Scores.....	22
Table 6. Summary of Analytic Samples for STAAR-Mathematics Performance Level.....	25
Table 7. Summary of the Analytic Samples for the Texas ACE Dosage Model Estimates for STAAR-Mathematics	27
Table 8. Summary of Analytic Samples for STAAR-RLA Scores.....	30
Table 9. Summary of Analytic Samples for STAAR-RLA Performance Level	33
Table 10. Summary of the Analytic Samples for the Texas ACE Dosage Model Estimates for STAAR-RLA.....	34
Table 11. Summary of Analytic Samples for STAAR Algebra I EOC Scores	37
Table 12. Summary of Analytic Samples for STAAR Algebra I EOC Performance Level	39
Table 13. Summary of the Analytic Samples for the Texas ACE Dosage Model Estimates for STAAR Algebra I EOC.....	40
Table 14. Summary of Analytic Samples for STAAR English I EOC Scores	43
Table 15. Summary of Analytic Samples for STAAR English I EOC Performance Level	45
Table 16. Summary of Analytic Samples for STAAR English II EOC Scores	47
Table 17. Summary of Analytic Samples for STAAR English II EOC Performance Level	48
Table 18. Summary of Analytic Samples for Attendance Rates	49
Table 19. Summary of the Analytic Samples for the Texas ACE Dosage Model Estimates for School-Day Attendance Rates.....	51
Table 20. Summary of Analytic Samples for CTE Course Passing Rates	54
Table A1. Multilevel Regression Results for STAAR-Mathematics Score, 1 Year, Cycle 12.....	A–2
Table A2. Multilevel Regression Results for STAAR-Mathematics Score, 2 Year, Cycle 12.....	A–3
Table A3. Multilevel Regression Results for STAAR-Mathematics Score and Interaction Effect, 1 Year, Cycle 11.....	A–4
Table A4. Multilevel Regression Results for STAAR-Mathematics Score and Interaction Effect, 2 Year, Cycle 11.....	A–5
Table A5. Multilevel Logistic Regression Results for STAAR-Mathematics Performance Level, 1 Year, Cycle 11.....	A–6

Table A6. Multilevel Logistic Regression Results for STAAR-Mathematics Performance Level, 1 Year, Cycle 12.....	A-7
Table A7. Multilevel Logistic Regression Results for STAAR-Mathematics Performance Level, 2 Years, Cycle 11	A-8
Table A8. Multilevel Logistic Regression Results for STAAR-Mathematics Performance Level, 2 Years, Cycle 12	A-9
Table A9. Generalized Propensity Score Model Results for STAAR-Mathematics, 1 Year	A-10
Table A10. Generalized Propensity Score Model Results for STAAR-Mathematics, 2 Year	A-10
Table A11. Multilevel Regression Results for STAAR-RLA Score, 1 Year, Cycle 12	A-11
Table A12. Multilevel Regression Results for STAAR-RLA Score and Interaction Effect, 1 Year, Cycle 11	A-12
Table A13. Multilevel Regression Results for STAAR-RLA Score and Interaction Effect, 1 Year, Cycle 12	A-13
Table A14. Multilevel Regression Results for STAAR-RLA Score and Interaction Effect, 2 Year, Cycle 11	A-14
Table A15. Multilevel Regression Results for STAAR-RLA Score and Interaction Effect, 2 Year, Cycle 12	A-15
Table A16. Multilevel Logistic Regression Results for STAAR-RLA Performance Level, 1 Year, Cycle 12	A-16
Table A17. Generalized Propensity Score Model Results for STAAR-RLA, 1 Year	A-17
Table A18. Generalized Propensity Score Model Results for STAAR-RLA, 2 Year	A-17
Table A19. Multilevel Regression Results for STAAR Algebra I EOC Score and Interaction Effect, 1 Year, Cycle 12.....	A-18
Table A20. Generalized Propensity Score Model Results for STAAR Algebra I EOC, 1 Year.....	A-19
Table A21. Generalized Propensity Score Model Results for STAAR Algebra I EOC, 2 Year.....	A-19
Table A22. Multilevel Regression Results for STAAR English I EOC Score and Interaction Effect, 2 Year, Cycle 12.....	A-20
Table A23. Multilevel Logistic Regression Results for STAAR English I EOC Performance Level, 2 Years, Cycle 12	A-21
Table A24. Multilevel Regression Results for Attendance Rates, 1 Year, Cycle 11	A-22
Table A25. Multilevel Regression Results for Attendance Rates, 1 Year, Cycle 12	A-23
Table A26. Multilevel Regression Results for Attendance Rates, 2 Year, Cycle 11	A-24
Table A27. Multilevel Regression Results for Attendance Rates, 2 Year, Cycle 12	A-25
Table A28. Generalized Propensity Score Model Results for School-Day Attendance, 1 Year...	A-26
Table A29. Generalized Propensity Score Model Results for School-Day Attendance, 2 Year...	A-27
Table A30. Multilevel Regression Results for CTE Course Passing Rates, 1 Year, Cycle 11	A-28
Table A31. Multilevel Regression Results for CTE Course Passing Rates, 2 Year, Cycle 11	A-29

Figures

Figure ES1. Matching Texas ACE Participants to Similar Students at Similar Schools to Assess Overall Impact of Texas ACE on Student Outcomes	3
Figure ES2. Differences in Average STAAR Score Percentiles (Adjusted) Between Texas ACE and Comparison Students.....	5
Figure ES3. Difference in Average Attendance Rates (Adjusted) Between Texas ACE and Comparison Students.....	6
Figure ES4. Difference in CTE Course Passing Rates (Adjusted) Between Texas ACE and Comparison Students.....	7
Figure ES5. Differences in Average STAAR Score Percentiles (Adjusted) Between Texas ACE and Comparison Students Who Scored <i>Did Not Meet Grade Level</i> at Baseline.....	8
Figure ES6. Differences in the Average Predicted Probability Between Texas ACE and Comparison Students Who Scored <i>Did Not Meet Grade Level</i> at Baseline.....	9
Figure 1. Number of Students Participating in Texas ACE by the Total Number of Days Attending the Program Across One and Two Years	21
Figure 2. Impact of Texas ACE Participation on 2024–25 STAAR-Mathematics Scores by Baseline STAAR Performance Level (1 & 2 Years, Cycle 11)	24
Figure 3. Impact of Texas ACE Participation on the Probability of Scoring <i>Approaches Grade Level</i> or Higher on 2024–25 STAAR-Mathematics (1 Year, Cycles 11 & 12)	26
Figure 4. Impact of Texas ACE Participation on the Probability of Scoring <i>Approaches Grade Level</i> or Higher on STAAR-Mathematics (2 Years, Cycles 11 & 12).....	27
Figure 5. Estimated Impact of Texas ACE Participation on STAAR-Mathematics Scores at Different Levels of Program Attendance (1 Year, Cycles 11 & 12)	28
Figure 6. Estimated Impact of Texas ACE Participation on STAAR-Mathematics Scores at Different Levels of Program Attendance (2 Year, Cycles 11 & 12)	29
Figure 7. Impact of Texas ACE Participation on STAAR-RLA Scores by Baseline STAAR Performance Level (1 Year, Cycles 11 & 12)	31
Figure 8. Impact of Texas ACE Participation on STAAR-RLA Scores by Baseline STAAR Performance Level (2 Years, Cycles 11 & 12).....	32
Figure 9. Impact of Texas ACE Participation on the Percentage of Students Scoring <i>Approaches Grade Level</i> or Higher on STAAR-RLA (1 Year, Cycles 11 & 12)	34
Figure 10. Estimated Impact of Texas ACE Participation on STAAR-RLA Scores at Different Levels of Program Attendance (1 Year, Cycles 11 & 12).....	35
Figure 11. Estimated Impact of Texas ACE Participation on STAAR-RLA Scores at Different Levels of Program Attendance (2 Year, Cycles 11 & 12).....	36
Figure 12. Impact of Texas ACE Participation on STAAR Algebra I EOC Exam Scores by Baseline STAAR Performance Level (1 Year, Cycle 12)	38

Figure 13. Estimated Impact of Texas ACE Participation on STAAR Algebra I EOC Scores at Different Levels of Program Attendance (1 Year, Cycles 11 & 12)	41
Figure 14. Estimated Impact of Texas ACE Participation on STAAR Algebra I EOC Scores at Different Levels of Program Attendance (2 Year, Cycles 11 & 12)	42
Figure 15. Impact of Texas ACE Participation on STAAR English I EOC Exam Scores by Baseline STAAR Performance Level (1 Year, Cycle 12)	44
Figure 16. Impact of Texas ACE Participation on the Percentage of Students Scoring <i>Approaches Grade Level</i> or Higher on STAAR English I EOC Exam (2 Years, Cycles 11 & 12).....	46
Figure 17. Impact of Texas ACE Participation on School-Day Attendance Rates (1 Year, Cycles 11 & 12).....	50
Figure 18. Impact of Texas ACE Participation on School-Day Attendance Rates (2 Years, Cycles 11 & 12).....	51
Figure 19. Estimated Impact of Texas ACE Participation on School-Day Attendance at Different Levels of Program Attendance (1 Year, Cycles 11 & 12)	52
Figure 20. Estimated Impact of Texas ACE Participation on School-Day Attendance at Different Levels of Program Attendance (2 Year, Cycles 11 & 12)	53
Figure 21. Impact of Texas ACE Participation on CTE Course Passing Rates (1 Year, Cycles 11 & 12).....	55
Figure 22. Impact of Texas ACE Participation on CTE Course Passing Rates (2 Years, Cycles 11 & 12).....	56

Copyright Notice

Copyright © 2026. Texas Education Agency. All Rights Reserved.

Notwithstanding the foregoing, the right to reproduce the copyrighted work is granted to Texas public school districts, Texas charter schools, and Texas education service centers for non-commercial, non-profit educational use within the state of Texas, and to residents of the state of Texas for their own personal, non-commercial, non-profit educational use, and provided further that no dollar amount is charged for such reproduced materials other than to cover the out-of-pocket cost of reproduction and distribution. No other rights, express or implied, are granted hereby.

For more information, please contact copyrights@tea.texas.gov.

Acronyms

21st CCLC = 21st Century Community Learning Centers

ACE = Afterschool Centers on Education

ATET = average treatment effect on the treated

CTE = career and technical education

EOC = end-of-course

RLA = reading language arts

RQ = research question

STAAR® = State of Texas Assessments of Academic Readiness

TEA = Texas Education Agency

Executive Summary

The Texas Afterschool Centers on Education (Texas ACE) is funded by the federal 21st Century Community Learning Centers (21st CCLC) grant program. Texas ACE provides a wide array of academic enrichment and youth development activities during non-school hours, with the primary goals of enhancing students' academic achievement, supporting character development, and cultivating skills and interests that will help them become college and career ready. Approximately 125,000 students across 680 active centers participated in the program funded across two grant cycles, Cycles 11 and 12, in 2024–25.

As a condition of receiving federal 21st CCLC funding for this program, the Texas Education Agency (TEA) is required to conduct a statewide evaluation of Texas ACE. In 2022, TEA contracted with the American Institutes for Research® (AIR®) to conduct this evaluation. This report presents the results of a study on student outcomes conducted as part of that evaluation effort.

Objectives

The purpose of this study was to estimate the impact of participating in the Texas ACE program on student outcomes. The assessed outcomes included academic performance as measured by State of Texas Assessments of Academic Readiness (STAAR®) in Mathematics, Reading Language Arts (RLA), Algebra I, English I, and English II; school-day attendance rates; and Career and Technical Education (CTE) course passing rates. The following research questions (RQs) guided the study.

- RQ 4.1. What impact does the program have for youth attending Texas ACE regularly during one school year relative to similar youth attending campuses that met the minimum eligibility requirements to apply for the 21st CCLC grant but were not awarded?
- RQ 4.2. What impact does the program have for youth attending Texas ACE regularly across the span of two school years relative to similar youth attending campuses that met the minimum eligibility requirements to apply for the 21st CCLC grant but were not awarded?
- RQ 4.3. Does the effect of Texas ACE program participation vary between students who scored above and below the *Approaches Grade Level* standard on prior-year STAAR-Mathematics and STAAR-RLA assessments?
- RQ 4.4. Does the effect of Texas ACE program participation vary across different dosages of within-year attendance?

Overview of Methods

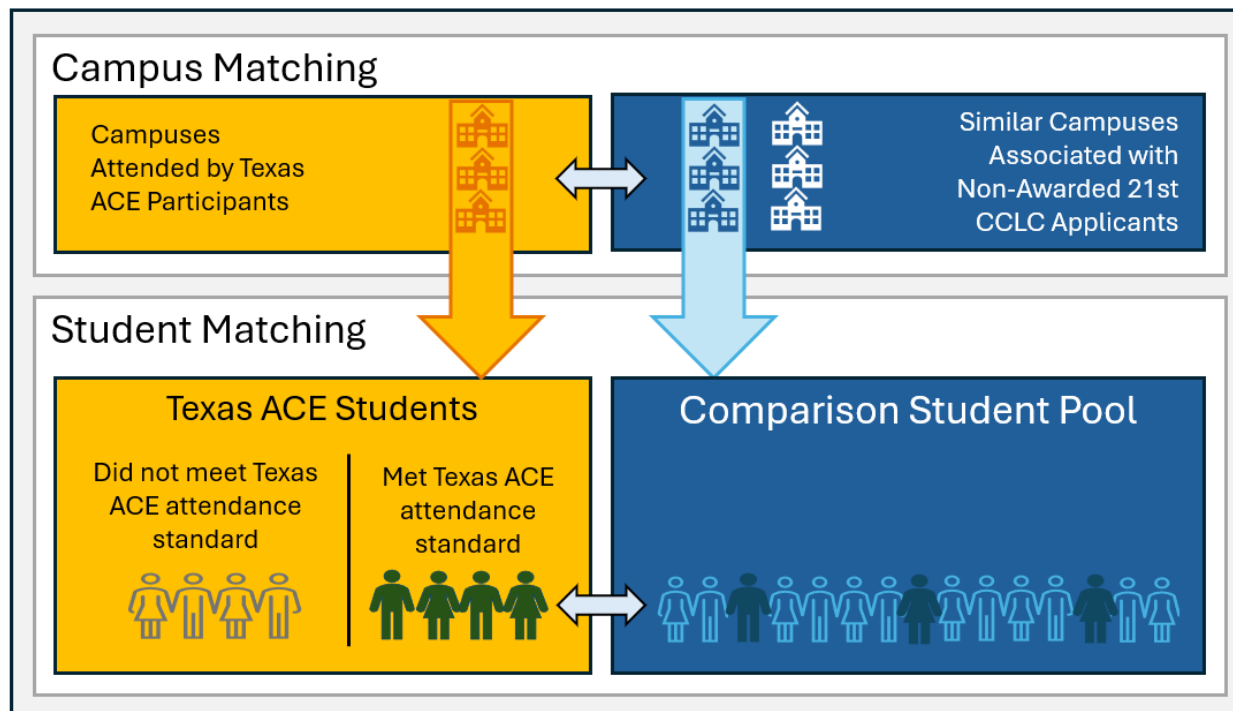
Analyses were structured to account for differences in Texas ACE program attendance requirements across grant cycles¹ (Cycle 11 and Cycle 12) and to examine potential variation in impacts by duration of participation (one year versus two years).

Overall Impact of Texas ACE on Students Who Met Attendance Target (RQs 4.1 and 4.2), and Overall Impact of Texas ACE on Students Performing at *Did Not Meet Grade Level* Prior to Program Participation (RQ 4.3)

To assess the overall impact of Texas ACE on students who met the attendance target (RQs 4.1 and 4.2), as well as to assess the overall impact of Texas ACE on students who were performing at *Did Not Meet Grade Level* prior to program participation (RQ 4.3), Texas ACE students were matched to similar students attending similar schools. Texas ACE students were included in analyses associated with RQs 4.1–4.3 only if they met program attendance standards. The comparison group was identified through a statistical matching process that selected students who were similar to Texas ACE participants (e.g., in terms of prior achievement, economic status, race/ethnicity, and qualification for special education) and who attended campuses that had applied for the grant but were not funded and that were similar to Texas ACE campuses (based on various campus-level characteristics such as locale, size, and demographic composition of the students). See [Figure ES1](#) for a visual summary of this matching process.

¹ The definition for meeting the attendance target varies by grant cycle and school level. For Cycle 11, students in grades K–8 who attended Texas ACE programming 45 days or more at 120 minutes per day from fall through spring or those who attended 12 days at 240 minutes per day during the following summer met the attendance target. Students in grades 9–12 who attended Texas ACE programming 45 days or more at 90 minutes or more per day during the school year and following summer met the target. For Cycle 12, students in grades K–5 who attended Texas ACE programming 60 days or more at 120 minutes per day from fall through spring or those who attended 15 days at 240 minutes per day during the following summer met the attendance target. Students in grades 6–12 who attended Texas ACE programming 60 days or more at 90 minutes or more per day during the school year or 15 days or more at 240 minutes or more in the summer met the target.

Figure ES1. Matching Texas ACE Participants to Similar Students at Similar Schools to Assess Overall Impact of Texas ACE on Student Outcomes



To answer RQs 4.1–4.3, estimates of program impact were obtained by conducting multilevel regression analyses to test for differences between the Texas ACE participant group and the matched comparison group. Note that these multilevel analyses controlled for a variety of student- and campus-level factors, and that the student-level matching was done separately for each attendance definition (one or two years) and outcome to ensure “apples-to-apples” comparisons.

The analysis to answer RQ 4.4 did not require the use of a nonparticipant comparison group; it only required comparisons among Texas ACE student participants to determine the extent to which incremental increases in program attendance were associated with positive increases in outcomes. These analyses were limited to students who participated in Texas ACE for at least one day within the study timeframe.

The following sections provide a high-level summary of the results of these analyses.

Overall Impact of Texas ACE on Students Who Met Attendance Target (RQs 4.1–4.2)

STAAR Assessments

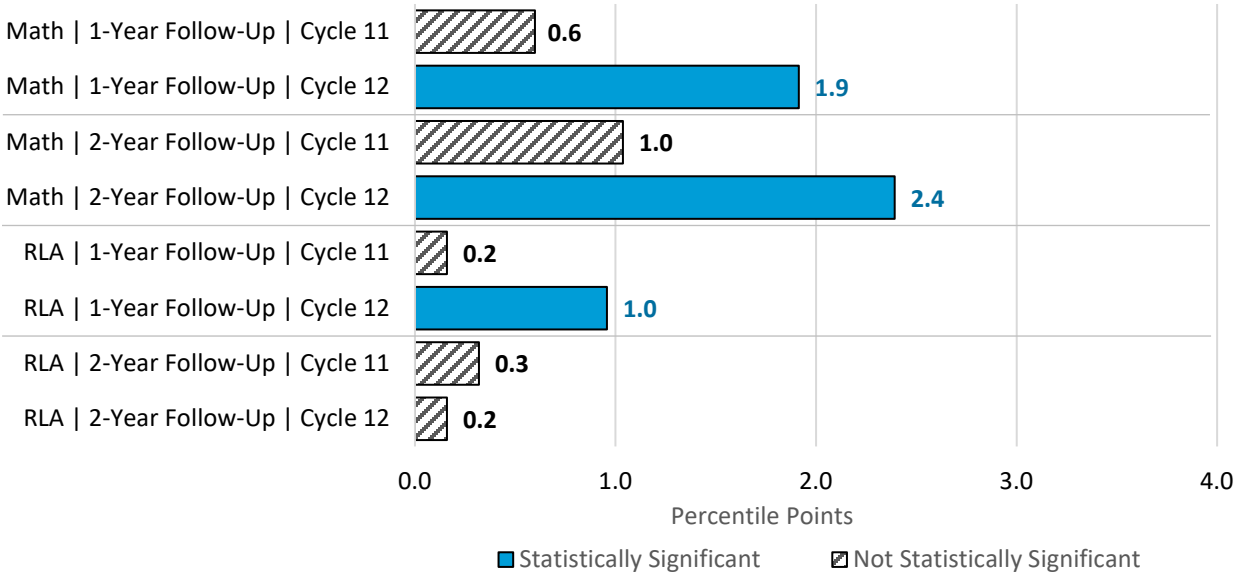
Overall, the results of the analyses associated with RQs 4.1 and 4.2 provided inconsistent evidence of an effect of the Texas ACE program on STAAR performance. Some analyses of STAAR-Mathematics and STAAR-RLA revealed statistically significant positive differences. Similar effects were not observed for STAAR End-of-Course (EOC) outcomes. In analyses where statistically significant differences were detected for STAAR-Mathematics and RLA, Texas ACE students performed slightly higher than comparison students—by approximately 1 to 2 percentile points—after controlling for student- and campus-level covariates.²

On average, Texas ACE students scored 1–2 percentile points higher on STAAR-Mathematics and STAAR-RLA than comparison students after controlling for student- and campus-level factors.

Figure ES2 provides a summary of the results assessing the overall impact of Texas ACE on STAAR-Mathematics and STAAR-RLA scores. The figure presents adjusted differences in average STAAR score percentiles between Texas ACE and comparison students across outcomes—by subject, program participation length, and grant cycle.

² Statistical significance means that the difference found is not likely to have occurred by chance. A statistically significant difference is not an indication in and of itself that the observed difference is very large. Thus, it is also important to consider the practical meaning of such differences. In the case of the results described here, a difference of 1–2 percentile points might equate to the difference in getting a single test question right or wrong.

Figure ES2. Differences in Average STAAR Score Percentiles (Adjusted) Between Texas ACE and Comparison Students



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period, Public Education Information Management System from 2022–23 to 2024–25, and STAAR data from 2022–23 to 2024–25.

Note: Exam scores were standardized prior to analysis. The treatment effects plotted here were converted into percentile points from standard deviation units and were based on students at the median. These estimates are “adjusted” in that they are based on models that account for various student- and campus-level factors. A 95% confidence level ($\alpha = .05$) was used to determine statistical significance.

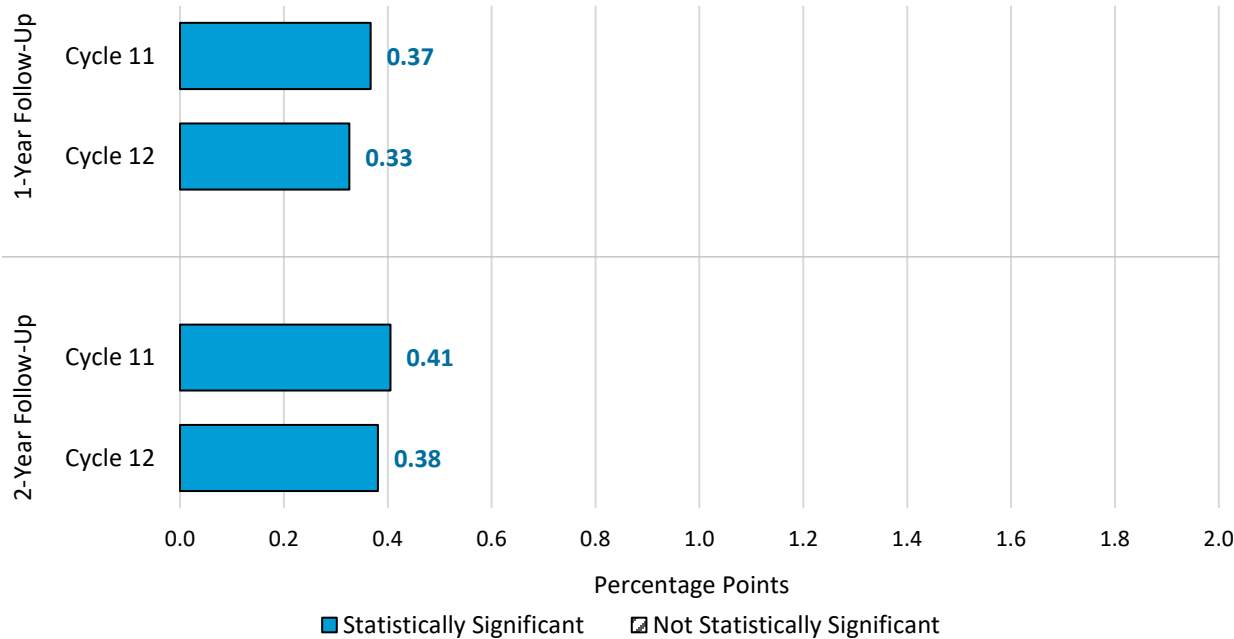
Note: “1-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over one year; “2-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over two years.

Attendance Rates

Across Cycles 11 and 12, and for both one-year and two-year program participation, estimated average effects of Texas ACE on students’ school-day attendance were consistently positive and statistically significant. After adjusting for student- and campus-level covariates, the average attendance rates for Texas ACE students were between 0.33 and 0.41 percentage points higher than comparison students (Figure ES3). Attendance rate percentage increases associated with Texas ACE (as described here) are average effects across all participants included in the model. The differences are small (they equate to a difference of a little less than one full school day), but they are consistent and in the desired direction.

On average, the school-day attendance rates of Texas ACE students were between 0.33 and 0.41 percentage points higher than comparison students.

Figure ES3. Difference in Average Attendance Rates (Adjusted) Between Texas ACE and Comparison Students



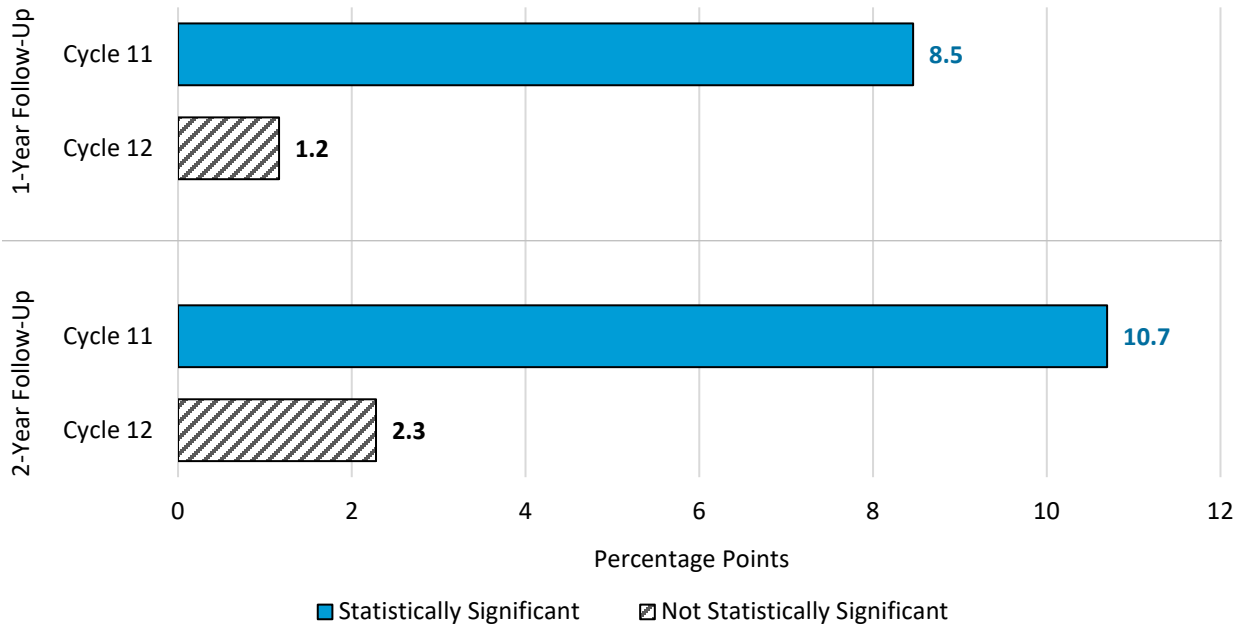
Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period and Public Education Information Management System from 2022–23 to 2024–25.

Note: “1-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over one year; “2-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over two years.

CTE Course Passing Rates

Texas ACE students participating at program centers funded under Cycle 11 passed CTE courses at higher rates than their peers in the comparison group. After controlling for student- and campus-level covariates, the differences in passing rates were estimated to be about 9 to 11 percentage points (Figure ES4). Differences in CTE course passing rates between Cycle 12 students and comparison students were not statistically significant. The reason for the apparent difference between funding cycles is unclear, but this may be worth exploring given the substantial treatment effect experienced by Cycle 11 students.

Figure ES4. Difference in CTE Course Passing Rates (Adjusted) Between Texas ACE and Comparison Students



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period and Public Education Information Management System from 2022–23 to 2024–25.

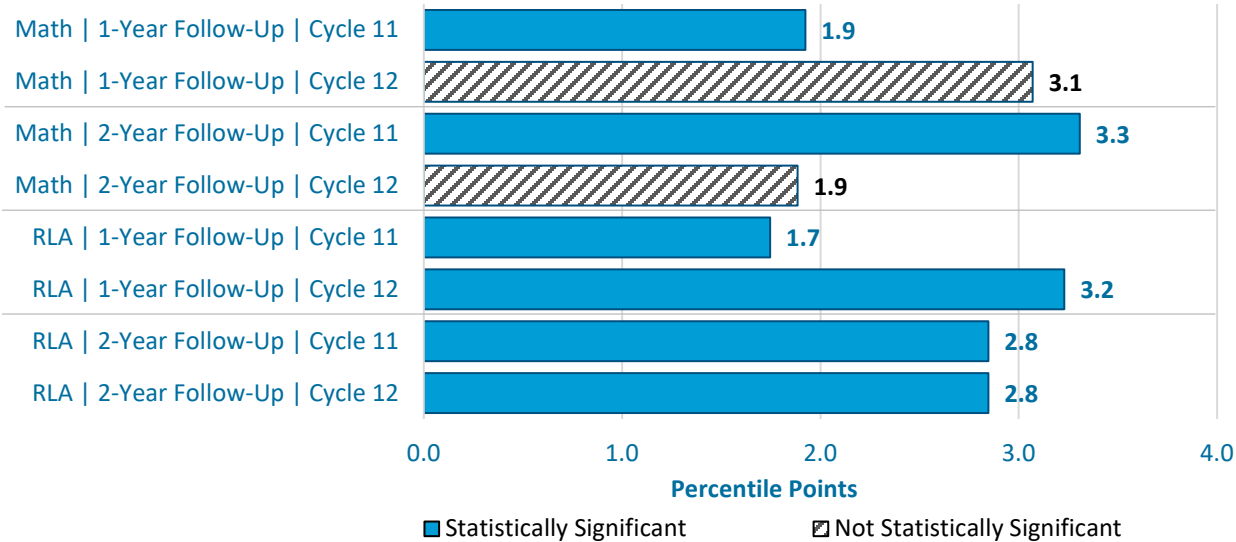
Note: “1-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over one year; “2-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over two years.

Impact of Texas ACE on Students Performing at *Did Not Meet Grade Level* Prior to Program Participation (RQ 4.3)

STAAR Test Scores

The impact of the Texas ACE program on students’ STAAR-Mathematics and STAAR-RLA scores tended to be greater for students who had previously scored *Did Not Meet Grade Level* on STAAR than for students who scored *Approaches Grade Level* or higher (RQ 4.3). **For students who scored *Did Not Meet Grade Level* at baseline, estimated impacts were positive across Cycle 11 STAAR-Mathematics analyses (for both one-year and two-year participation) and across Cycle 11 and Cycle 12 STAAR-RLA analyses (for both one-year and two-year participation).** In these analyses, Texas ACE participants scored between 1.7 and 3.3 percentile points higher, on average, than comparable students with the same baseline performance (Figure ES5). No statistically significant effects in STAAR-Mathematics scores were found for Cycle 11 students who performed at the *Did Not Meet Grade Level* standard nor for students who scored *Did Not Meet Grade Level* on the STAAR EOC exams for Algebra I, English I, or English II.

Figure ES5. Differences in Average STAAR Score Percentiles (Adjusted) Between Texas ACE and Comparison Students Who Scored *Did Not Meet Grade Level* at Baseline



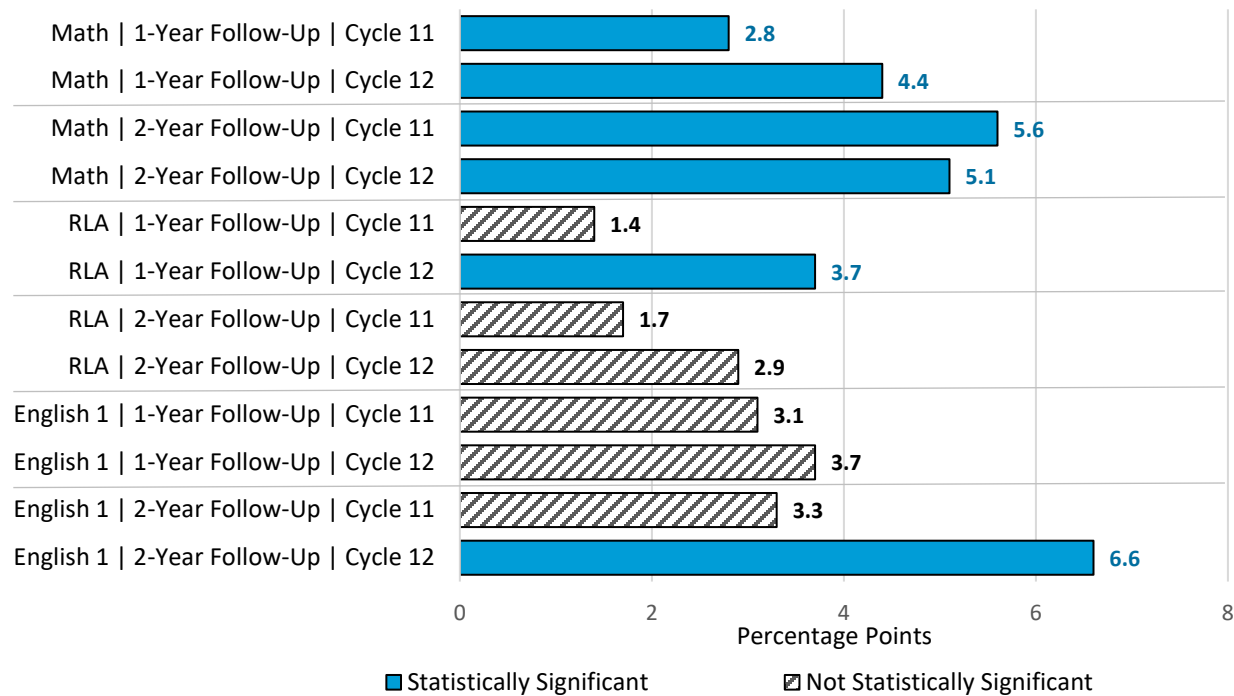
Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period, Public Education Information Management System from 2022–23 to 2024–25, and STAAR data from 2022–23 to 2024–25.

Note: Exam scores were standardized prior to analysis. The treatment effects plotted here were converted into percentile points from standard deviation units and were based on students who scored at the upper end of the *Did Not Meet Grade Level* performance level. These estimates are “adjusted” in that they are based on models that account for various student- and campus-level factors. A 95% confidence level ($\alpha = .05$) was used to determine statistical significance. “1-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over one year. “2-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over two years.

STAAR Performance Level

Among students who scored *Did Not Meet Grade Level* on the baseline STAAR-Mathematics assessment, Texas ACE students had an average predicted probability of scoring *Approaches Grade Level* or higher on the 2024–25 STAAR-Mathematics exam that was between 2.8 and 5.6 percentage points higher than students in the comparison group (Figure ES6). For Cycle 12 students participating in the program over one year, the average predicted probability of scoring *Approaches Grade Level* or higher on the STAAR-RLA exam was 3.7 percentage points higher than comparison students. For Cycle 12 students participating in the program over two years, the average predicted probability of scoring *Approaches Grade Level* or higher on the STAAR English I EOC exam was 6.6 percentage points higher than students in the comparison group. Differences between treatment and comparison students were not statistically significant for the other EOC outcomes (i.e., Algebra I and English II) at either follow-up point. They were also not statistically significant for RLA outcomes at the two-year follow-up, nor at the one-year follow-up for Cycle 11 students.

Figure ES6. Differences in the Average Predicted Probability Between Texas ACE and Comparison Students Who Scored *Did Not Meet Grade Level* at Baseline



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period, Public Education Information Management System from 2022–23 to 2024–25, and STAAR data from 2022–23 to 2024–25.

Note: “1-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over one year; “2-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over two years.

Differential Impacts of Texas ACE by Level of Program Attendance (RQ 4.4)

To assess the impact of the number of days of participation in Texas ACE, the research team estimated models that adjusted for student characteristics associated with participation and used those models to predict outcomes at varying levels of program participation. Findings showed that prolonged participation in Texas ACE is associated with higher performance on STAAR Algebra I EOC and school-day attendance. Beginning at about 50 days of program attendance, participation is also associated with higher scores on STAAR-Mathematics and STAAR-RLA. Increased participation in Texas ACE also resulted in higher predicted school-day attendance rates for all participants, though the expected increase per day of Texas ACE varied at different levels of participation. For STAAR Algebra I EOC, the expected scores increased with Texas ACE participation up to approximately 100 days of participation, after which this trend seemed to reverse. These results suggest that more prolonged participation in Texas ACE is more beneficial to students than less frequent participation, but there is a reduced effect for students on STAAR Algebra I EOC.

IS TOTAL NUMBER OF DAYS OF TEXAS ACE ATTENDANCE ASSOCIATED WITH STUDENT OUTCOMES?

RQ 4.4 asks this very question. The simple answer is yes, but for some outcomes there appears to be an attendance *threshold* associated with positive change, while for other outcomes there appears to be a *ceiling*. For example, more program days attended was positively associated with gains in STAAR Mathematics, but *only after a threshold of 50 days had already been reached*. On the other hand, predicted Algebra I EOC scores increased *up to a ceiling of 100 days*, after which additional attendance days weren't helpful. Note, however, that these are overall effects; these analyses do not attempt to address why some students might attend at higher or lower levels.

Introduction

The Texas Afterschool Centers on Education (Texas ACE) is funded by the federal 21st Century Community Learning Centers (21st CCLC) grant program. Texas ACE provides a wide array of academic enrichment and youth development activities during non-school hours, with the primary goals of enhancing students' academic achievement, supporting character development, and cultivating skills and interests that will help them become college and career ready. Approximately 125,000 students across 680 active centers participated in the program in 2024–25, funded in Cycles 11 and 12.

As a condition of receiving federal 21st CCLC funding for this program, the Texas Education Agency (TEA) is required to conduct a statewide evaluation of Texas ACE. In 2022, TEA contracted with the American Institutes for Research® (AIR®) to conduct this evaluation. This report presents the results of a study on student outcomes conducted as part of that evaluation effort.

The purpose of this study was to assess the effect of participation in Texas ACE programming on desired outcomes among youth using a quasi-experimental design. Propensity score matching was used to create separate comparison groups for each research question (RQ), outcome, and condition. The comparison group for most RQs was drawn from campuses that had applied for but did not receive funding in Cycles 11 and 12. To further increase the similarity between treatment and comparison campuses, propensity score modeling was used to match Texas ACE campuses to one or more comparison campuses. Following that, Texas ACE students were matched to one or more nonparticipating students enrolled in a matched comparison campus. The impact of the program was then estimated using multilevel modeling with students nested in campuses. For RQ 4.4, regarding the estimated impact of varying levels of Texas ACE participation, only students who participated in the program were included.

Research Questions

For each RQ, the research team assessed the effect of Texas ACE program participation on three domains of outcomes: (a) performance on State of Texas Assessment of Academic Readiness (STAAR) assessments in reading and mathematics; (b) school-day attendance; and (c) career and technical education (CTE) course completion.

- RQ 4.1. What impact does the program have for youth attending Texas ACE regularly during one school year relative to similar youth attending campuses that met the minimum eligibility requirements to apply for the 21st CCLC grant but were not awarded?

- RQ 4.2. What impact does the program have for youth attending Texas ACE regularly across the span of two school years relative to similar youth attending campuses that met the minimum eligibility requirements to apply for the 21st CCLC grant but were not awarded?
- RQ 4.3. Does the effect of Texas ACE program participation vary between students who scored above and below the *Approaches Grade Level* standard on prior-year STAAR-Mathematics and STAAR-Reading Language Arts (RLA) assessments?
- RQ 4.4. Does the effect of Texas ACE program participation vary across different dosages of within-year attendance?

This report is organized as follows. The “Methods” section describes the data sources used, how participant and comparison student samples were defined, and the procedures followed to conduct each set of analyses. The “Results” section summarizes the findings and is organized by outcome: STAAR-Mathematics, STAAR-RLA, STAAR Algebra I End-of-Course (EOC), STAAR English I EOC, STAAR English II EOC, school-day attendance, and CTE. The “Discussion” section provides a general interpretation of the findings within the context of the study’s objectives and limitations. The appendix included within this report contains the regression results tables for analyses with statistically significant treatment effects. Full regression results tables for all analyses are available in an unpublished supplemental appendix and may be obtained by contacting TEA at ProgramEvaluation@tea.texas.gov.

Methods

This section describes the data sources, sample-limiting conditions (including treatment and control definitions), and analytic methods used to address RQs 4.1–4.4. Each RQ draws on different subsets of participants, may use different subsets of comparison students (those who did not attend Texas ACE programming), and uses analytic methods appropriate for the question. This section describes these components for the analyses included in the report as well as the student characteristics included in the matching and impact modeling for each RQ.

Data Sources

The research team used a variety of sources to conduct the analysis (Table 1). Primary data was collected by the Texas ACE programs. These data include center characteristics, student program attendance by activity and day, and information about the activity—such as the subject for academic activities and the purpose of the activity (e.g., homework help or enrichment). The research team supplemented this data with locale data (urban, rural) from the National Center for Education Statistics. These data were paired with student-level data from Texas’s student information systems, including grade levels, attendance rates, and demographic characteristics (e.g., emergent bilingual). Student data from STAAR and STAAR EOC tests were combined with the other student data to conduct impact analyses.

Table 1. Summary of Data Sources and Elements

Data source	Programming period/school year	Key variables
TX21st Student Tracking System	Federal programming year (leading summer, fall, and spring) for 2023–24 and 2024–25	Center of attendance, attendance duration, grantee type
Public Education Information Management System	2022–23 through the 2024–25 school year	Campus of enrollment, race/ethnicity, program participation, grade level, sex, school-day attendance, CTE course completion
State of Texas Assessments of Academic Readiness	2022–23 through the 2024–25 school year	Grade-level and end-of-course STAAR tests, scale scores, performance level indicators
National Center for Education Statistics Geographical Data	Most recently available year at the time of data management and analysis	Campus locale

Sample

The potential comparison group was limited to campuses that applied for 21st CCLC grants but did not receive funding. This purposeful selection of campuses from the unfunded pool of applicants is intended to account for staff- and administration-level motivation characteristics that may also affect student performance. Importantly, students at these campuses did not have the opportunity to participate in the program. This should help to mitigate selection bias caused by things like motivation to participate (i.e., bias could result from matching treatment students with other students from the same campus). This pool of comparison campuses included applicants to the Cycle 11 and Cycle 12 grant periods.

Treatment students were broadly defined as students who participated in the Texas ACE program, though the level of participation for inclusion in the analyses varied by RQ. For RQs 4.1, 4.2, and 4.3 (examining one year of participation, two years of participation, and one and two years of participation for students who did not meet STAAR standards in the prior year) treatment students were limited to students who met the Texas ACE attendance standard.³ For treatment students included in analyses that considered two years of participation (RQ 4.2 and a subset of 4.3 analyses), only students who met the Texas ACE attendance standard in both years were included. To have the clearest comparison, students who participated in Texas ACE below the attendance standards established for each cycle (students in Cycle 11 centers were held to Cycle 11 standards and students in Cycle 12 centers were held to Cycle 12 standards) were excluded from the analysis. Given that RQ 4.4 examined how impacts varied across levels of attendance in Texas ACE, those analyses included all treatment students who participated in at least one standard day.⁴

³ The definition for meeting the attendance target varies by grant cycle and school level. For Cycle 11, students in grades K–8 who attended Texas ACE programming 45 days or more at 120 minutes per day from fall through spring or those who attended 12 days at 240 minutes per day during the following summer met the attendance target. Students in grades 9–12 who attended Texas ACE programming 45 days or more at 90 minutes or more per day during the school year and following summer met the target. For Cycle 12, students in grades K–5 who attended Texas ACE programming 60 days or more at 120 minutes per day from fall through spring or those who attended 15 days at 240 minutes per day during the following summer met the attendance target. Students in grades 6–12 who attended Texas ACE programming 60 days or more at 90 minutes or more per day during the school year or 15 days or more at 240 minutes or more in the summer met the target.

⁴ For RQ 4.4, Cycle 12 standards for time a student needed to attend each day were used to determine the number of days of participation. Footnote 1 describes these standards. Cycle 12 standards were used because RQ 4.4 is designed to assist Texas ACE program staff in determining attendance requirements for future grant cycles and Cycle 12 standards are the most recent currently available.

Analysis

Campus-Level Matching

The research team matched 21st CCLC campuses to one or more campuses from the purposefully selected pool of campuses that applied for but were not awarded 21st CCLC grants. Although this overall pool of potential comparison campuses is likely similar to the treatment campuses, important differences may still exist. To minimize these differences, the research team used campus-level information to narrow the comparison sample to campuses that more closely matched the Texas ACE campuses. Campuses were matched independently for each outcome; separate matching processes were conducted for the one-year and two-year participation RQs. The following variables were included in the campus-matching process.

- Lagged Dependent Variables
 - In most cases, the lagged dependent variable represents the campus average of students' scores at baseline (i.e., one or two years prior, depending on the RQ).
 - Because a direct baseline measure of the average CTE course passing rate was not consistently available, average attendance rate was used as the baseline measure for this outcome.
 - Prior to the matching process, all baseline achievement scores were standardized within assessment, school year, and—for STAAR-RLA and STAAR-Mathematics—grade level. The campus averages of these standardized scores were used in the matching process.
- Total students enrolled at the campus
- Percentage of students identified as economically disadvantaged
- Highest and lowest grades served by the campus
- Campus locale
 - Indicators for city, suburban, and town areas are included as variables in the model, and rural campuses are used as the reference category.

Propensity score matching was used to identify comparison campuses. The model for each outcome and RQ used an average treatment effect on the treated (ATET) method as students in the comparison group could not reasonably have received treatment since their campus was not selected for the program. This means that for each treatment campus, the comparison group campus with the most similar characteristics was selected for inclusion in the study. These campuses were selected with replacement, meaning that one comparison campus could be matched to multiple Texas ACE hosting campuses. The final group of comparison campuses comprises those that matched to at least one Texas ACE campus. This selection method is likely to reduce bias by excluding comparison campuses that were unlike campuses that hosted Texas

ACE centers. Summary information about the campus-matching process is available in the unpublished supplemental appendix, which may be obtained by contacting TEA at ProgramEvaluation@tea.texas.gov.

Student-Level Matching

Following the comparison campus pool selection and campus matching process, the research team engaged in student-level matching. Students who participated in the Texas ACE program were matched to students from the matched comparison campuses using a propensity score matching technique. This involved fitting a statistical model to estimate the likelihood (a propensity score) that a student would be in the treatment group based on their demographic and educational characteristics. Comparison-campus students with propensity scores similar to one or more treatment students were selected for the next stage of the analysis. Similar to the campus-level matching, an ATET approach was used for matching nonparticipating to participating students. Separate propensity score analyses were conducted for each outcome, grant cycle (Cycle 11 and 12), and participation duration (one-year or two-year). This approach ensured that baseline equivalence was assessed using the most appropriate prior measures available for each outcome and analytic sample. The following variables were included in the student-level matching process, with specific baseline measures (i.e., lagged dependent variables) varying by outcome:

- Lagged Dependent Variables
 - In most cases, the lagged dependent variable represents the student’s prior-year score on the same assessment (e.g., STAAR-RLA, STAAR-Mathematics, or EOC exams), depending on the outcome and RQ.
 - For outcomes where a direct prior-year measure was not consistently available (e.g., CTE course passing), attendance rate was used as the baseline academic measure.
 - Prior to the matching process, all prior achievement measures were standardized within assessment, school year, and—for STAAR-RLA and STAAR-Mathematics scores—grade level.
- Student Demographic and Program Characteristics
 - Economic disadvantage status
 - Emergent bilingual status
 - At-risk status
 - Special education participation
 - Gifted and talented participation
 - Sex
 - Race/ethnicity indicators

- Grade-Level Indicators
 - Grade indicators appropriate to each outcome (e.g., elementary grades for STAAR, secondary grades for EOC and CTE outcomes)

The unpublished appendix contains a more detailed description of the matching process, including bias reduction figures and tables, as well as balance plots showing the propensity distribution prior to and after the matching process.

Approach to Estimating Program Impact

Overall Impact Across One and Two Years (RQs 4.1 & 4.2)

Analyses were conducted to estimate the impact of the Texas ACE program on student achievement, school-day attendance rates, and CTE course passing rates. Analysis for each outcome was conducted for each grant cycle (Cycle 11 and Cycle 12). These analyses were then repeated for each of the first two RQs, 4.1 and 4.2, with the sample restricted accordingly. That is, models were estimated for treatment students who met the attendance target across one school year (RQ 4.1), and this same set of models was estimated again for treatment students who met the attendance target across two school years. These analyses are summarized in Table 2.

The analyses of academic achievement used standardized outcome measures by translating student scores onto a scale with a mean of zero and a standard deviation of one. This standardization was conducted separately for each grade level and STAAR test. To aid interpretation, estimated impacts on STAAR scores are also reported as changes in percentile points.

Table 2. Summary of Analyses Conducted to Answer RQs 4.1 and 4.2

RQ	Treatment	Control	Outcome	Grade levels
4.1	Texas ACE students who met the program attendance target in 2024–25	Matched students who attended a comparison campus for 2024–25	STAAR-Mathematics score	Grades 4–8
			STAAR-RLA score	Grades 4–8
			Algebra I EOC score	Grades 7–9
			English I EOC score	Grades 8–10
			English II EOC score	Grades 9–11
			Attendance rate	Grades 1–12
			CTE course pass rate	Grades 9–12

RQ	Treatment	Control	Outcome	Grade levels
4.2	Texas ACE students who met the program attendance target in 2023–24 and 2024–25	Matched students who attended a comparison campus for 2023–24 and 2024–25	STAAR-Mathematics score	Grades 5–8
			STAAR-RLA score	Grades 5–8
			Algebra I EOC score	Grades 7–9
			English I EOC score	Grades 8–10
			English II EOC score	Grades 9–11
			Attendance rate	Grades 2–12
			CTE course pass rate	Grades 9–12

Difference in Impact by Prior STAAR Performance Level (RQ 4.3)

STAAR Scores

In addition to assessing the estimated impact of participation in Texas ACE for all students, the research team also conducted analyses of students who scored at *Did Not Meet Grade Level* on the relevant STAAR/EOC exams in the year preceding the treatment period (participation in Texas ACE in the 2024–25 school year for one-year analyses and participation in the 2023–24 and 2024–25 school years for the two-year analyses).⁵ To assess whether the effects of Texas ACE participation varied by prior achievement, the research team included an interaction term between Texas ACE participation status and prior-year STAAR performance (defined as *Approaches Grade Level* or above vs. *Did Not Meet Grade Level*). These models were estimated for the STAAR/EOC outcomes described in Table 2. When the interaction terms were statistically significant, additional direct comparisons were made to determine whether statistically significant differences in the outcome between treatment and comparison groups existed for students who scored *Approaches Grade Level* or higher, *Did Not Meet Grade Level*, or both.

STAAR Performance Level

In addition to the interactive models described in the first section addressing RQ 4.3, the research team used logistic models which estimated the probability that each student would attain a score of approaches or better in the relevant STAAR exam, for those students who did not meet the standard in the prior year. These models also utilized matched students as the comparison group and present the estimated impact of Texas ACE participation among students who did not meet the relevant STAAR standard in the baseline year (one year prior for one-year analyses and two years prior for analyses focusing on two years of participation).

⁵ Student performance on STAAR is separated into four categories: *Masters Grade Level*, *Meets Grade Level*, *Approaches Grade Level*, and *Did Not Meet Grade Level*. To pass the test, students must achieve *Approaches Grade Level* or higher. For more information, see <https://tea.texas.gov/data-reports/student-assessment-results/staar-performance-standards>

These analyses are summarized in Table 3. Results are presented as the marginal estimated increase in probability that Texas ACE students reached a level of *Approaches Grade Level* or higher when compared to matched students from comparison campuses.

Table 3. Summary of STAAR Performance Level Analyses Conducted to Answer RQ 4.3

Treatment	Control	Outcome	Grade levels
Texas ACE students who met the program attendance target in 2024–25 and who did not meet the standard in their 2023–24 STAAR exam.	Matched students who attended a comparison campus for 2024–25	STAAR-Mathematics performance level	Grades 4–8
		STAAR-RLA performance level	Grades 4–8
		Algebra I EOC performance level	Grades 7–9
		English I EOC performance level	Grades 8–10
		English II EOC performance level	Grades 9–11
Texas ACE students who met the program attendance target in 2023–24 and 2024–25 and who did not meet the standard in their 2022–23 STAAR exam.	Matched students who attended a comparison campus for 2023–24 and 2024–25	STAAR-Mathematics performance level	Grades 5–8
		STAAR-RLA performance level	Grades 5–8
		Algebra I EOC performance level	Grades 7–9
		English I EOC performance level	Grades 8–10
		English II EOC performance level	Grades 9–11

Variation in Impact by Program Attendance (RQ 4.4)

In addition to estimating differences between Texas ACE and comparison students, the research team also considered the extent to which increased participation, defined as the number of days students participated in Texas ACE, was associated with differences in the estimated treatment effect.⁶ These analyses cover STAAR-Mathematics, RLA, and Algebra I EOC, along with the percentage of school-days attended.

These analyses help the program team set realistic attendance expectations for current and future grant cycles. Using Generalized Propensity Scores, the models estimate students’ likelihood of participating in Texas ACE at different levels and predict their outcomes at those levels, accounting for student characteristics. As with other models in this report, separate samples were used for each participation timeframe (one or two years) and each outcome.

Only students who attended at least one day of Texas ACE programming were included, and they were compared with students who attended more days. These analyses were conducted

⁶ RQ 4.4 applied the Cycle 12 definition of a day of program participation—which is based on a minimum required number of minutes per day that varies across grade levels—to all analyses, including those for Cycles 11 and 12. The Cycle 12 definition was used to calculate days of program participation to ensure consistency and reflect the most current standard, which is expected to inform future grant cycles.

for both a one-year participation period (assessing the association between 2024–25 Texas ACE participation and 2024–25 outcomes) and a two-year participation period (assessing the association between 2023–24 and 2024–25 Texas ACE participation and 2024–25 outcomes). For the two-year period, only students who attended the program in each of the two years were included in the analysis. These analyses are summarized in Table 4. More details are provided in the unpublished supplemental appendix for the report.

Table 4. Summary of Analyses Conducted to Answer RQ 4.4

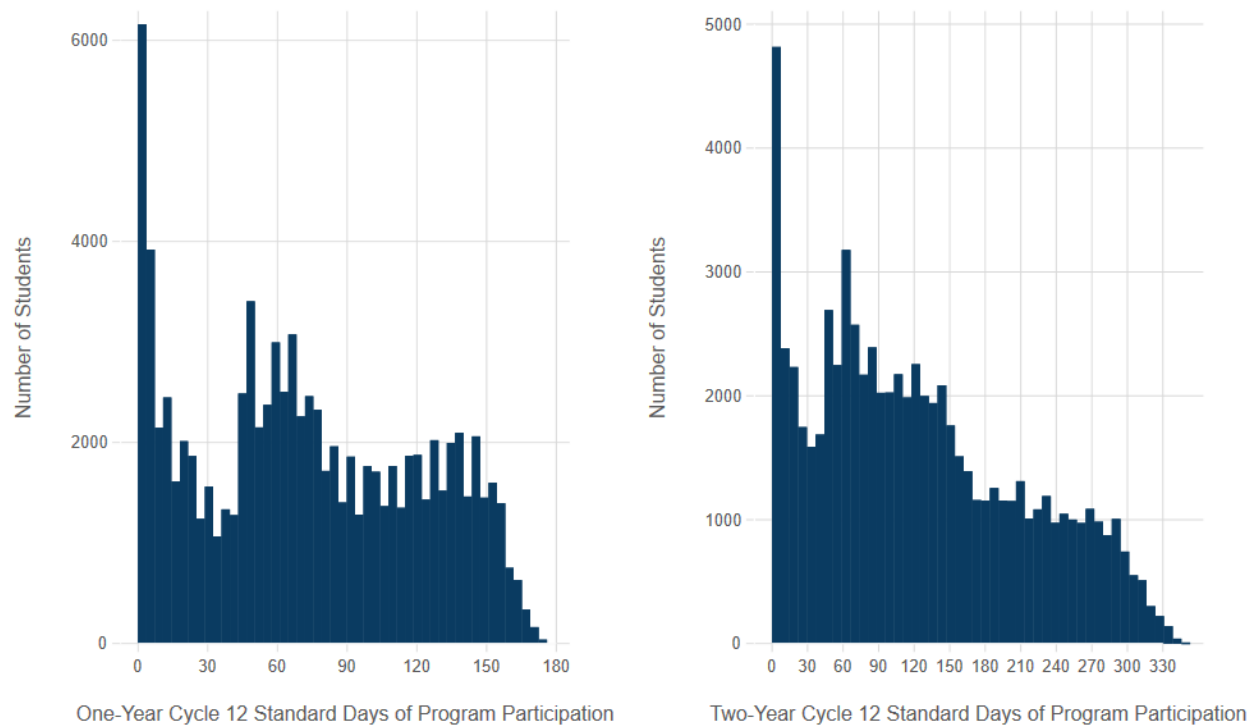
Sample	Outcome	Grade levels
Texas ACE days of participation over the 2024–25 school year	STAAR-Mathematics score	Grades 4–8
	STAAR-RLA score	Grades 4–8
	Algebra I EOC score	Grades 7–9
	Attendance rate	Grades 1–12
Texas ACE days of participation over the 2023–24 and 2024–25 school years	STAAR-Mathematics score	Grades 5–8
	STAAR-RLA score	Grades 5–8
	Algebra I EOC score	Grades 7–9
	Attendance rate	Grades 2–12

Note: Texas ACE days of participation were defined as each program day that satisfied the Cycle 12 standard for a day of participation. This standard was applied to Cycle 11 and Cycle 12 students.

The results of these models are dosage response function figures, which are line graphs with days of participation on the X axis and performance on each outcome on the Y axis. These figures show the predicted outcome performance as a function of the number of days of Texas ACE participation and demonstrate how higher levels of participation in Texas ACE could be expected to improve student performance on each outcome. It is important to note that estimates at the highest levels of participation for these models are more uncertain as they rely on just a few students who participated at these levels. For context, Figure 1 shows the number of students who participated at various levels over the one- and two-year periods.⁷

⁷ The included sample for each outcome is dependent on the relevant grade range. This table uses the sample for estimates on school-day attendance, as it encompasses the entire grade range, unlike the testing outcomes, which are more grade-level dependent.

Figure 1. Number of Students Participating in Texas ACE by the Total Number of Days Attending the Program Across One and Two Years



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period and Public Education Information Management System from 2022–23 to 2024–25.

Note: One-year N: 90,552; Two-year N: 83,210.

Results

STAAR-Mathematics

STAAR-Mathematics Scores

Separate analyses were conducted to estimate the impact of Texas ACE on STAAR-Mathematics scores for students who met the program attendance target during the 2024–25 school year (RQ 4.1) and students who met the target during both the 2023–24 and 2024–25 school years (RQ 4.2). As the STAAR-Mathematics test is administered in grades 3–8, the one-year analysis was restricted to students who were enrolled in grades 4–8 in 2024–25.⁸ For this analysis, students’ STAAR-Mathematics score from the 2023–24 school year was used as a baseline control measure. The two-year analysis was limited to students in grades 5–8 and used students’ STAAR-Mathematics score from the 2022–23 school year as the baseline control.⁹

Table 5 provides the number of students from the treatment and comparison groups that were included in each analysis. The number of students in the comparison group exceeds the number of Texas ACE students for each analysis because many students in the treatment group were matched to multiple students in the comparison group. The model to estimate differences between groups used a weighting technique to account for the relatively larger number of comparison group students.

Table 5. Summary of Analytic Samples for STAAR-Mathematics Scores

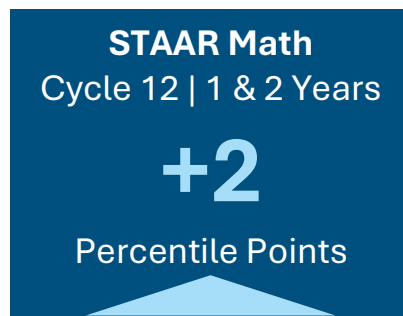
Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 4–8	Cycle 11	17,094	60,965
		Cycle 12	12,691	58,394
2 years	Grades 5–8	Cycle 11	5,944	35,493
		Cycle 12	4,336	34,647

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

⁸ Students in grade 3 were excluded from the one-year analysis because most of these students were in grade 2 during the baseline year (2023–24), and the STAAR test was not administered at that grade level.
⁹ Students in grades 3–4 were excluded from the two-year analysis because most of these students were in grades 1–2 during the baseline year (2022–23), and the STAAR test was not administered at those grade levels.

Overall Impact

After adjusting for baseline and time-invariant covariates that are associated with both program participation and student achievement, there were no statistically significant differences in STAAR-Mathematics scores between Cycle 11 students and the comparison group in either the one-year analysis or two-year analysis. However, differences between Cycle 12 students and the comparison group were statistically significant and positive for both the one-year analysis ($z = 2.79$, $p < .01$) and two-year analysis ($z = 2.27$, $p < .05$). On average, Cycle 12 students who met the attendance standard over one year scored 0.05 standard deviations (equivalent to about 2 percentile points) higher than comparison group students, and Cycle 12 students who met the attendance standard over two years scored 0.06 standard deviations (about 2 percentile points) higher, on average, than students in the comparison group.¹⁰ Full regression results for these analyses are provided in [Table A1](#) and [Table A2](#) in the appendix.



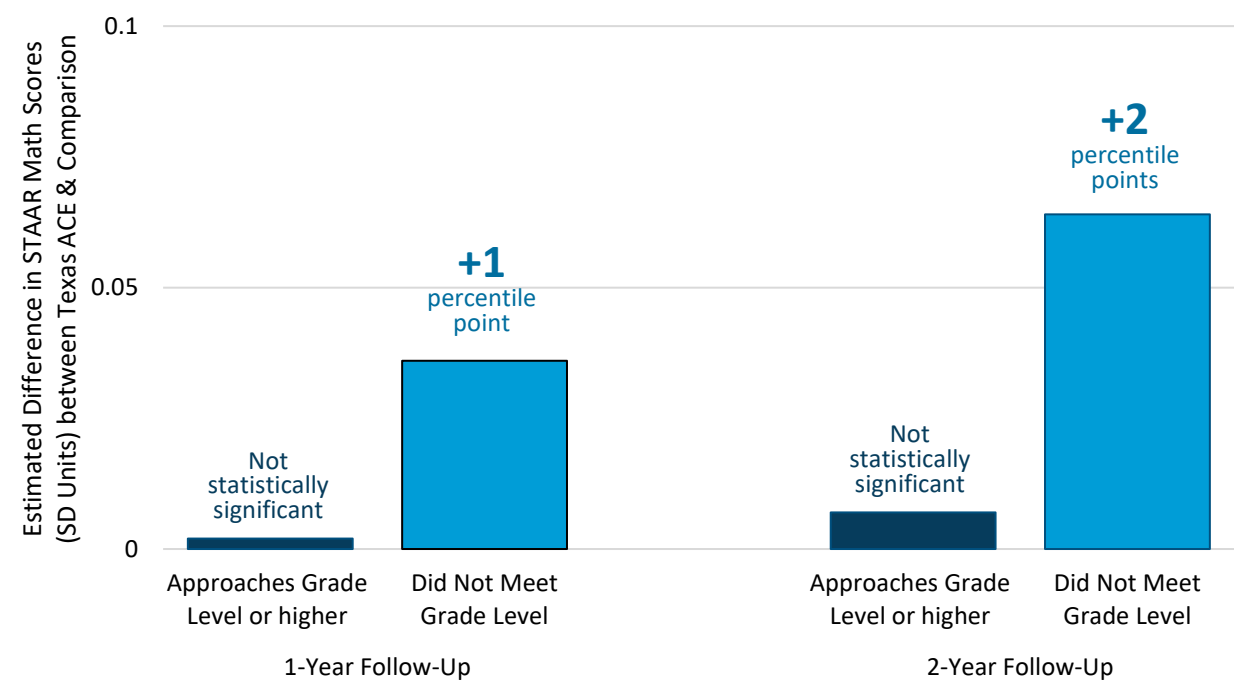
Difference in Impact by Prior STAAR-Mathematics Performance Level

These same models were estimated again with one change: an interaction term was added to each model to determine whether treatment effects differed for students who scored *Did Not Meet Grade Level* on the baseline STAAR test (RQ 4.3). For Cycle 11 students, these interaction terms were statistically significant, indicating that the effect of the treatment differed between students who scored *Did Not Meet Grade Level* on the baseline STAAR test and students who scored *Approaches Grade Level* or better at baseline in both the one-year analysis ($z = 2.11$, $p < .05$) and two-year analysis ($z = 2.31$, $p < .05$). No interaction effect was detected for Cycle 12 students in either the one-year analysis or two-year analysis.

Direct comparisons of treatment and comparison students within each prior performance level showed that, for students who scored *Approaches Grade Level* or better at baseline, Cycle 11 students did not differ from comparison group in terms of their 2024–25 STAAR-Mathematics scores. However, for students who scored *Did Not Meet Grade Level* at baseline, Cycle 11 students who met the attendance target over one year scored 0.04 standard deviations (about 1 percentile point) higher, on average, than comparison group students, and Cycle 11 students who met the attendance target over two years scored 0.06 standard deviations (about 2 percentile points) higher, on average, than comparison group students ([Figure 2](#)). For more details on these results, see [Table A3](#) and [Table A4](#) in the appendix.

¹⁰ For more information on converting standard deviations to percentile points, see von Hippel, Paul. “A Surprisingly Accurate Rule of Thumb for Converting Effect Sizes from Standard Deviations to Percentile Points.” *Educational Evaluation and Policy Analysis*, 37, no. 3 (2025): 960–969. <https://doi.org/10.3102/01623737241239677>

Figure 2. Impact of Texas ACE Participation on 2024–25 STAAR-Mathematics Scores by Baseline STAAR Performance Level (1 & 2 Years, Cycle 11)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics. Note: “1-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over one year; “2-Year Follow-Up” includes Texas ACE participants and matched comparison students observed over two years. For the one-year follow-up, the total number of Texas ACE students included in the analysis was 17,094 and the total number of comparison students was 60,965; for the two-year follow-up, the total number of Texas ACE students was 5,944 and the total number of comparison students was 35,493; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

STAAR Performance Level

To further examine the extent to which Texas ACE impacted students with lower math performance in prior years, another set of analyses was conducted that was limited to students who scored *Did Not Meet Grade Level* on the STAAR-Mathematics test at baseline. The outcome assessed for this set of analyses was students’ 2024–25 STAAR-Mathematics performance level, computed as a binary measure indicating whether students scored *Approaches Grade Level* or higher on the 2024–25 STAAR-Mathematics test. The objective of this set of analyses was to test whether Texas ACE students differed from comparison students in terms of the likelihood that their performance level on STAAR-Mathematics would improve from *Did Not Meet Grade Level* at baseline to *Approaches Grade Level* or higher in the 2024–25 school year.

Again, separate analyses were conducted for Cycle 11 and Cycle 12 and for students who met the program attendance target across one year and those who met the target across two years. The one-year analysis was limited to students enrolled in grades 4–8 in 2024–25. For this analysis, students’ STAAR-Mathematics scores from the 2023–24 school year were used as a baseline control measure. The two-year analysis was limited to students in grades 5–8 and used students’ STAAR-Mathematics scores from the 2022–23 school year as the baseline control.

Table 6 provides the number of students from the treatment and comparison groups that were included in each analysis. The number of students in the comparison group exceeds the number of Texas ACE students for each analysis because many students in the treatment group were matched to multiple students in the comparison group. The model to estimate differences between groups used a weighting technique to account for the relatively larger number of comparison group students.

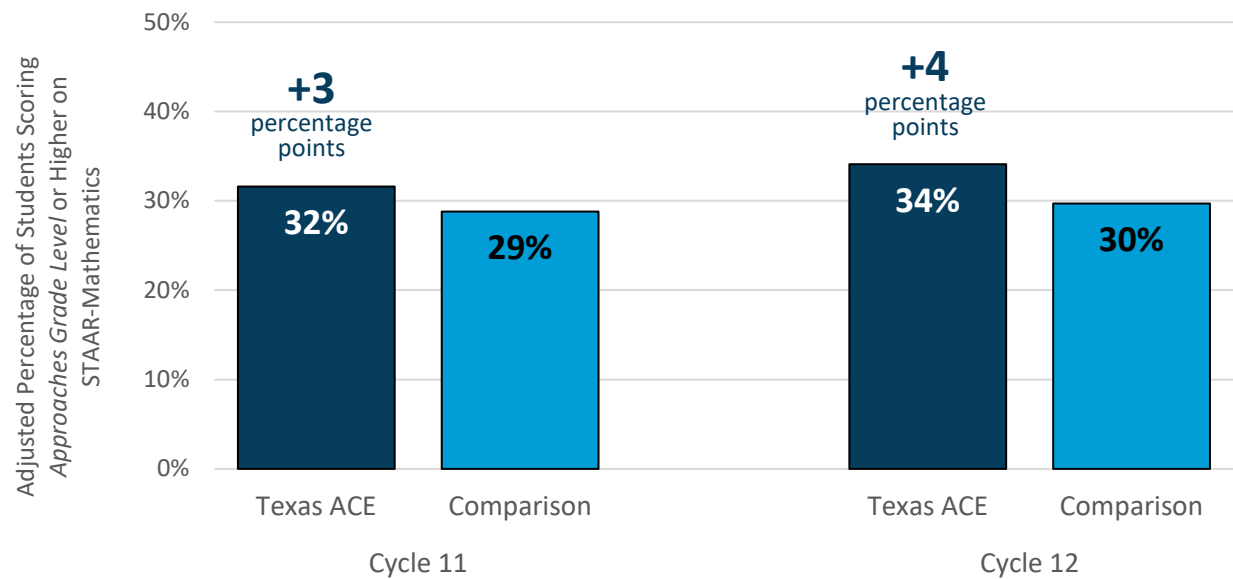
Table 6. Summary of Analytic Samples for STAAR-Mathematics Performance Level

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 4–8	Cycle 11	6,883	26,003
		Cycle 12	4,821	24,580
2 years	Grades 5–8	Cycle 11	1,973	13,136
		Cycle 12	1,402	12,931

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

For the one-year analyses, statistically significant differences were noted for both Cycle 11 and Cycle 12 after adjusting for baseline and time-invariant covariates that are associated with both program participation and test performance. For students who scored *Did Not Meet Grade Level* on the 2023–24 STAAR-Mathematics assessment, the predicted probability that they would score *Approaches Grade Level* or higher on the 2024–25 STAAR-Mathematics test was 3 percentage points higher for Cycle 11 students ($z = 2.80, p < .01$) and 4 percentage points higher for Cycle 12 students ($z = 3.77, p < .001$) than comparison students (Figure 3). Full regression results for these analyses are provided in Table A5 and Table A6 in the appendix.

Figure 3. Impact of Texas ACE Participation on the Probability of Scoring *Approaches Grade Level* or Higher on 2024–25 STAAR-Mathematics (1 Year, Cycles 11 & 12)

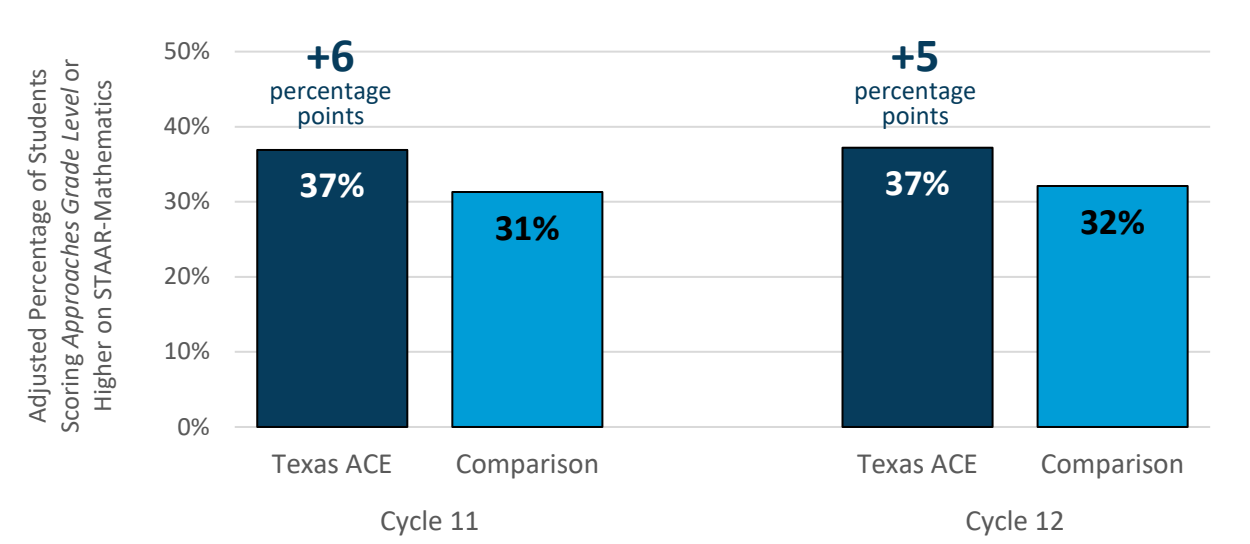


Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: For Cycle 11, the total number of Texas ACE students included in the analysis was 6,883 and the total number of comparison students was 26,003; for Cycle 12, the total number of Texas ACE students was 4,821 and the total number of comparison students was 24,580; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

For the two-year analyses, statistically significant differences were again noted for both Cycle 11 and Cycle 12 after adjusting for baseline and time-invariant covariates that are associated with both program participation and STAAR-Mathematics test performance. For students who scored *Did Not Meet Grade Level* on the 2022–23 STAAR-Mathematics assessment, the predicted probability that they would score *Approaches Grade Level* or higher on the 2024–25 STAAR-Mathematics test was 6 percentage points higher for Cycle 11 students ($z = 3.28, p < .01$) and 5 percentage points higher for Cycle 12 students ($z = 2.77, p < .01$) than comparison students (Figure 4). Full regression results for these analyses are provided in Table A7 and Table A8 in the appendix.

Figure 4. Impact of Texas ACE Participation on the Probability of Scoring Approaches Grade Level or Higher on STAAR-Mathematics (2 Years, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics. *Note:* For Cycle 11, the total number of Texas ACE students included in the analysis was 1,973 and the total number of comparison students was 13,136; for Cycle 12, the total number of Texas ACE students was 1,402 and the total number of comparison students was 12,931; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

Variation in Impact by Level of Program Participation

To examine the extent to which increased program participation—measured as the number of days students participated in Texas ACE—had an estimated impact on the students’ STAAR-Mathematics scores (RQ 4.4), the research team conducted separate dosage response analyses for students who participated in the program over one and two years (Table 7). Model results for these analyses are provided in Table A9 and Table A10 in the appendix.

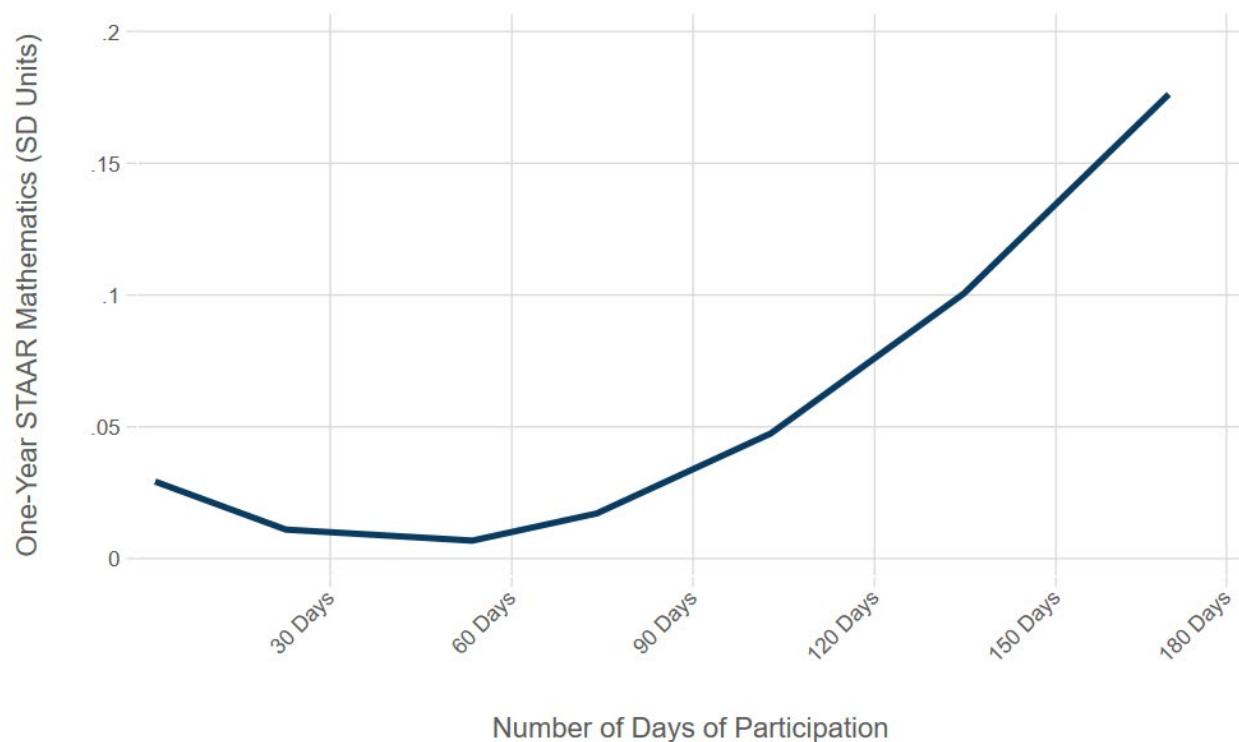
Table 7. Summary of the Analytic Samples for the Texas ACE Dosage Model Estimates for STAAR-Mathematics

Time period	Number of students included
1 year	39,773
2 year	23,617

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Across one year of program participation, the expected improvement in STAAR-Mathematics scores as the number of days of Texas ACE attendance increases is illustrated in Figure 5. The upward sloping line beginning at approximately 50 days suggests that participation in Texas ACE begins having a positive impact on students' STAAR-Mathematics scores for students who participate for at least 50 days and that the impact continues to increase as student attendance in Texas ACE increases. For example, the graph shows that students who attend Texas ACE for 105 days over the course of one year are estimated to have a higher STAAR score than the average student, about 0.05 standard deviations on their STAAR-Mathematics score on average, compared to a 0.10 standard deviation increase, on average, for students who attend Texas ACE 135 days out of the year.

Figure 5. Estimated Impact of Texas ACE Participation on STAAR-Mathematics Scores at Different Levels of Program Attendance (1 Year, Cycles 11 & 12)

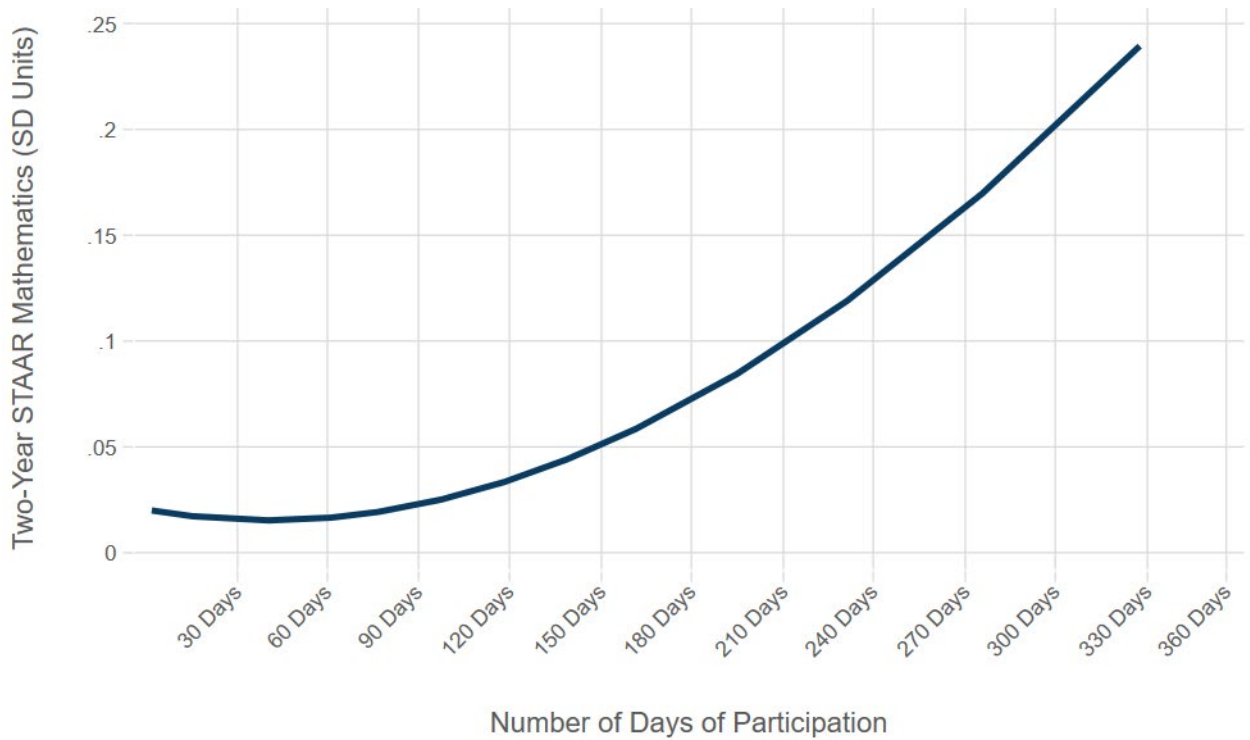


Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User's Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.
Note: This model included 39,773 Texas ACE participants; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

Across two years of program participation, the expected improvement in STAAR-Mathematics scores as the number of days of Texas ACE attendance increases is illustrated in Figure 6. The upward sloping line beginning at approximately 50 days suggests that participation in Texas ACE

begins having a positive impact on students’ STAAR-Mathematics scores for students who participate for at least 50 days and that the impact continues to increase as student attendance in Texas ACE increases. For example, the graph shows that students who attend Texas ACE for 150 days over the course of two years are estimated to have an increase of about 0.05 standard deviations on their STAAR-Mathematics score on average, compared to 0.10 standard deviation increase, on average, for students who attend Texas ACE 210 days over two years.

Figure 6. Estimated Impact of Texas ACE Participation on STAAR-Mathematics Scores at Different Levels of Program Attendance (2 Year, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics. Note: 23,617 Texas ACE participants were included in this model; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

STAAR-RLA

STAAR-RLA Scores

Separate analyses were conducted to test the impact of Texas ACE on STAAR-RLA scores for students who met the program attendance target for the 2024–25 school year (RQ 4.1) and students who met the target for the 2023–24 and 2024–25 school years (RQ 4.2). As the STAAR-RLA test is administered to students in grades 3–8, the one-year analysis was limited to

students who were enrolled in grades 4–8¹¹ in 2024–25. For this analysis, students’ STAAR-RLA score from the 2023–24 school year were used as a baseline control measure. The two-year analysis was limited to students in grades 5–8¹² and used students’ STAAR-RLA score from the 2022–23 school year as the baseline control. A summary of the samples used for each analysis is given in Table 8.

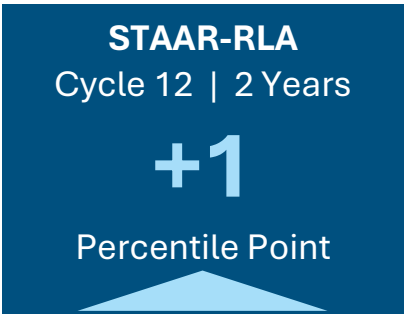
Table 8. Summary of Analytic Samples for STAAR-RLA Scores

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 4–8	Cycle 11	17,711	60,333
		Cycle 12	13,100	56,849
2 years	Grades 5–8	Cycle 11	6,267	33,199
		Cycle 12	4,557	31,234

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Overall Impact

After adjusting for baseline and time-invariant covariates that are associated with both program participation and test performance, there were no statistically significant differences overall in STAAR-RLA scores between Cycle 11 students and the comparison group in either the one-year analysis or two-year analysis. For Cycle 12 students, statistically significant differences were found between Texas ACE and comparison students for the one-year analysis ($z = 2.30, p < .05$) but not the two-year analysis. On average, Cycle 12 students who met the attendance standard over one year scored 0.02 standard deviations (equivalent to about 1 percentile point) higher on the STAAR-RLA exam than comparison group students. For more details on these results, see Table A11 in the appendix.



Difference in Impact by Prior Performance Level

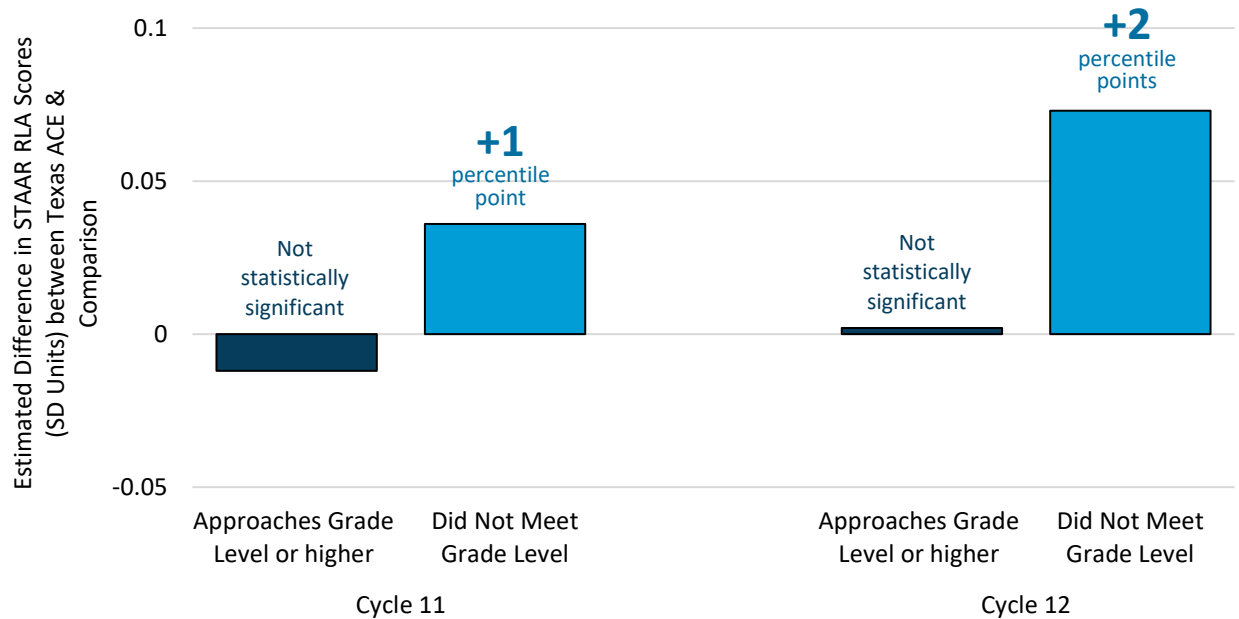
These same models were estimated again with the addition of an interaction term to determine whether treatment effects differed for students who scored *Did Not Meet Grade Level* on the baseline STAAR-RLA test (RQ 4.3). These interaction terms were statistically significant across all

¹¹ Students in grade 3 were excluded from the one-year analysis because most of these students were in grade 2 during the baseline year (2023–24), and the STAAR test was not administered at that grade level.
¹² Students in grades 3–4 were excluded from the two-year analysis because most of these students were in grades 1–2 during the baseline year (2022–23), and the STAAR test was not administered at those grade levels.

models for STAAR-RLA, indicating that the effect of the treatment differed between students who scored *Did Not Meet Grade Level* on the baseline STAAR test and students who scored *Approaches Grade Level* or better at baseline for Cycle 11 students in both the one-year analysis ($z = 3.66, p < .001$) and two-year analysis ($z = 3.69, p < .001$) and for Cycle 12 students in both the one-year analysis ($z = 4.80, p < .001$) and two-year analysis ($z = 3.23, p < .001$).

For the one-year analysis, direct comparisons of treatment and comparison students within each prior performance level showed that, for students who scored *Approaches Grade Level* or better at baseline, Texas ACE students did not differ from comparison students in terms of their 2024–25 STAAR-RLA scores. However, for students who scored *Did Not Meet Grade Level* at baseline, Cycle 11 students scored 0.04 standard deviations (about 1 percentile point) higher, on average, than comparison group students, and Cycle 12 students scored 0.07 standard deviations (about 2 percentile points) higher, on average, than comparison group students (Figure 7). For more details on these results, see Table A12 and Table A13 in the appendix.

Figure 7. Impact of Texas ACE Participation on STAAR-RLA Scores by Baseline STAAR Performance Level (1 Year, Cycles 11 & 12)

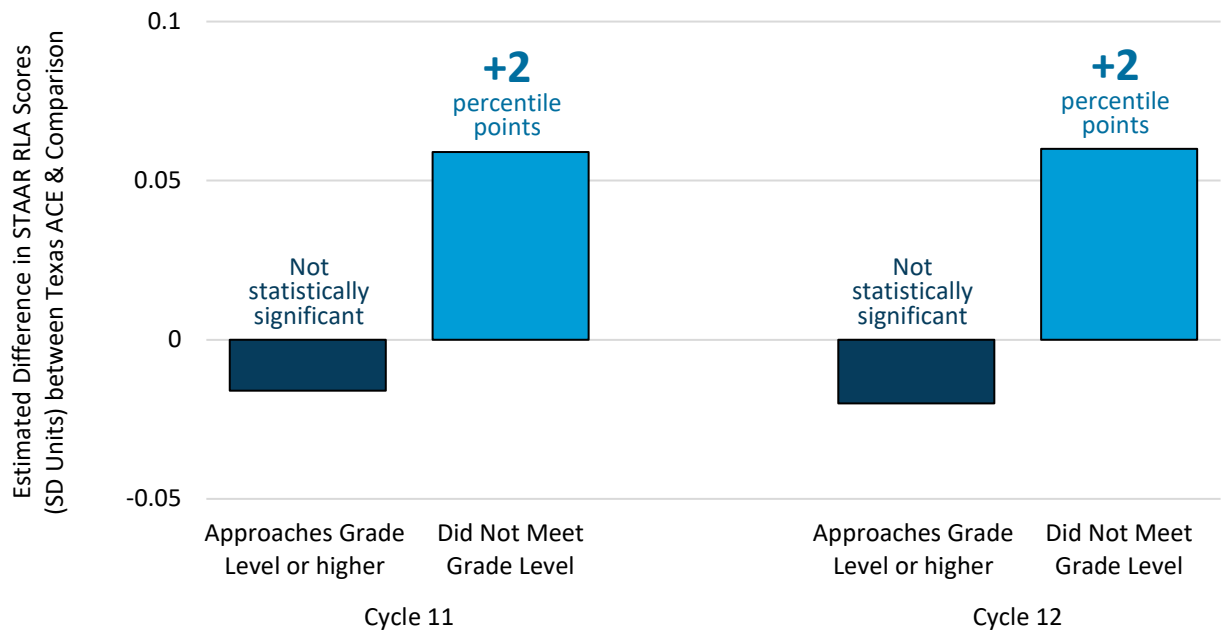


Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: For Cycle 11, the total number of Texas ACE students included in the analysis was 17,711 and the total number of comparison students was 60,333; for Cycle 12, the total number of Texas ACE students was 13,100 and the total number of comparison students was 56,849; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

For the two-year analysis, direct comparisons of treatment and comparison students within each prior performance level showed that, for students who scored *Approaches Grade Level* or better at baseline, Texas ACE students did not differ from comparison students in terms of their 2024–25 STAAR-RLA scores. However, for students who scored *Did Not Meet Grade Level* at baseline, Cycle 11 and Cycle 12 students scored 0.06 standard deviations (about 2 percentile points) higher, on average, than comparison group students (Figure 8). For more details on these results, see Table A14 and Table A15 in the appendix.

Figure 8. Impact of Texas ACE Participation on STAAR-RLA Scores by Baseline STAAR Performance Level (2 Years, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics. *Note:* For Cycle 11, the total number of Texas ACE students included in the analysis was 6,267 and the total number of comparison students was 33,199; for Cycle 12, the total number of Texas ACE students was 4,557 and the total number of comparison students was 31,234; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

STAAR-RLA Performance Level

To further examine the extent to which Texas ACE impacted students with lower RLA performance in prior years, another set of analyses was conducted that was limited to students who scored *Did Not Meet Grade Level* on the STAAR-RLA test at baseline. The outcome used in this set of analyses was the 2024–25 STAAR-RLA performance level, computed as a binary measure indicating whether students scored *Approaches Grade Level* or higher on the 2024–25 STAAR-RLA test. The objective of this set of analyses was to test whether Texas ACE students

differed from comparison students in terms of the likelihood that their performance level on STAAR-RLA would improve from *Did Not Meet Grade Level* at baseline to *Approaches Grade Level* or higher in the 2024–25 school year.

Again, separate analyses were conducted for Cycle 11 and Cycle 12 and for students who met the program attendance target across one year and those who met the target across two years. The one-year analysis was limited to students who were enrolled in grades 4–8 in 2024–25. For this analysis, students’ STAAR-RLA score from the 2023–24 school year was used as a baseline control measure. The two-year analysis was limited to students in grades 5–8 and used students’ STAAR-RLA score from the 2022–23 school year as the baseline control. The samples used for these analyses are summarized in Table 9.

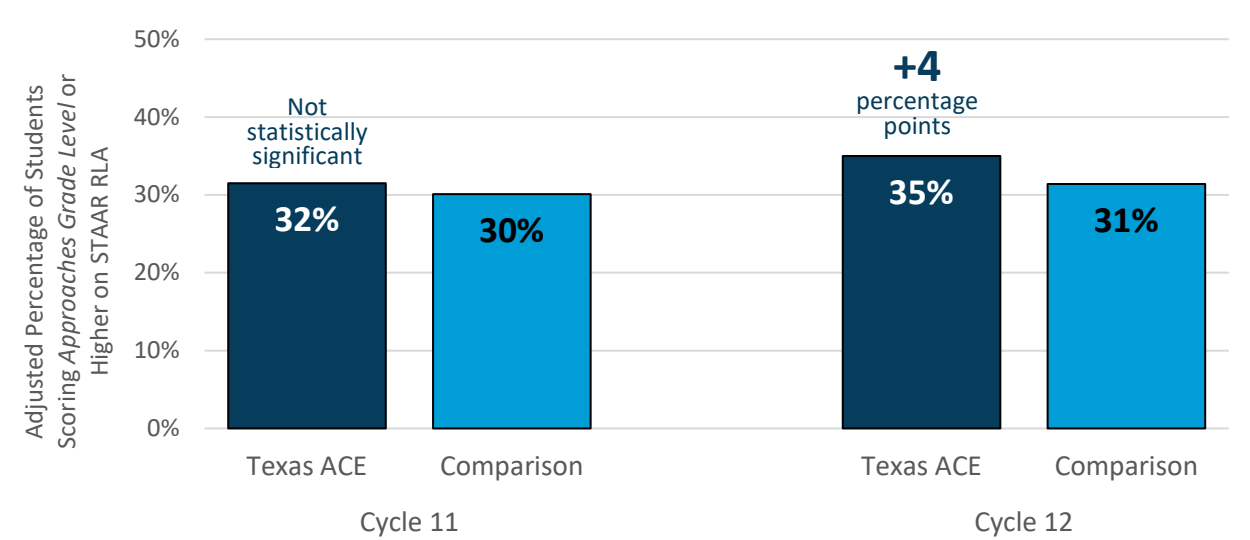
Table 9. Summary of Analytic Samples for STAAR-RLA Performance Level

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 4–8	Cycle 11	5,847	20,258
		Cycle 12	3,970	18,921
2 years	Grades 5–8	Cycle 11	1,954	11,354
		Cycle 12	1,258	10,023

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics. STAAR = State of Texas Assessments of Academic Readiness.

After adjusting for baseline and time-invariant covariates that are associated with both program participation and test performance, one-year analyses yielded statistically significant differences for Cycle 12 ($z = 3.83$, $p < .001$) but not Cycle 11. For students who scored *Did Not Meet Grade Level* on the 2023–24 STAAR-RLA assessment, the predicted probability that they would score *Approaches Grade Level* or higher on the 2024–25 STAAR-RLA test was 4 percentage points higher for Cycle 12 students than comparison students (Figure 9). Full regression results for this analysis are provided in Table A16 in the appendix. No statistically significant differences in the outcome were found between Texas ACE and comparison students in the two-year analyses for either Cycle 11 students or Cycle 12 students.

Figure 9. Impact of Texas ACE Participation on the Percentage of Students Scoring Approaches Grade Level or Higher on STAAR-RLA (1 Year, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: For Cycle 11, the total number of Texas ACE students included in the analysis was 5,847 and the total number of comparison students was 20,258; for Cycle 12, the total number of Texas ACE students was 3,970 and the total number of comparison students was 18,921; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

Variation in Impact by Level of Program Participation

To examine the extent to which increased program participation—measured as the number of days students participated in Texas ACE—had an estimated impact on the students’ STAAR-RLA scores (RQ 4.4), separate dosage response analyses were conducted for students who participated in the program over one and two years (Table 10). Model results for these analyses are provided in Table A17 and Table A18 in the appendix.

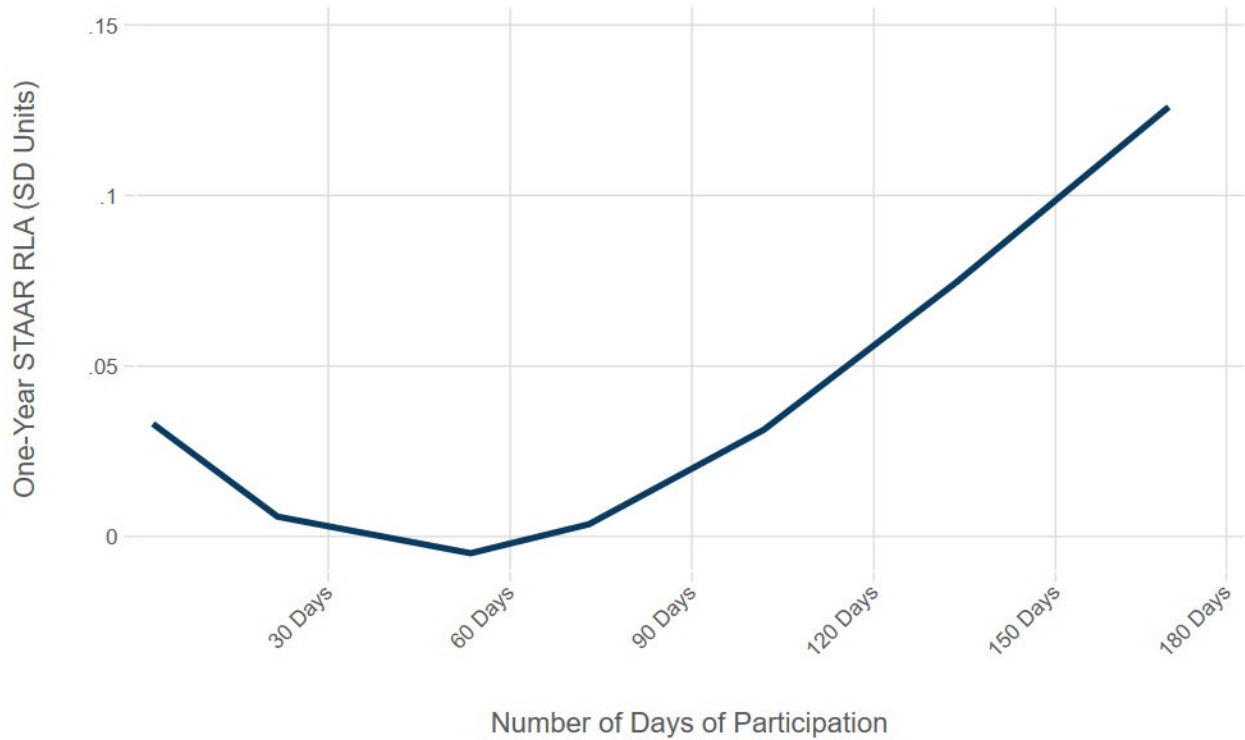
Table 10. Summary of the Analytic Samples for the Texas ACE Dosage Model Estimates for STAAR-RLA

Time period	Number of students included
1 year	41,256
2 years	24,945

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Across one year of program participation, the expected improvement in STAAR-RLA scores as the number of days of Texas ACE attendance increases is illustrated in [Figure 10](#). The upward sloping line beginning at approximately 50 days suggests that participation in Texas ACE begins having a positive impact on students’ STAAR-RLA scores for students who participate for at least 50 days. While there is an estimated negative effect at participation rates just below that point, the positive impact increases as student attendance in Texas ACE increases. For example, the graph shows that students who attend Texas ACE for 115 days over the course of one year are estimated to have an increase of about 0.05 standard deviations on their STAAR-RLA score on average, compared to a 0.10 standard deviation increase, on average for students who attend Texas ACE 150 days out of the year.

Figure 10. Estimated Impact of Texas ACE Participation on STAAR-RLA Scores at Different Levels of Program Attendance (1 Year, Cycles 11 & 12)

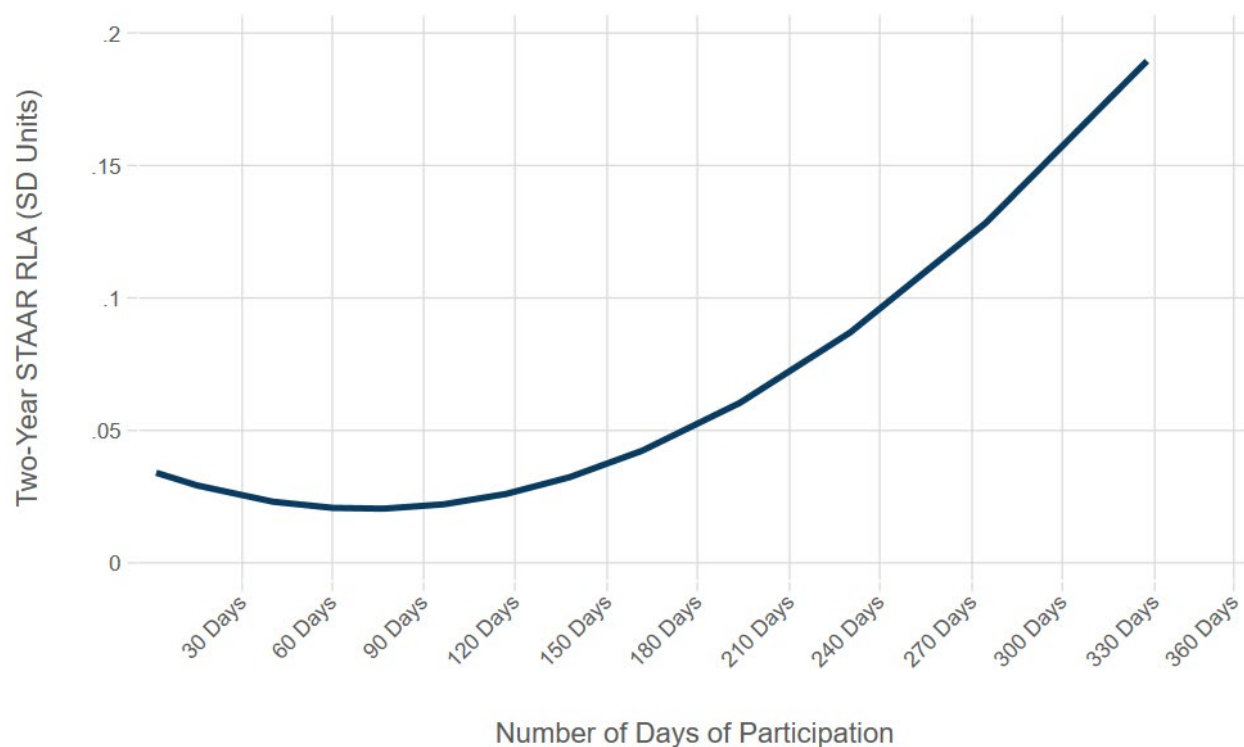


Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.
Note: 41,256 Texas ACE participants were included in this model; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

Across two years of program participation, the expected improvement in STAAR-RLA scores as the number of days of Texas ACE attendance increases is illustrated in [Figure 11](#). The upward sloping line beginning at approximately 75 days suggests that participation in Texas ACE begins

having a positive impact on students' STAAR-RLA scores for students who participate for at least 75 days and that the impact continues to increase as student attendance in Texas ACE increases. For example, the graph shows that students who attend Texas ACE for 180 days over the course of two years are estimated to have an increase of about 0.05 standard deviations on their STAAR-RLA score on average, compared to a 0.10 standard deviation increase, on average, for students who attend Texas ACE 240 days over two years.

Figure 11. Estimated Impact of Texas ACE Participation on STAAR-RLA Scores at Different Levels of Program Attendance (2 Year, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.
Note: 24,945 Texas ACE participants were included in this model; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

STAAR Algebra I EOC Exam

STAAR Algebra I EOC Scores

Separate analyses were conducted to test the impact of Texas ACE on STAAR Algebra I EOC exam scores for students who met the program attendance target for the 2024–25 school year (RQ 4.1) and students who met the target for the 2023–24 and 2024–25 school years (RQ 4.2). As the STAAR Algebra I EOC exam is taken mainly by students in grades 7 through 9, each analysis was limited to students within this grade band. For the one-year analysis, students’ STAAR-Mathematics scores from the 2023–24 school year were used as a baseline control measure. The two-year analysis used students’ STAAR-Mathematics scores from the 2022–23 school year as the baseline control. A summary of the samples used for each analysis is provided in Table 11.

Table 11. Summary of Analytic Samples for STAAR Algebra I EOC Scores

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 7–9	Cycle 11	1,739	3,614
		Cycle 12	1,948	3,585
2 years	Grades 7–9	Cycle 11	1,768	5,410
		Cycle 12	1,942	5,393

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Overall Impact

After adjusting for baseline and time-invariant covariates that are associated with both program participation and test performance, there were no statistically significant differences overall in STAAR Algebra I EOC exam scores between Cycle 11 students and comparison students for either the one-year analysis or the two-year analysis. Similarly, no statistically significant effects were detected for Cycle 12 students in the one-year analysis or the two-year analysis.

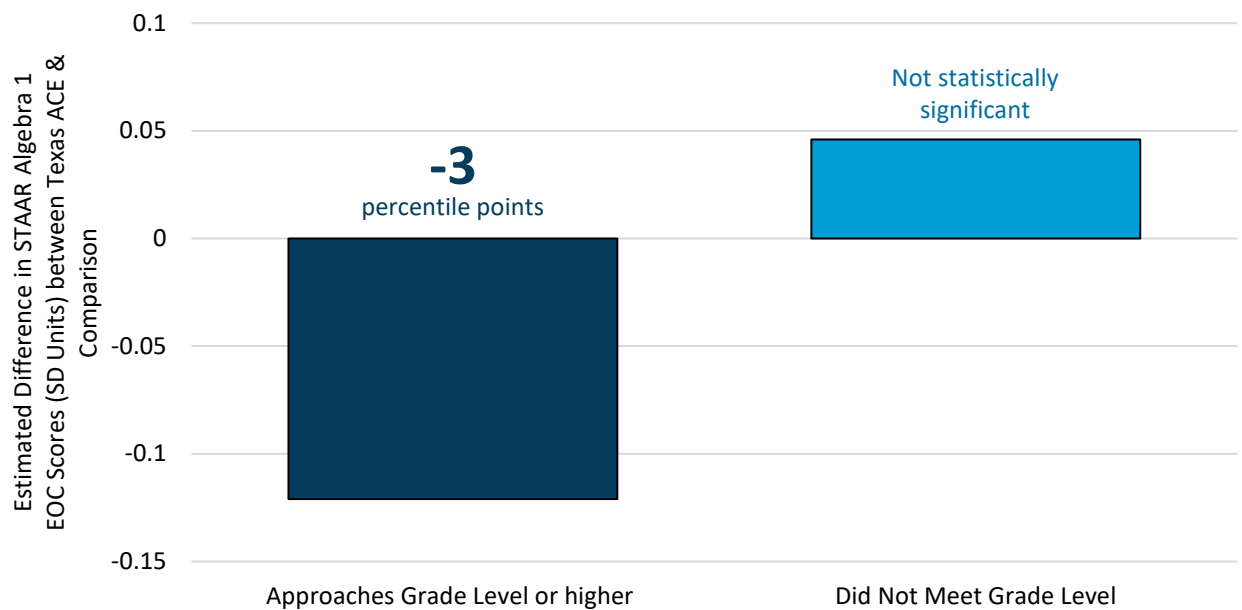
Difference in Impact by Prior Performance Level

These same models were estimated again with an interaction term added to each model to determine whether treatment effects differed for students who scored *Did Not Meet Grade Level* on the baseline STAAR-Mathematics test (RQ 4.3). This interaction was not statistically

significant for Cycle 11 students in either the one-year analysis or the two-year analysis. For Cycle 12 students, a statistically significant difference was detected in the one-year analysis ($z = 2.88, p < .01$), indicating that the effect of the treatment on 2024–25 STAAR Algebra I EOC exam scores differed between students who scored *Did Not Meet Grade Level* and students who scored *Approaches Grade Level* or higher on the 2023–24 STAAR-Mathematics test. No statistically significant differences were found for Cycle 12 students when the treatment group was limited to students meeting the program attendance standard across two years.

For Cycle 12 students who met the attendance standard across one year, direct comparisons of treatment and comparison students within each prior performance level showed that, for students who scored *Did Not Meet Grade Level* on the 2023–24 STAAR-Mathematics assessment, Texas ACE students did not differ from comparison students in terms of their 2024–25 STAAR Algebra I EOC exam scores. However, for students who scored *Approaches Grade Level* or higher at baseline, Texas ACE students scored 0.12 standard deviations (about 3 percentile points) lower, on average, than comparison group students (Figure 12). For more details on these results, see Table A19 in the appendix.

Figure 12. Impact of Texas ACE Participation on STAAR Algebra I EOC Exam Scores by Baseline STAAR Performance Level (1 Year, Cycle 12)



Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.
Note: The total number of Texas ACE students included in the analysis was 1,948 and the total number of comparison students was 3,585; SD = Standard Deviations; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

STAAR Algebra I EOC Performance Level

To further examine the extent to which Texas ACE impacted students with lower math performance in prior years, the team conducted another set of analyses that was limited to students who scored *Did Not Meet Grade Level* on the STAAR-Mathematics test at baseline. The outcome used in this set of analyses was students’ 2024–25 STAAR Algebra I EOC performance level, computed as a binary measure indicating whether students scored *Approaches Grade Level* or higher on the exam. The objective of this set of analyses was to test whether Texas ACE students differed from comparison students in terms of the likelihood that their performance level in math would improve from *Did Not Meet Grade Level* on STAAR-Mathematics at baseline to *Approaches Grade Level* or higher on the STAAR Algebra I EOC exam in the 2024–25 school year.

Again, separate analyses were conducted for Cycle 11 and Cycle 12 and for students who met the program attendance target across one year and those who met the target across two years. The analyses were limited to students who were enrolled in grades 7–9 in 2024–25. For the one-year analysis, students’ STAAR-Mathematics scores from the 2023–24 school year were used as a baseline control measure. The two-year analysis used students’ STAAR-Mathematics scores from the 2022–23 school year as the baseline control. A summary of the samples used for each analysis is provided in Table 12.

Table 12. Summary of Analytic Samples for STAAR Algebra I EOC Performance Level

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 7–9	Cycle 11	486	1,163
		Cycle 12	510	1,141
2 years	Grades 7–9	Cycle 11	638	2,461
		Cycle 12	746	2,458

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

After adjusting for baseline and time-invariant covariates associated with both program participation and test performance, no statistically significant differences were found between Cycle 11 students and comparison students in the likelihood of scoring *Approaches Grade Level* or higher on the 2024–25 STAAR Algebra I EOC exam in either the one-year or two-year analysis. Similarly, no statistically significant effects were detected for Cycle 12 students in either the one-year or two-year analysis.

Variation in Impact by Level of Program Participation

To examine the extent to which increased program participation—measured as the number of days that students participated in Texas ACE—had an estimated impact the students’ STAAR Algebra I EOC exam scores (RQ 4.4), separate dosage response analyses were conducted for students who participated in the program over one and two years (Table 13). Model results for these analyses are provided in Table A20 and Table A21 in the appendix.

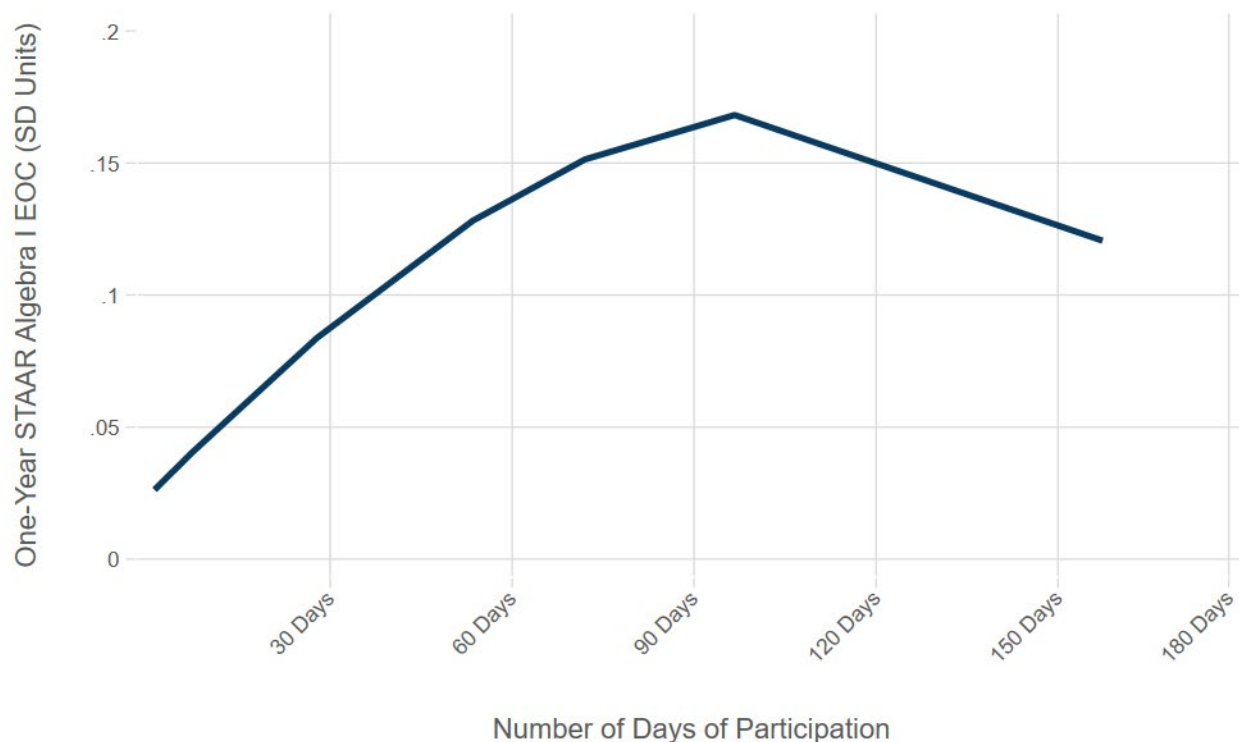
Table 13. Summary of the Analytic Samples for the Texas ACE Dosage Model Estimates for STAAR Algebra I EOC

Time period	Number of students included
1 year	3,628
2 years	3,177

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Across one year of program participation, there is expected improvement in STAAR Algebra I EOC scores as the number of days of Texas ACE attendance increases up to about 100 days, as illustrated in Figure 13. The line slopes upward from one day of participation indicating a positive impact on students’ STAAR Algebra I EOC up to 100 days. Beyond this, the estimated impact of participation levels off and decreases. For example, the graph shows that students who attend Texas ACE for 40 days over the course of one year are estimated to have an increase of about 0.10 standard deviations on their STAAR Algebra I EOC score on average, compared to a 0.17 standard deviation increase, on average, for students who attend Texas ACE 100 days out of the year. It is not clear why further participation is expected to have a less positive effect, but it may be related to the tendency for some middle school students to engage in Texas ACE for the clubs and activities rather than academic need.

Figure 13. Estimated Impact of Texas ACE Participation on STAAR Algebra I EOC Scores at Different Levels of Program Attendance (1 Year, Cycles 11 & 12)

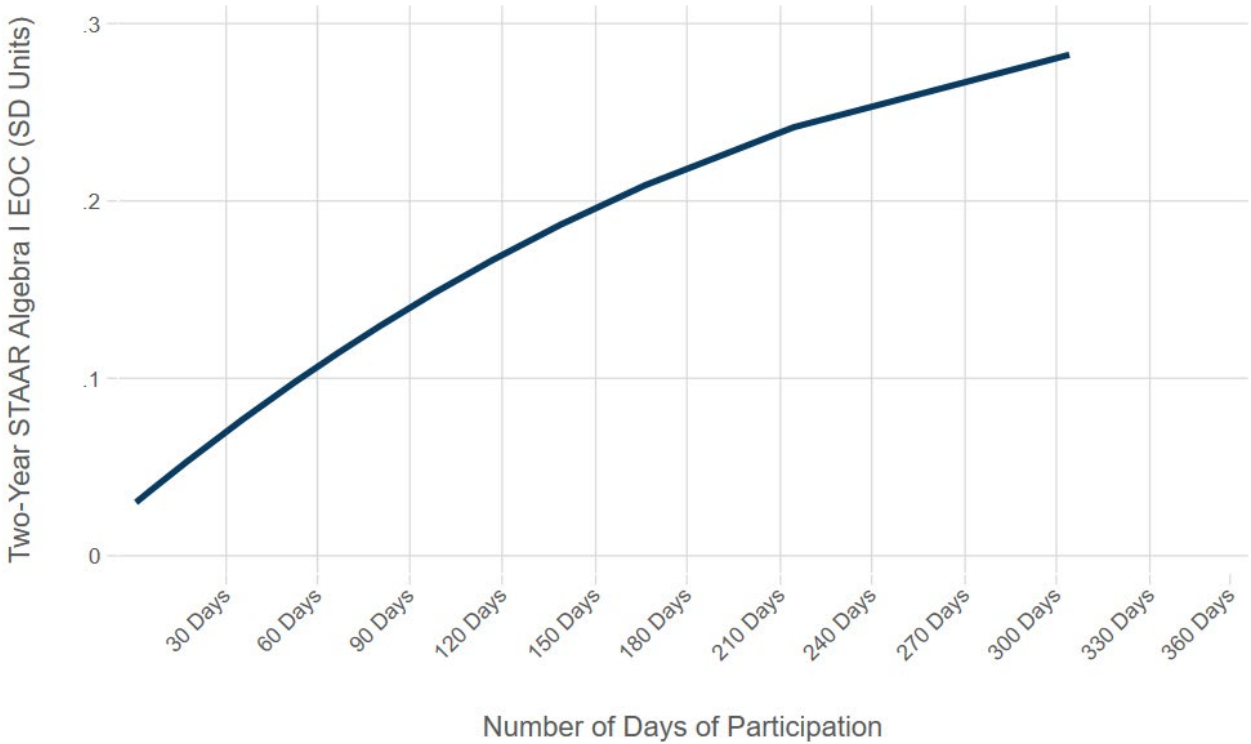


Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: 3,628 Texas ACE participants were included in this model; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

Across two years of program participation, the expected improvement in STAAR Algebra I EOC scores as the number of days of Texas ACE attendance increases is illustrated in [Figure 14](#). The line slopes upward at one day and continues to increase through 300 days of participation, though additional days are less effective than previous ones (estimated improvement decreases with additional days). As the graph shows, students who attend Texas ACE for 55 days over the course of two years are estimated to have an increase of about 0.10 standard deviations on their STAAR Algebra I EOC score on average, compared to a 0.20 standard deviation increase, on average, for students who attend Texas ACE 150 days over two years. The results suggest that STAAR Algebra I EOC scores are likely to continue to increase as the number of days of Texas ACE attendance increases.

Figure 14. Estimated Impact of Texas ACE Participation on STAAR Algebra I EOC Scores at Different Levels of Program Attendance (2 Year, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: 3,177 Texas ACE participants were included in this model; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

STAAR English I EOC Exam

STAAR English I EOC Scores

Separate analyses were conducted to test the impact of Texas ACE on STAAR English I EOC exam scores for students who met the program attendance target for the 2024–25 school year (RQ 4.1) and students who met the target for the 2023–24 and 2024–25 school years (RQ 4.2). As the STAAR English I EOC exam is taken mainly by students in grades 8 through 9, each analysis was limited to students within this grade band. For the one-year analysis, students’ STAAR-RLA scores from the 2023–24 school year (or from the 2022–23 school year for grade 10 students) were used as a baseline control measure. The two-year analysis used students’ STAAR-RLA scores from the 2022–23 school year as the baseline control. A summary of the samples used for each analysis is provided in Table 14.

Table 14. Summary of Analytic Samples for STAAR English I EOC Scores

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 8–10	Cycle 11	1,385	3,680
		Cycle 12	1,925	4,138
2 years	Grades 8–10	Cycle 11	1,339	4,317
		Cycle 12	1,881	5,004

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Overall Impact

After adjusting for baseline and time-invariant covariates that are associated with both program participation and test performance, there were no statistically significant differences in STAAR English I EOC exam scores between Cycle 11 students and comparison students in either the one-year or two-year analysis. Likewise, no statistically significant effects were detected for Cycle 12 students across one or two years.

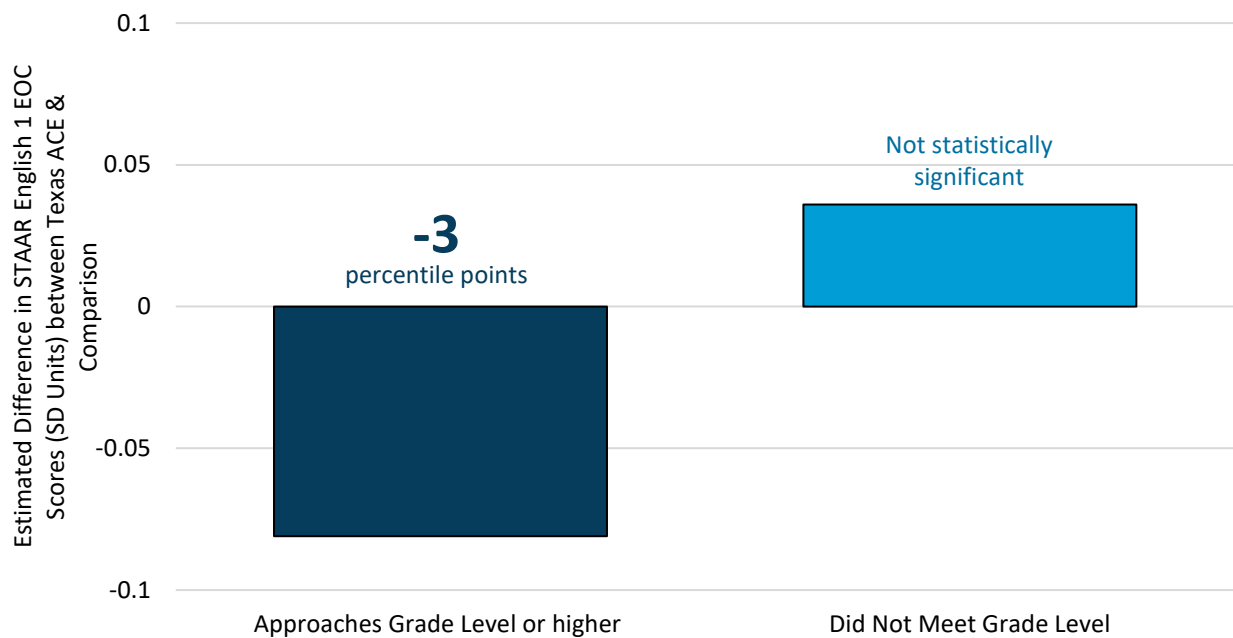
Difference in Impact by Prior Performance Level

These same models were estimated again with an interaction term added to each model to determine whether treatment effects differed for students who scored *Did Not Meet Grade Level* on the baseline STAAR-RLA test (RQ 4.3). This interaction was not statistically significant for Cycle 11 students in either the one-year or the two-year analysis. For Cycle 12 students, a statistically significant difference was detected in the two-year analysis ($z = 3.30$, $p < .001$),

indicating that the effect of the treatment on 2024–25 STAAR English I EOC exam scores differed between students who scored *Did Not Meet Grade Level* and students who scored *Approaches Grade Level* or better on the 2022–23 STAAR-RLA test. No differences were found for Cycle 12 students in the analysis where the treatment group included all students meeting the program attendance standard across one year.

For Cycle 12 students who met the attendance standard across two years, direct comparisons of treatment and comparison students within each prior performance level showed that, for students who scored *Did Not Meet Grade Level* or better on the 2022–23 STAAR-RLA assessment, Texas ACE students did not differ from comparison students in terms of their 2024–25 STAAR English I EOC exam scores. However, for students who scored *Approaches Grade Level* at baseline, Texas ACE students scored 0.08 standard deviations (about 3 percentile points) lower, on average, than comparison group students (Figure 15). For more details on these results, see Table A22 in the appendix.

Figure 15. Impact of Texas ACE Participation on STAAR English I EOC Exam Scores by Baseline STAAR Performance Level (1 Year, Cycle 12)



Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: The total number of Texas ACE students included in the analysis was 1,925 and the total number of comparison students was 4,138; SD = Standard Deviation; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

STAAR English I EOC Performance Level

To further examine the extent to which Texas ACE impacted students with lower RLA performance in prior years, another set of analyses was conducted that was limited to students who scored *Did Not Meet Grade Level* on the STAAR-RLA test at baseline. The outcome used in this set of analyses was students’ 2024–25 STAAR English I EOC performance level, computed as a binary measure indicating whether students scored *Approaches Grade Level* or higher on the exam. The objective of this set of analyses was to test whether Texas ACE students differed from comparison students in terms of the likelihood that their performance level would improve from *Did Not Meet Grade Level* on STAAR-RLA at baseline to *Approaches Grade Level* or higher on the STAAR English I EOC exam in the 2024–25 school year.

Again, separate analyses were conducted for Cycle 11 and Cycle 12 and for students who met the program attendance targets across one or two years (Table 15). The analyses were limited to students enrolled in grades 8–10 in 2024–25. For the one-year analysis, students’ STAAR-RLA scores from the 2023–24 school year (or from the 2022–23 school year for grade 10 students) were used as a baseline control measure. The two-year analysis used students’ STAAR-RLA scores from the 2022–23 school year as the baseline control.

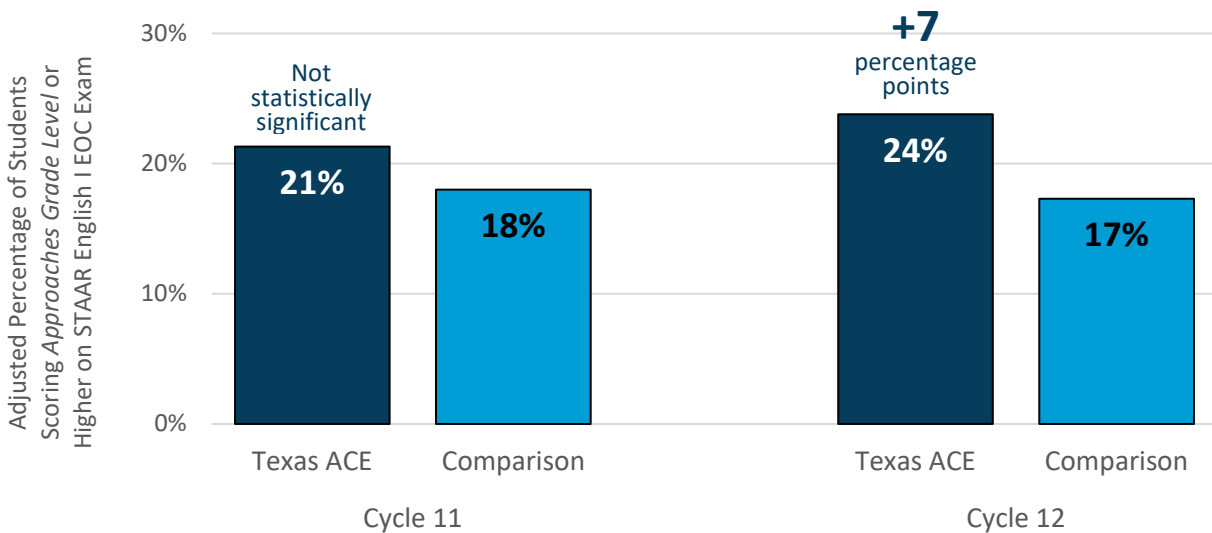
Table 15. Summary of Analytic Samples for STAAR English I EOC Performance Level

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 8–10	Cycle 11	516	1,475
		Cycle 12	583	1,459
2 years	Grades 8–10	Cycle 11	537	1,675
		Cycle 12	628	1,803

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

After adjusting for baseline and time-invariant covariates that are associated with both program participation and test performance, two-year analyses yielded statistically significant differences for Cycle 12 ($z = 2.50, p < .05$) but not Cycle 11. For students who scored *Did Not Meet Grade Level* on the 2022–23 STAAR-RLA assessment, the predicted probability that they would score *Approaches Grade Level* or higher on the 2024–25 STAAR English I EOC exam was 7 percentage points higher for Cycle 12 students than comparison students (Figure 16). Full regression results for this analysis are provided in Table A23 in the appendix. No statistically significant differences in the outcome were found between Texas ACE and comparison students for the one-year analyses for Cycle 11 or Cycle 12.

Figure 16. Impact of Texas ACE Participation on the Percentage of Students Scoring Approaches Grade Level or Higher on STAAR English I EOC Exam (2 Years, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: For Cycle 11, the total number of Texas ACE students included in the analysis was 537 and the total number of comparison students was 1,675; for Cycle 12, the total number of Texas ACE students was 628 and the total number of comparison students was 1,803; STAAR = State of Texas Assessments of Academic Readiness; Texas ACE = Texas Afterschool Centers on Education

STAAR English II EOC Exam

STAAR English II EOC Scores

Separate analyses were conducted to test the impact of Texas ACE on STAAR English II EOC exam scores for students who met the program attendance target for the 2024–25 school year (RQ 4.1) and students who met the target for the 2023–24 and 2024–25 school years (RQ 4.2). Each analysis was limited to students in grades 9–11. For the one-year analysis, students’ STAAR English I scores from the 2023–24 school year were used as a baseline control measure. The two-year analysis used either students’ STAAR English I EOC scores or STAAR-RLA scores from the 2022–23 school year as the baseline control. A summary of the samples used for each analysis is provided in Table 16.

Table 16. Summary of Analytic Samples for STAAR English II EOC Scores

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 9–11	Cycle 11	1,644	4,556
		Cycle 12	2,051	4,970
2 years	Grades 9–11	Cycle 11	1,636	4,561
		Cycle 12	1,966	4,840

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Overall Impact

After adjusting for baseline and time-invariant covariates associated with both program participation and test performance, there were no statistically significant differences in STAAR English II EOC exam scores between Cycle 11 students and comparison students in the one-year or two-year analysis. Similarly, no statistically significant differences were detected between Cycle 12 students and comparison students in the one-year or two-year analysis.

Difference in Impact by Prior Performance Level

These same models were estimated again with an interaction term added to each model to determine whether treatment effects differed for students who scored *Did Not Meet Grade Level* on the baseline test (RQ 4.3). Across analyses involving students in Cycle 11, there were no statistically significant differences in the treatment effect between Texas ACE students who scored *Did Not Meet Grade Level* at baseline and those who scored higher after one year or two

years. Likewise, no statistically significant interaction effects were detected for Cycle 12 students after one year or two years.

STAAR English II EOC Performance Level

As another method of examining whether Texas ACE impacted students with lower academic performance in prior years, another set of analyses was conducted that only included students who scored *Did Not Meet Grade Level* at baseline. The outcome used in this set of analyses was students’ 2024–25 STAAR English II EOC performance level, computed as a binary measure indicating whether students scored *Approaches Grade Level* or higher on the exam. The objective of this set of analyses was to test whether Texas ACE students differed from comparison students in terms of the likelihood that their performance level would improve from *Did Not Meet Grade Level* at baseline to *Approaches Grade Level* or higher in the 2024–25 school year.

Again, separate analyses were conducted for Cycle 11 and Cycle 12 and for students who met the program attendance target across one year and those who met the target across two years (Table 17). The analyses were limited to students who were enrolled in grades 9–11 in 2024–25. The same baseline control measures were used as were used in the analyses for RQs 4.1 and 4.2.

Table 17. Summary of Analytic Samples for STAAR English II EOC Performance Level

Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 9–11	Cycle 11	666	1,689
		Cycle 12	700	1,833
2 years	Grades 9–11	Cycle 11	559	1,316
		Cycle 12	567	1,412

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

After adjusting for baseline and time-invariant covariates that are associated with both program participation and test performance, no statistically significant differences in the likelihood of scoring *Approaches Grade Level* or higher on the STAAR English II EOC exam were found between Cycle 11 students and comparison students in either the one-year or two-year analysis. Similarly, no statistically significant differences were found for Cycle 12 students after either one year or two years.

Attendance

Separate analyses were conducted to test the impact of Texas ACE on school-day attendance for students who met the program attendance target for the 2024–25 school year (RQ 4.1) and students who met the target for the 2023–24 and 2024–25 school years (RQ 4.2). For the one-year analysis, the sample was limited to students in grades 1–12, and 2023–24 attendance rates were used as a baseline control. For the two-year analysis, the sample was limited to students in grades 2–12, and 2022–23 attendance rates were used as the baseline control. A summary of the samples used for each analysis is provided in Table 18.

Table 18. Summary of Analytic Samples for Attendance Rates

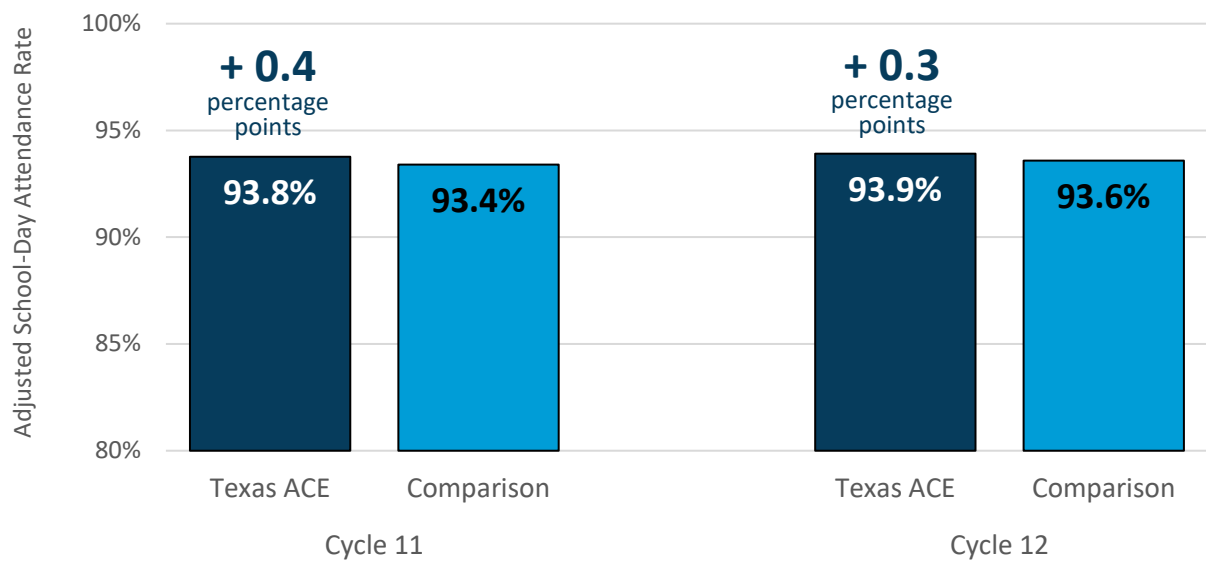
Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 1–12	Cycle 11	45,929	60,996
		Cycle 12	41,550	59,297
2 years	Grades 2–12	Cycle 11	40,733	61,757
		Cycle 12	37,202	57,438

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Overall Impact

After adjusting for baseline and time-invariant covariates that are associated with both program participation and school-day attendance, statistically significant differences between treatment and comparison students were found across all four analyses. In the analyses examining the effect of participating in Texas ACE across one year, Cycle 11 students had an average attendance rate that was 0.4 percentage points higher than comparison students ($z = 4.85$, $p < .001$) and Cycle 12 students had an attendance rate that was 0.3 percentage points higher than the comparison group ($z = 4.03$, $p < .001$; Figure 17). For more details on these results, see Table A24 and Table A25 in the appendix.

Figure 17. Impact of Texas ACE Participation on School-Day Attendance Rates (1 Year, Cycles 11 & 12)

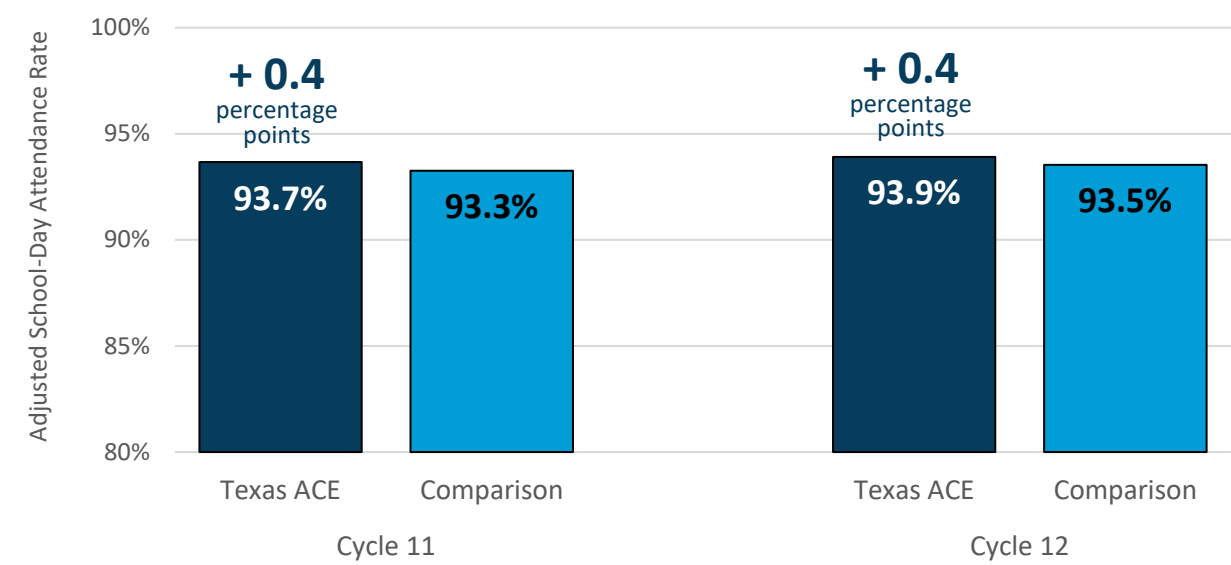


Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: For Cycle 11, the total number of Texas ACE students included in the analysis was 45,929 and the total number of comparison students was 60,996; for Cycle 12, the total number of Texas ACE students was 41,550 and the total number of comparison students was 59,297; Texas ACE = Texas Afterschool Centers on Education

When limiting the sample to program participants who met the program attendance standard across two years, statistically significant differences in school-day attendance were found for Cycle 11 ($z = 4.34$, $p < .001$) and Cycle 12 ($z = 3.82$, $p < .001$). Texas ACE students in both cycles had average attendance rates that were 0.4 percentage points higher than matched comparison students (Figure 18). For more details on these results, see Table A26 and Table A27 in the appendix.

Figure 18. Impact of Texas ACE Participation on School-Day Attendance Rates (2 Years, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics. *Note:* For Cycle 11, the total number of Texas ACE students included in the analysis was 40,733 and the total number of comparison students was 61,757; for Cycle 12, the total number of Texas ACE students was 37,202 and the total number of comparison students was 57,438; Texas ACE = Texas Afterschool Centers on Education

Variation in Impact by Level of Program Participation

To examine the extent to which increased program participation—measured as the number of days students participated in Texas ACE—had an estimated impact on students’ school-day attendance rates (RQ 4.4), separate dosage response analyses were conducted for students who participated in the program over one and two years (Table 19). Model results for these analyses are provided in Table A28 and Table A29 in the appendix.

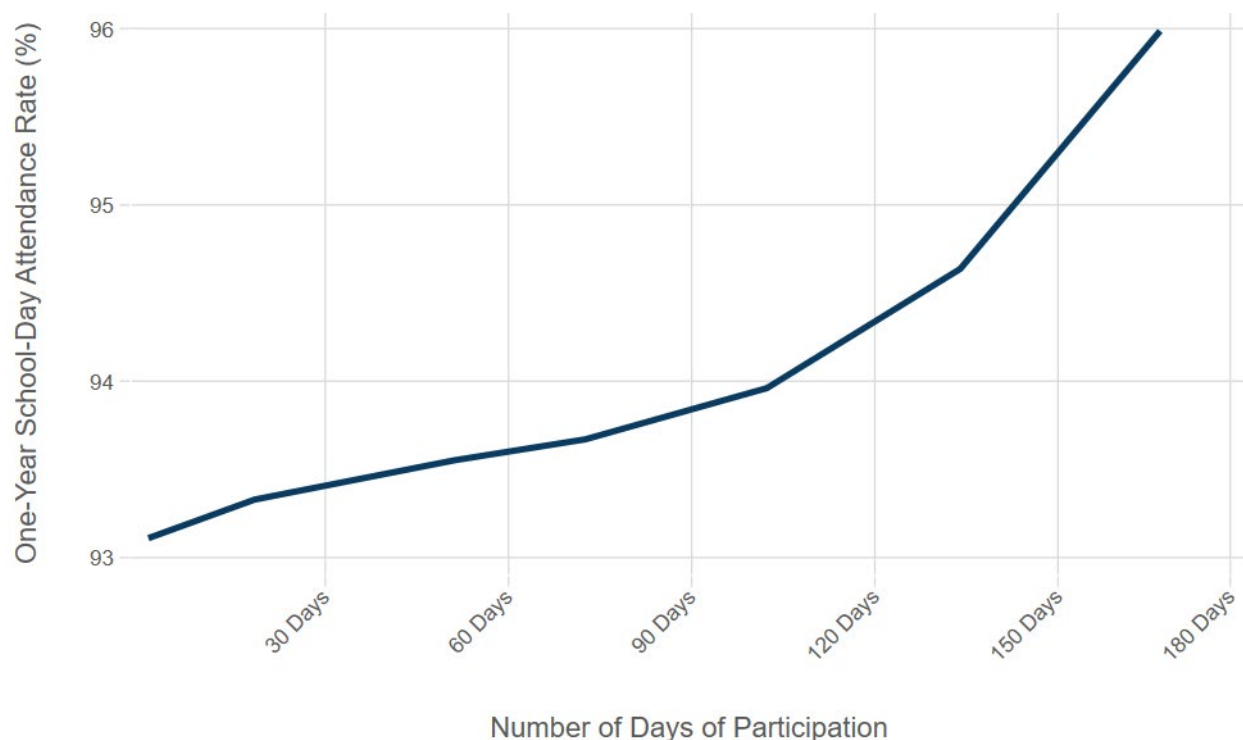
Table 19. Summary of the Analytic Samples for the Texas ACE Dosage Model Estimates for School-Day Attendance Rates

Time period	Number of students included
1 year	86,521
2 years	67,979

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Across one year of program participation, the expected improvement in school-day attendance increases across the number of days of Texas ACE attendance through the range of program attendance, as is illustrated in Figure 19. The line slopes upward from one day of participation, indicating a positive impact on students' school-day attendance through the maximum amount of participation, though the slope changes at various points. Expected improvement in school-day attendance increases per day continuing through 15 days, and correlation becomes more positive from there. The graph shows that students who attend Texas ACE for one day over the course of one year are estimated to have a school-day attendance rate of just a little over 93% on average, compared to a 94% attendance rate on average for students who attend Texas ACE 105 days out of the year. When interpreting this figure, it is important to recall that the relationship between afterschool and school-day attendance is somewhat mechanical in that it is hard to attend afterschool programming when one is not present during the school day. Additionally, the estimates are less stable at high levels of attendance, as fewer students attend Texas ACE to that degree.

Figure 19. Estimated Impact of Texas ACE Participation on School-Day Attendance at Different Levels of Program Attendance (1 Year, Cycles 11 & 12)

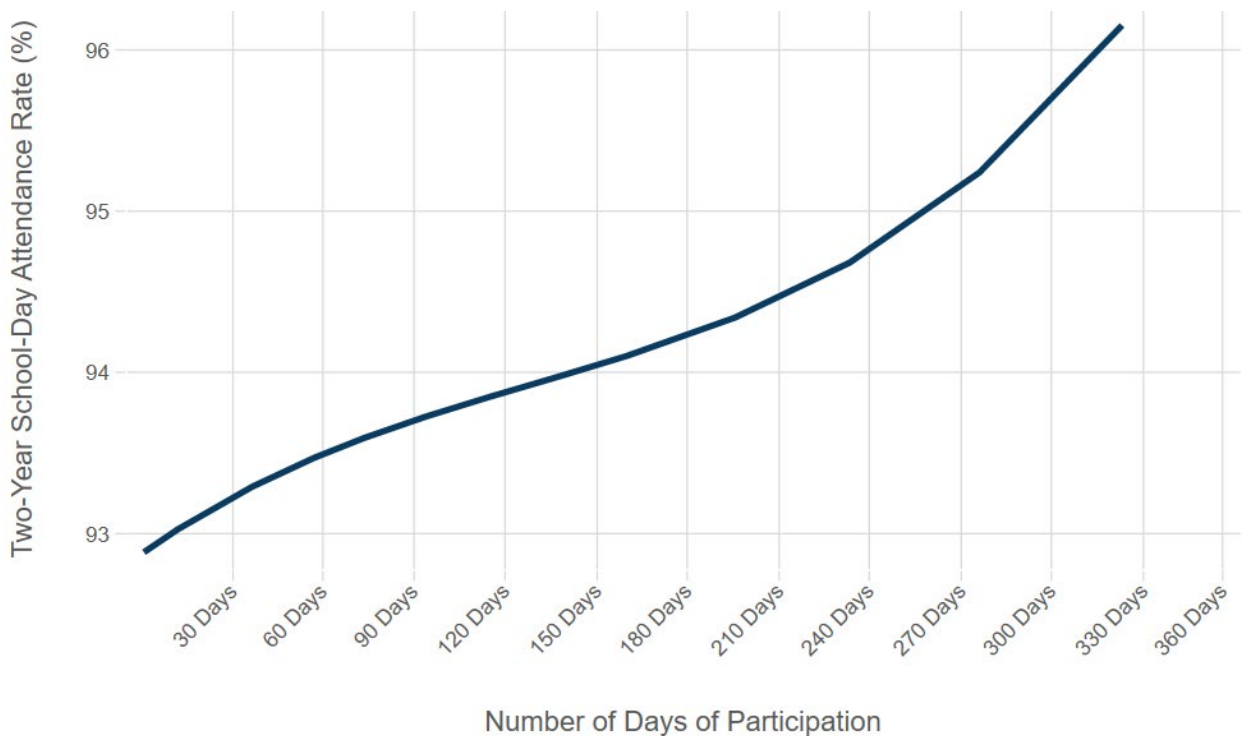


Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User's Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: 86,521 Texas ACE participants were included in this model; Texas ACE = Texas Afterschool Centers on Education

Across two years of program participation, the expected improvement in school-day attendance as the number of days of Texas ACE attendance increases is illustrated in Figure 20. The line slopes upward at one day and continues to increase through the range of participation. The graph shows that students who attend Texas ACE for one day over the course of two years are estimated to have about 93% school-day attendance, but those students who attend Texas ACE 255 days over two years are estimated to have an attendance rate of 95% in 2024–25.

Figure 20. Estimated Impact of Texas ACE Participation on School-Day Attendance at Different Levels of Program Attendance (2 Year, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.
Note: 67,979 Texas ACE participants were included in this model.

Career and Technical Education

Separate analyses were conducted to test the impact of Texas ACE on CTE course passing rates for students who met the program attendance target for the 2024–25 school year (RQ 4.1) and students who met the target for the 2023–24 and 2024–25 school years (RQ 4.2). For both the one- and two-year analyses, the sample was limited to students in grades 9–12. A summary of the samples used for each analysis is provided in Table 20.

Table 20. Summary of Analytic Samples for CTE Course Passing Rates

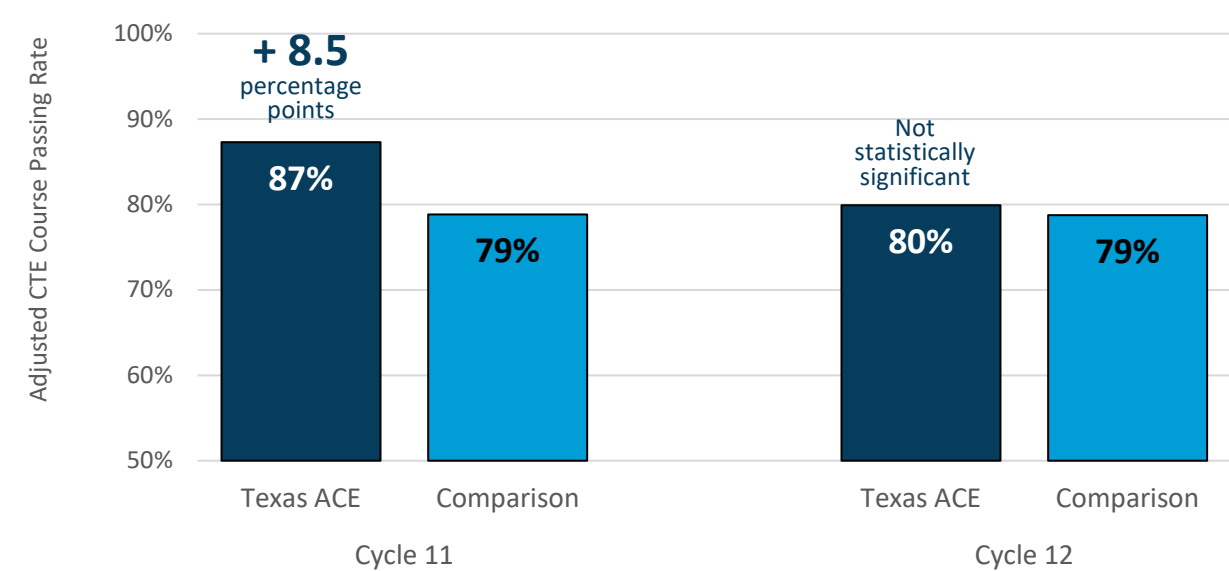
Program participation	Grade levels	Grant cycle	Texas ACE	Comparison group
1 year	Grades 9–12	Cycle 11	5,491	7,213
		Cycle 12	7,165	9,071
2 years	Grades 9–12	Cycle 11	5,402	6,889
		Cycle 12	7,057	8,075

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Overall Impact

After adjusting for baseline and time-invariant covariates that are associated with both program participation and test performance, statistically significant differences between Cycle 11 students and comparison students were found for both the one-year analysis ($z = 2.46$; $p < .05$) and the two-year analysis ($z = 2.78$, $p < .01$). No statistically significant differences between Cycle 12 students and comparison students were found for either the one-year analysis or the two-year analysis. Cycle 11 students who met the attendance standard across one year had an average passing rate that was 8.5 percentage points higher than comparison students (Figure 21). See Table A30 in the appendix for more details.

Figure 21. Impact of Texas ACE Participation on CTE Course Passing Rates (1 Year, Cycles 11 & 12)

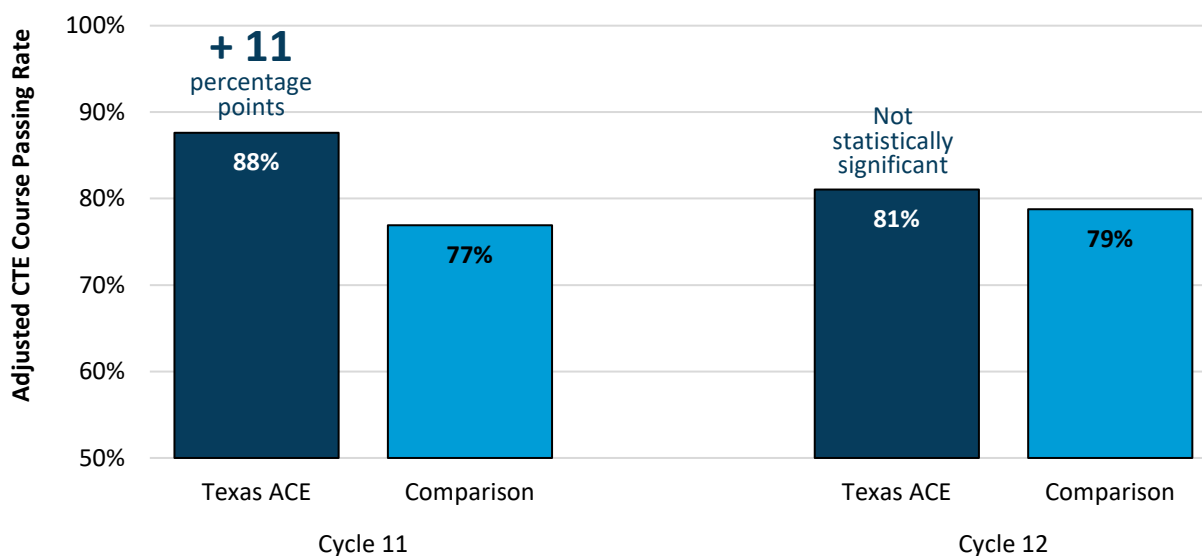


Source: Tx21st Student Tracking System data 2024–25 federal programming period; Public Education Information Management System from 2023–24 to 2024–25; STAAR data from 2023–24 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: For Cycle 11, the total number of Texas ACE students included in the analysis was 5,491 and the total number of comparison students was 7,213; for Cycle 12, the total number of Texas ACE students was 7,165 and the total number of comparison students was 9,071; Texas ACE = Texas Afterschool Centers on Education

Cycle 11 students who met the program attendance standard across two years passed CTE courses at a rate that was 11 percentage points higher, on average, than comparison students (Figure 22). For more details, see Table A31 in the appendix.

Figure 22. Impact of Texas ACE Participation on CTE Course Passing Rates (2 Years, Cycles 11 & 12)



Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: For Cycle 11, the total number of Texas ACE students included in the analysis was 5,402 and the total number of comparison students was 6,889; for Cycle 12, the total number of Texas ACE students was 7,057 and the total number of comparison students was 8,075; Texas ACE = Texas Afterschool Centers on Education

Discussion

Overall, the evaluation findings suggest that Texas ACE participation was associated with generally positive but modest improvements in student outcomes across measures. The most consistent impacts emerged in school-day attendance, though the effects were small. All four attendance analyses (one-year and two-year participation in both grant cycles) found statistically significant increases of about 0.3–0.4 percentage points in average attendance rates for Texas ACE students after controlling for other factors. These gains, while consistent, equate to less than one full additional day of schooling. Moreover, the relationship between school-day and afterschool attendance needs to be considered in the context that it is unlikely that students would attend an afterschool program after being absent from school that day. In terms of CTE course passing rates, the program’s impact was notable for centers funded in Cycle 11, where CTE passing rates were 9.0–11.0 percentage points higher for Texas ACE high school students compared to their matched peers. By contrast, no statistically significant differences in passing rates were found between Cycle 12 students and comparison students.

For academic achievement on STAAR assessments, findings were generally not statistically significant when examining differences between Texas ACE and comparison students across the full sample; however, a small number of results indicated slight positive effects. Specifically, compared to comparison students, the Cycle 11 cohorts for one and two years scored 2 percentile points higher, on average, on STAAR-Mathematics and Cycle 12 students who participated in the program over two years scored 1 percentile point higher on STAAR-RLA. The fact that these effects were small in size and the majority of academic outcome comparisons were not statistically distinguishable from zero suggests that, at scale, the Texas ACE program did not impact achievement in ways that are both universal and measurable through current state standardized tests.

There are caveats that should be considered with these findings. First, the only types of academic achievement measures examined by this study were performance on the STAAR assessments and CTE course passing rates. Other types of academic outcomes could conceivably be impacted by Texas ACE, such as classroom engagement and interest in and readiness to pursue postsecondary education. Relatedly, it is notoriously challenging for educational programs and interventions to move the needle on standardized student achievement measures, and there are many complex factors to consider when examining the connections between programs and outcomes.¹³ For example, this study did not account for

¹³ For additional information, see, Kraft, Matthew. “Interpreting Effect Sizes of Education Interventions.” *Educational Researcher* 49, no. 4 (2020): 241–253.

potential variation in program implementation. This can be very challenging and costly to do at scale, but it is often a crucial factor in validly interpreting results.¹⁴ Finally, as described in the following paragraphs, the results of this study do suggest two important themes: namely, that the program’s academic impact was somewhat stronger and more consistent for students more academically behind, and that the level of program attendance (“dosage”) was positively associated with better outcomes.

Analyses by student subgroup revealed that Texas ACE participants who had previously scored *Did Not Meet Grade Level* on STAAR tended to realize relatively larger improvements in test performance than similar nonparticipants, whereas their higher-performing peers saw little or no impact. For example, across multiple analyses, academically struggling students in Texas ACE outperformed comparison students with similar baseline scores by approximately 1.7–3.3 percentile points on STAAR-Mathematics and STAAR-RLA, but no corresponding gains were observed in the higher-baseline subgroup on those same assessments. Likewise, Texas ACE students who previously scored *Did Not Meet Grade Level* showed increased predicted probabilities (roughly 3–6 percentage points higher) of meeting state achievement benchmarks in certain subjects (e.g., STAAR-Mathematics and some RLA/English tests) relative to similarly low-performing peers who did not attend Texas ACE. These patterns indicate that the program may be particularly beneficial for students who begin with lower academic performance. One implication of this is that the Texas ACE program may have the potential to help narrow achievement gaps if such students are effectively engaged. To explore this further, it may be beneficial to take a deeper look at heterogeneous effects of the program across program centers and consider program structures and practices that may be more or less effective at supporting student learning.

In terms of the level of program attendance (RQ 4.4), a greater number of days in the Texas ACE program was generally associated with positive increases in student outcomes. The dosage-response analyses suggest that sustained participation may bring cumulative benefits. In practical terms, these findings underscore the importance of encouraging consistent and long-term attendance in Texas ACE to maximize student gains, especially for those who are academically behind at program entry, as they appeared to benefit the most.

Limitations

Several important limitations of the study should be noted. The study used a quasi-experimental design with propensity score matching to create comparison groups of

¹⁴ For more information, see Hill, C. J., Scher, L., Haimson, J., & Granito, K. (2023). *Conducting implementation research in impact studies of education interventions: A guide for researchers* (NCEE 2023-005). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from <http://ies.ed.gov/ncee>.

nonparticipants from similar applicant campuses for RQs 4.1–4.3 and compared students who attended more to those who attended less for RQ 4.4. The fact that no random assignment was used suggests a need for some caution when drawing causal conclusions, but the baseline equivalence that was established through the matching methods used in this study was within the acceptable standards set by What Works Clearinghouse. However, even with rigorous matching and statistical controls, there remains the possibility of unobserved differences between Texas ACE participants and comparison students influencing the outcomes. Thus, caution is warranted with regard to interpreting effects as solely attributable to program participation.

The findings regarding how outcomes vary by level of Texas ACE attendance are correlational in nature. The models examining the relationship between student outcomes and program attendance consider only Texas ACE students, and though the analyses controlled for known factors, it is possible that students who attend more days might differ in motivation or other unmeasured ways from those who attend fewer days.¹⁵ As such, estimated gains by level of attendance should be interpreted with caution, and not as proof that increasing days alone causes the outcome improvements. Readers should also be aware that estimates at the highest level of participation are based on relatively few students and may therefore be less reliable. It is unlikely that increased participation increases student expected outcomes indefinitely as those figures may suggest.

¹⁵ These models did control for observed student characteristics, but it is still possible that additional unmeasurable factors contribute to student success which could not be included in these models.

Conclusion

This quasi-experimental study found that program participation yielded small but beneficial impacts across multiple student outcomes. The Texas ACE program had small but consistent positive effects on school-day attendance rates. Although overall academic performance differences on STAAR tests were generally modest and often not statistically significant, a few positive academic gains were noted for Texas ACE students in some analyses. Crucially, the program's impact on academic achievement was more pronounced for students who had lower baseline academic achievement, suggesting that Texas ACE may be more beneficial for students who initially scored *Did Not Meet Grade Level* on STAAR assessments. Additionally, the program's effect on high school CTE course passing rates was substantially positive for Cycle 11 students but not for Cycle 12 students, pointing to meaningful improvements in CTE course outcomes for some participants. Finally, analyses of program attendance indicated that greater levels of participation (more days attended) is generally associated with stronger outcomes, which further supports the idea that the Texas ACE program benefits students and that it is possible that program benefits can be increased with increased engagement.

Appendix A. Statistical Model Results

This appendix contains tables reporting the results of the statistical models conducted to answer RQs 4.1–4.4. These include the results of the multilevel regression models and the generalized propensity score models.

Multilevel regression analysis is a statistical method used to estimate the relationship between an outcome and one or more predictor variables while also accounting for the nested structure of the data. In these analyses, students are nested in schools. The analyses estimate the relationship between the outcome and student- and school-level characteristics while also distinguishing the variation in the outcome measure that is between students versus between schools. This method helps ensure that the models provide more accurate estimates of the relationships being examined.

The generalized propensity score models are used here to examine how the impact of the treatment may vary across different levels of program attendance. This is done by comparing differences in potential and actual outcomes among Texas ACE students with similar propensities of receiving a given level of treatment but who nonetheless received different levels of exposure to the program.

For the multilevel regression analyses conducted to estimate the impact of Texas ACE participation on student outcomes, only the results of the analyses with a statistically significant treatment effect or statistically significant interaction with the treatment effect are provided here. Results of all analyses, including those where the treatment effect was not statistically significant, are provided in an unpublished appendix that may be obtained by contacting TEA at ProgramEvaluation@tea.texas.gov.

STAAR-Mathematics

Table A1. Multilevel Regression Results for STAAR-Mathematics Score, 1 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	0.076	0.156	0.49	.625	-0.230	0.383
Student-Level Variables						
Texas ACE participation	0.048	0.017	2.79	.005	0.014	0.082
2024 STAAR-Mathematics score	0.690	0.009	78.53	.000	0.673	0.707
Grade Level (Ref: Grade 4)						
Grade 5	0.002	0.020	0.09	.928	-0.037	0.040
Grade 6	0.032	0.029	1.11	.266	-0.024	0.088
Grade 7	0.208	0.028	7.51	.000	0.153	0.262
Grade 8	0.150	0.032	4.64	.000	0.087	0.214
Economically Disadvantaged	-0.073	0.010	-7.35	.000	-0.093	-0.054
Emergent Bilingual/English Learner	0.016	0.010	1.60	.109	-0.004	0.037
At risk	-0.129	0.011	-12.05	.000	-0.150	-0.108
Gifted and Talented	0.307	0.018	16.82	.000	0.271	0.343
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.084	0.160	0.53	.598	-0.230	0.399
Black	-0.181	0.142	-1.28	.201	-0.458	0.096
Hispanic	-0.129	0.140	-0.92	.358	-0.403	0.146
White	-0.110	0.142	-0.77	.441	-0.388	0.169
Two or more races	-0.152	0.146	-1.04	.300	-0.439	0.135
Special Education	-0.144	0.009	-15.95	.000	-0.162	-0.126
Sex	-0.042	0.007	-6.17	.000	-0.056	-0.029
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	-0.006	0.021	-0.29	.776	-0.048	0.036
Town	-0.047	0.030	-1.53	.125	-0.106	0.013
Rural	-0.036	0.027	-1.35	.177	-0.089	0.016
Campus Enrollment	-0.000	0.000	-0.03	.975	-0.000	0.000
Economically Disadvantaged Percentage	0.003	0.001	3.34	.001	0.001	0.004
2024 Campus mean score	0.176	0.033	5.26	.000	0.110	0.241
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.029	0.003			0.024	0.035
Campus	0.371	0.006			0.360	0.382

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 12,691 and the total number of comparison students was 58,394.

Table A2. Multilevel Regression Results for STAAR-Mathematics Score, 2 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	0.364	0.194	1.87	.061	-0.017	0.745
Student-Level Variables						
Texas ACE participation	0.060	0.026	2.27	.023	0.008	0.112
2023 STAAR-Mathematics score	0.622	0.011	54.21	.000	0.599	0.644
Grade Level (Ref: Grade 5)						
Grade 6	-0.012	0.032	-0.39	.697	-0.075	0.050
Grade 7	0.144	0.034	4.18	.000	0.076	0.211
Grade 8	0.162	0.041	3.92	.000	0.081	0.243
Economically Disadvantaged	-0.092	0.016	-5.57	.000	-0.124	-0.060
Emergent Bilingual/English Learner	0.083	0.020	4.17	.000	0.044	0.122
At risk	-0.310	0.018	-17.33	.000	-0.346	-0.275
Gifted and Talented	0.313	0.033	9.55	.000	0.248	0.377
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	-0.016	0.207	-0.08	.938	-0.421	0.389
Black	-0.307	0.157	-1.95	.051	-0.614	0.001
Hispanic	-0.239	0.159	-1.50	.134	-0.551	0.074
White	-0.284	0.163	-1.74	.081	-0.602	0.035
Two or more races	-0.394	0.168	-2.34	.019	-0.724	-0.065
Special Education	-0.143	0.015	-9.67	.000	-0.172	-0.114
Sex	-0.006	0.012	-0.46	.645	-0.030	0.018
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.043	0.032	1.35	.178	-0.020	0.106
Town	-0.046	0.045	-1.02	.306	-0.134	0.042
Rural	0.013	0.042	0.31	.759	-0.069	0.094
Campus Enrollment	0.000	0.000	1.30	.194	-0.000	0.000
Economically Disadvantaged Percentage	0.002	0.001	1.45	.146	-0.001	0.004
2023 Campus mean score	0.102	0.044	2.30	.021	0.015	0.188
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.047	0.005			0.038	0.058
Campus	0.412	0.010			0.393	0.432

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 4,336 and the total number of comparison students was 34,647.

Table A3. Multilevel Regression Results for STAAR-Mathematics Score and Interaction Effect, 1 Year, Cycle 11

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	-0.163	0.147	-1.11	.267	-0.451	0.125
Student-Level Variables						
Texas ACE participation	0.002	0.019	0.09	.930	-0.035	0.038
Did Not Meet Grade Level	0.013	0.014	0.93	.352	-0.014	0.039
Treatment x Did Not Meet	0.034	0.016	2.11	.034	0.002	0.065
2024 STAAR-Mathematics score	0.680	0.008	82.35	.000	0.664	0.696
Grade Level (Ref: Grade 4)						
Grade 5	-0.008	0.019	-0.44	.659	-0.046	0.029
Grade 6	0.021	0.030	0.71	.478	-0.038	0.080
Grade 7	0.150	0.026	5.71	.000	0.099	0.202
Grade 8	0.138	0.031	4.50	.000	0.078	0.197
Economically Disadvantaged	-0.064	0.009	-6.82	.000	-0.083	-0.046
Emergent Bilingual/English Learner	0.027	0.010	2.76	.006	0.008	0.045
At risk	-0.137	0.011	-12.98	.000	-0.157	-0.116
Gifted and Talented	0.334	0.017	20.13	.000	0.301	0.367
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.231	0.140	1.65	.099	-0.043	0.505
Black	0.039	0.132	0.30	.765	-0.219	0.297
Hispanic	0.089	0.132	0.67	.501	-0.170	0.348
White	0.115	0.136	0.85	.397	-0.151	0.382
Two or more races	0.072	0.133	0.55	.585	-0.187	0.332
Special Education	-0.154	0.008	-20.01	.000	-0.169	-0.139
Sex	-0.052	0.006	-8.48	.000	-0.064	-0.040
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	-0.020	0.017	-1.19	.233	-0.053	0.013
Town	-0.041	0.025	-1.59	.111	-0.090	0.009
Rural	-0.059	0.024	-2.51	.012	-0.106	-0.013
Campus Enrollment	-0.000	0.000	-1.18	.239	-0.000	0.000
Economically Disadvantaged Percentage	0.003	0.001	5.31	.000	0.002	0.005
2024 Campus mean score	0.275	0.027	10.08	.000	0.222	0.329
Random Effects						
	Est.	St. Err.			[95% Confidence Interval]	
Student	0.023	0.002			0.020	0.028
Campus	0.362	0.005			0.352	0.372

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 17,094 and the total number of comparison students was 60,965.

Table A4. Multilevel Regression Results for STAAR-Mathematics Score and Interaction Effect, 2 Year, Cycle 11

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	-0.364	0.133	-2.73	.006	-0.625	-0.103
Student-Level Variables						
Texas ACE participation	0.007	0.030	0.22	.823	-0.051	0.065
Did Not Meet Grade Level	0.032	0.019	1.68	.093	-0.005	0.069
Treatment x Did Not Meet	0.058	0.025	2.31	.021	0.009	0.107
2023 STAAR-Mathematics score	0.627	0.013	48.49	.000	0.602	0.652
Grade Level (Ref: Grade 5)						
Grade 6	-0.039	0.040	-0.98	.328	-0.117	0.039
Grade 7	0.075	0.035	2.12	.034	0.006	0.145
Grade 8	0.136	0.039	3.50	.000	0.060	0.211
Economically Disadvantaged	-0.049	0.014	-3.47	.001	-0.076	-0.021
Emergent Bilingual/English Learner	0.098	0.016	6.17	.000	0.067	0.129
At risk	-0.281	0.017	-16.99	.000	-0.313	-0.249
Gifted and Talented	0.354	0.026	13.62	.000	0.303	0.405
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.464	0.166	2.80	.005	0.139	0.790
Black	0.317	0.096	3.30	.001	0.129	0.506
Hispanic	0.320	0.096	3.33	.001	0.131	0.508
White	0.377	0.099	3.80	.000	0.183	0.571
Two or more races	0.308	0.104	2.96	.003	0.104	0.511
Special Education	-0.158	0.013	-12.21	.000	-0.183	-0.133
Sex	-0.008	0.011	-0.68	.495	-0.029	0.014
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.007	0.027	0.24	.807	-0.047	0.060
Town	-0.024	0.040	-0.60	.550	-0.103	0.055
Rural	-0.029	0.040	-0.72	.473	-0.107	0.050
Campus Enrollment	0.000	0.000	0.63	.532	-0.000	0.000
Economically Disadvantaged Percentage	0.003	0.001	3.25	.001	0.001	0.006
2023 Campus mean score	0.172	0.044	3.89	.000	0.085	0.259
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.050	0.005			0.041	0.061
Campus	0.404	0.008			0.389	0.420

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 5,944 and the total number of comparison students was 35,493.

Table A5. Multilevel Logistic Regression Results for STAAR-Mathematics Performance Level, 1 Year, Cycle 11

Fixed Effects	OR	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	1.186	0.290	0.70	.485	0.734	1.916
Student-Level Variables						
Texas ACE participation	1.166	0.064	2.80	.005	1.047	1.298
2024 STAAR-Mathematics score	4.672	0.294	24.53	.000	4.130	5.284
Grade Level (Ref: Grade 4)						
Grade 5	1.309	0.090	3.89	.000	1.143	1.499
Grade 6	1.499	0.128	4.73	.000	1.267	1.773
Grade 7	0.462	0.044	-8.20	.000	0.384	0.556
Grade 8	1.477	0.122	4.71	.000	1.256	1.737
Economically Disadvantaged	0.794	0.048	-3.85	.000	0.706	0.893
Emergent Bilingual/English Learner	0.968	0.043	-0.73	.464	0.887	1.056
At risk	0.807	0.065	-2.64	.008	0.689	0.946
Gifted and Talented	2.550	0.525	4.55	.000	1.703	3.816
Race/Ethnicity (Ref: Black)						
Hispanic	1.228	0.065	3.90	.000	1.108	1.362
White	1.330	0.124	3.06	.002	1.108	1.597
Other	1.081	0.162	0.52	.600	0.807	1.449
Special Education	0.483	0.021	-16.64	.000	0.443	0.526
Sex	1.037	0.035	1.09	.277	0.971	1.108
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.909	0.061	-1.43	.154	0.797	1.036
Town	0.786	0.069	-2.76	.006	0.662	0.932
Rural	0.816	0.082	-2.02	.043	0.670	0.994
Campus Enrollment	1.000	0.000	-1.61	.107	1.000	1.000
Economically Disadvantage Percentage	1.010	0.002	3.87	.000	1.005	1.015
2024 Campus mean score	2.637	0.261	9.81	.000	2.172	3.200
Random Effects						
	Est.	St. Err.	[95% Confidence Interval]			
Campus	0.156	0.026	0.113 0.215			

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; OR = Odds Ratio; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 6,883 and the total number of comparison students was 26,003.

Table A6. Multilevel Logistic Regression Results for STAAR-Mathematics Performance Level, 1 Year, Cycle 12

Fixed Effects	OR	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	1.487	0.435	1.36	.175	0.838	2.638
Student-Level Variables						
Texas ACE participation	1.267	0.079	3.77	.000	1.120	1.433
2024 STAAR-Mathematics score	4.515	0.454	14.98	.000	3.707	5.499
Grade Level (Ref: Grade 4)						
Grade 5	1.332	0.091	4.19	.000	1.165	1.524
Grade 6	1.333	0.113	3.40	.001	1.130	1.573
Grade 7	0.380	0.037	-9.80	.000	0.313	0.461
Grade 8	1.346	0.129	3.11	.002	1.116	1.624
Economically Disadvantaged	0.758	0.050	-4.20	.000	0.666	0.863
Emergent Bilingual/English Learner	0.926	0.049	-1.45	.147	0.834	1.027
At risk	0.740	0.072	-3.11	.002	0.612	0.895
Gifted and Talented	1.794	0.409	2.56	.010	1.148	2.803
Race/Ethnicity (Ref: Black)						
Hispanic	1.298	0.088	3.86	.000	1.137	1.482
White	1.370	0.139	3.10	.002	1.123	1.672
Other	1.412	0.300	1.63	.104	0.931	2.140
Special Education	0.472	0.022	-15.78	.000	0.430	0.518
Sex	0.982	0.040	-0.45	.651	0.906	1.064
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	1.040	0.079	0.52	.604	0.896	1.207
Town	0.879	0.103	-1.10	.273	0.698	1.107
Rural	0.866	0.077	-1.62	.105	0.727	1.031
Campus Enrollment	1.000	0.000	-0.59	.557	1.000	1.000
Economically Disadvantage Percentage	1.007	0.003	2.54	.011	1.002	1.012
2024 Campus mean score	1.883	0.219	5.44	.000	1.499	2.366
Random Effects	Est.	St. Err.	[95% Confidence Interval]			
Campus	0.150	0.030	0.102 0.221			

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; OR = Odds Ratio; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 4,821 and the total number of comparison students was 24,580.

Table A7. Multilevel Logistic Regression Results for STAAR-Mathematics Performance Level, 2 Years, Cycle 11

Fixed Effects	OR	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	1.943	0.785	1.64	.100	0.880	4.291
Student-Level Variables						
Texas ACE participation	1.326	0.114	3.28	.001	1.120	1.569
2023 STAAR-Mathematics score	2.419	0.281	7.61	.000	1.926	3.037
Grade Level (Ref: Grade 5)						
Grade 6	0.911	0.088	-0.97	.333	0.753	1.101
Grade 7	0.309	0.043	-8.45	.000	0.236	0.406
Grade 8	1.061	0.108	0.58	.559	0.870	1.295
Economically Disadvantaged	0.839	0.082	-1.81	.070	0.693	1.015
Emergent Bilingual/English Learner	1.314	0.097	3.70	.000	1.137	1.519
At risk	0.467	0.058	-6.17	.000	0.367	0.595
Gifted and Talented	3.088	1.278	2.72	.006	1.372	6.950
Race/Ethnicity (Ref: Black)						
Hispanic	1.054	0.088	0.63	.526	0.896	1.240
White	1.021	0.163	0.13	.899	0.746	1.396
Other	0.896	0.249	-0.40	.692	0.519	1.545
Special Education	0.520	0.035	-9.74	.000	0.456	0.593
Sex	1.127	0.068	1.99	.047	1.002	1.268
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.956	0.095	-0.46	.646	0.787	1.160
Town	0.860	0.120	-1.08	.282	0.654	1.132
Rural	0.915	0.132	-0.62	.535	0.690	1.213
Campus Enrollment	1.000	0.000	-1.50	.132	0.999	1.000
Economically Disadvantage Percentage	1.008	0.004	2.00	.045	1.000	1.016
2023 Campus mean score	2.288	0.333	5.68	.000	1.719	3.044
Random Effects	Est.	St. Err.	[95% Confidence Interval]			
Campus	0.133	0.046	0.068 0.261			

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; OR = Odds Ratio; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 1,973 and the total number of comparison students was 13,136.

Table A8. Multilevel Logistic Regression Results for STAAR-Mathematics Performance Level, 2 Years, Cycle 12

Fixed Effects	OR	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	2.902	1.306	2.37	.018	1.201	7.008
Student-Level Variables						
Texas ACE participation	1.292	0.120	2.77	.006	1.078	1.549
2023 STAAR-Mathematics score	3.250	0.416	9.21	.000	2.529	4.176
Grade Level (Ref: Grade 5)						
Grade 6	0.847	0.097	-1.46	.145	0.677	1.059
Grade 7	0.253	0.037	-9.34	.000	0.189	0.337
Grade 8	0.988	0.134	-0.09	.932	0.758	1.289
Economically Disadvantaged	0.746	0.082	-2.67	.008	0.601	0.925
Emergent Bilingual/English Learner	1.202	0.111	2.00	.046	1.004	1.440
At risk	0.495	0.066	-5.28	.000	0.382	0.643
Gifted and Talented	1.249	0.637	0.44	.663	0.460	3.392
Race/Ethnicity (Ref: Black)						
Hispanic	1.185	0.148	1.36	.175	0.928	1.513
White	1.166	0.271	0.66	.510	0.739	1.839
Other	1.319	0.432	0.84	.399	0.694	2.507
Special Education	0.536	0.042	-7.90	.000	0.460	0.626
Sex	1.005	0.072	0.07	.942	0.874	1.156
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	1.324	0.152	2.44	.015	1.057	1.658
Town	0.943	0.159	-0.35	.726	0.678	1.311
Rural	0.942	0.129	-0.44	.662	0.719	1.233
Campus Enrollment	1.000	0.000	-1.36	.174	0.999	1.000
Economically Disadvantage Percentage	1.006	0.004	1.41	.157	0.998	1.014
2023 Campus mean score	1.610	0.273	2.80	.005	1.154	2.246
Random Effects	Est.	St. Err.	[95% Confidence Interval]			
Campus	0.056	0.057	0.008 0.413			

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; OR = Odds Ratio; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 1,402 and the total number of comparison students was 12,931.

Table A9. Generalized Propensity Score Model Results for STAAR-Mathematics, 1 Year

	Coef.	Std. Err.	t	p	[95% Confidence Interval]	
Intercept	0.020	0.025	0.800	.424	-0.029	0.069
2024 STAAR-Mathematics score	0.080	0.007	12.230	.000	0.067	0.093
Sex	0.040	0.010	3.990	.000	0.020	0.060
Race/Ethnicity (Ref: White)						
Black	0.360	0.024	14.940	.000	0.313	0.407
Hispanic	0.120	0.021	5.830	.000	0.080	0.160
Other	0.260	0.038	6.850	.000	0.186	0.334
Emergent Bilingual/English Learner	-0.110	0.014	-7.630	.000	-0.138	-0.082
At risk	0.060	0.015	4.010	.000	0.031	0.089
Special Education	0.050	0.015	3.430	.001	0.021	0.079
Economically Disadvantaged	-0.140	0.016	-8.910	.000	-0.171	-0.109
Grade Level (Ref: Grade 4)						
Grade 5	-0.090	0.015	-6.180	.000	-0.119	-0.061
Grade 6	-0.620	0.016	-37.820	.000	-0.652	-0.588
Grade 7	-0.720	0.016	-44.000	.000	-0.752	-0.688
Grade 8	-0.850	0.018	-46.530	.000	-0.886	-0.814

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES 2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; t = t statistic; p-value = probability value; Ref = Reference group; statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 39,773.

Table A10. Generalized Propensity Score Model Results for STAAR-Mathematics, 2 Year

	Coef.	Std. Err.	t	p	[95% Confidence Interval]	
Intercept	-0.270	0.032	-8.490	.000	-0.332	-0.208
2024 STAAR-Mathematics score	0.060	0.008	7.310	.000	0.044	0.076
Sex	0.030	0.013	2.390	.017	0.005	0.055
Race/Ethnicity (Ref: White)						
Black	0.290	0.031	9.290	.000	0.229	0.351
Hispanic	0.160	0.027	5.900	.000	0.107	0.213
Other	0.220	0.053	4.180	.000	0.117	0.323
Emergent Bilingual/English Learner	-0.140	0.018	-7.960	.000	-0.174	-0.106
At risk	0.020	0.023	0.860	.390	-0.026	0.066
Special Education	0.070	0.018	3.940	.000	0.035	0.105
Economically Disadvantaged	-0.120	0.019	-6.290	.000	-0.157	-0.083
Grade Level (Ref: Grade 4)						
Grade 6	-0.400	0.019	-21.420	.000	-0.437	-0.363
Grade 7	-0.610	0.018	-34.480	.000	-0.645	-0.575
Grade 8	-0.770	0.019	-39.820	.000	-0.808	-0.732

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES 2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; t = t statistic; p-value = probability value; Ref = Reference group; statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 23,617.

STAAR-RLA

Table A11. Multilevel Regression Results for STAAR-RLA Score, 1 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	-0.222	0.107	-2.09	.037	-0.431	-0.014
Student-Level Variables						
Texas ACE participation	0.024	0.011	2.30	.022	0.004	0.045
2024 STAAR-RLA score	0.692	0.007	92.56	.000	0.677	0.707
Grade Level (Ref: Grade 4)						
Grade 5	-0.010	0.012	-0.79	.432	-0.033	0.014
Grade 6	0.037	0.015	2.49	.013	0.008	0.067
Grade 7	0.013	0.016	0.85	.398	-0.017	0.044
Grade 8	0.056	0.014	3.93	.000	0.028	0.084
Economically Disadvantaged	-0.067	0.009	-7.06	.000	-0.086	-0.048
Emergent Bilingual/English Learner	0.005	0.010	0.51	.607	-0.015	0.025
At risk	-0.146	0.009	-16.83	.000	-0.163	-0.129
Gifted and Talented	0.214	0.013	16.83	.000	0.189	0.239
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.228	0.115	1.98	.048	0.002	0.454
Black	0.117	0.096	1.21	.226	-0.072	0.306
Hispanic	0.156	0.097	1.60	.109	-0.035	0.346
White	0.188	0.100	1.89	.059	-0.007	0.383
Two or more races	0.147	0.103	1.43	.154	-0.055	0.348
Special Education	-0.262	0.009	-27.97	.000	-0.280	-0.243
Sex	0.106	0.006	18.32	.000	0.095	0.118
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	-0.016	0.013	-1.23	.218	-0.041	0.009
Town	-0.036	0.017	-2.13	.033	-0.069	-0.003
Rural	-0.025	0.015	-1.60	.109	-0.055	0.006
Campus Enrollment	0.000	0.000	0.59	.553	-0.000	0.000
Economically Disadvantaged Percentage	0.003	0.000	5.92	.000	0.002	0.004
2024 Campus mean score	0.139	0.019	7.19	.000	0.101	0.176
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.008	0.001			0.006	0.009
Campus	0.281	0.004			0.274	0.289

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 13,100 and the total number of comparison students was 56,849.

Table A12. Multilevel Regression Results for STAAR-RLA Score and Interaction Effect, 1 Year, Cycle 11

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	-0.031	0.094	-0.33	.743	-0.215	0.154
Student-Level Variables						
Texas ACE participation	-0.012	0.011	-1.04	.300	-0.034	0.011
Did Not Meet Grade Level	-0.118	0.012	-10.01	.000	-0.141	-0.095
Treatment x Did Not Meet	0.048	0.013	3.66	.000	0.022	0.074
2024 STAAR-RLA score	0.666	0.007	94.45	.000	0.652	0.679
Grade Level (Ref: Grade 4)						
Grade 5	-0.021	0.012	-1.79	.074	-0.043	0.002
Grade 6	0.035	0.017	2.12	.034	0.003	0.068
Grade 7	0.014	0.014	0.99	.322	-0.014	0.042
Grade 8	0.071	0.015	4.63	.000	0.041	0.101
Economically Disadvantaged	-0.046	0.008	-5.63	.000	-0.062	-0.030
Emergent Bilingual/English Learner	0.007	0.009	0.81	.419	-0.010	0.025
At risk	-0.144	0.008	-17.56	.000	-0.160	-0.128
Gifted and Talented	0.237	0.011	21.12	.000	0.215	0.259
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.103	0.091	1.14	.254	-0.074	0.281
Black	0.042	0.082	0.51	.607	-0.118	0.202
Hispanic	0.075	0.081	0.92	.355	-0.084	0.234
White	0.094	0.082	1.15	.252	-0.067	0.255
Two or more races	0.063	0.088	0.71	.476	-0.110	0.236
Special Education	-0.227	0.008	-27.90	.000	-0.243	-0.211
Sex	0.089	0.006	15.94	.000	0.078	0.100
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	-0.003	0.012	-0.29	.772	-0.027	0.020
Town	-0.070	0.015	-4.60	.000	-0.100	-0.040
Rural	-0.062	0.015	-4.04	.000	-0.092	-0.032
Campus Enrollment	-0.000	0.000	-2.02	.043	-0.000	-0.000
Economically Disadvantaged Percentage	0.002	0.000	4.04	.000	0.001	0.003
2024 Campus mean score	0.157	0.018	8.54	.000	0.121	0.193
Random Effects						
	Est.	St. Err.			[95% Confidence Interval]	
Student	0.008	0.001			0.007	0.010
Campus	0.284	0.003			0.278	0.290

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 17,711 and the total number of comparison students was 60,333.

Table A13. Multilevel Regression Results for STAAR-RLA Score and Interaction Effect, 1 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	-0.204	0.107	-1.91	.056	-0.414	0.006
Student-Level Variables						
Texas ACE participation	0.002	0.011	0.19	.850	-0.020	0.025
Did Not Meet Grade Level	-0.091	0.014	-6.55	.000	-0.119	-0.064
Treatment x Did Not Meet	0.071	0.015	4.80	.000	0.042	0.100
2024 STAAR-RLA score	0.672	0.010	66.19	.000	0.652	0.692
Grade Level (Ref: Grade 4)						
Grade 5	-0.014	0.012	-1.15	.250	-0.038	0.010
Grade 6	0.035	0.015	2.31	.021	0.005	0.064
Grade 7	0.013	0.016	0.80	.421	-0.018	0.043
Grade 8	0.056	0.014	3.93	.000	0.028	0.084
Economically Disadvantaged	-0.068	0.009	-7.18	.000	-0.087	-0.050
Emergent Bilingual/English Learner	0.004	0.010	0.36	.716	-0.016	0.024
At risk	-0.143	0.009	-16.62	.000	-0.160	-0.126
Gifted and Talented	0.222	0.013	16.91	.000	0.196	0.248
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.235	0.116	2.02	.043	0.007	0.463
Black	0.120	0.097	1.24	.216	-0.070	0.311
Hispanic	0.159	0.098	1.63	.103	-0.032	0.351
White	0.193	0.100	1.93	.054	-0.003	0.390
Two or more races	0.151	0.103	1.46	.145	-0.052	0.354
Special Education	-0.255	0.009	-27.99	.000	-0.273	-0.237
Sex	0.106	0.006	18.26	.000	0.095	0.118
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	-0.016	0.013	-1.26	.208	-0.041	0.009
Town	-0.036	0.017	-2.15	.032	-0.070	-0.003
Rural	-0.026	0.016	-1.66	.097	-0.056	0.005
Campus Enrollment	0.000	0.000	0.69	.487	-0.000	0.000
Economically Disadvantaged Percentage	0.003	0.000	6.04	.000	0.002	0.004
2024 Campus mean score	0.138	0.019	7.19	.000	0.101	0.176
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.008	0.001			0.006	0.009
Campus	0.281	0.004			0.273	0.289

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 13,100 and the total number of comparison students was 56,849.

Table A14. Multilevel Regression Results for STAAR-RLA Score and Interaction Effect, 2 Year, Cycle 11

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	0.021	0.153	0.13	.893	-0.280	0.321
Student-Level Variables						
Texas ACE participation	-0.016	0.018	-0.94	.346	-0.051	0.018
Did Not Meet Grade Level	-0.142	0.018	-7.82	.000	-0.177	-0.106
Treatment x Did Not Meet	0.076	0.020	3.69	.000	0.035	0.116
2023 STAAR-RLA score	0.578	0.011	51.37	.000	0.556	0.600
Grade Level (Ref: Grade 5)						
Grade 6	0.051	0.024	2.14	.033	0.004	0.098
Grade 7	0.050	0.020	2.43	.015	0.010	0.090
Grade 8	0.093	0.019	4.86	.000	0.055	0.130
Economically Disadvantaged	-0.038	0.012	-3.06	.002	-0.062	-0.014
Emergent Bilingual/English Learner	0.055	0.015	3.78	.000	0.027	0.083
At risk	-0.282	0.013	-21.56	.000	-0.308	-0.257
Gifted and Talented	0.225	0.019	11.55	.000	0.187	0.263
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.298	0.138	2.16	.031	0.027	0.568
Black	-0.022	0.135	-0.17	.868	-0.287	0.242
Hispanic	0.046	0.135	0.34	.733	-0.218	0.310
White	0.039	0.137	0.29	.773	-0.229	0.308
Two or more races	0.040	0.141	0.28	.778	-0.237	0.317
Special Education	-0.263	0.012	-21.82	.000	-0.287	-0.239
Sex	0.114	0.009	13.34	.000	0.097	0.130
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.040	0.019	2.11	.035	0.003	0.077
Town	-0.068	0.025	-2.71	.007	-0.117	-0.019
Rural	-0.035	0.026	-1.34	.180	-0.085	0.016
Campus Enrollment	-0.000	0.000	-0.71	.476	-0.000	0.000
Economically Disadvantaged Percentage	0.003	0.001	3.34	.001	0.001	0.004
2023 Campus mean score	0.114	0.031	3.72	.000	0.054	0.175
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.015	0.002			0.011	0.019
Campus	0.306	0.005			0.297	0.316

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User's Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 6,267 and the total number of comparison students was 33,199.

Table A15. Multilevel Regression Results for STAAR-RLA Score and Interaction Effect, 2 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	-0.337	0.233	-1.44	.149	-0.794	0.120
Student-Level Variables						
Texas ACE participation	-0.020	0.019	-1.04	.297	-0.057	0.017
Did Not Meet Grade Level	-0.131	0.019	-7.06	.000	-0.167	-0.095
Treatment x Did Not Meet	0.080	0.025	3.23	.001	0.031	0.129
2023 STAAR-RLA score	0.588	0.012	47.14	.000	0.564	0.613
Grade Level (Ref: Grade 5)						
Grade 6	0.028	0.020	1.36	.173	-0.012	0.068
Grade 7	0.051	0.021	2.45	.014	0.010	0.092
Grade 8	0.103	0.019	5.43	.000	0.066	0.140
Economically Disadvantaged	-0.088	0.013	-6.78	.000	-0.114	-0.063
Emergent Bilingual/English Learner	0.054	0.017	3.12	.002	0.020	0.087
At risk	-0.256	0.016	-15.93	.000	-0.287	-0.224
Gifted and Talented	0.250	0.019	13.15	.000	0.213	0.288
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.422	0.238	1.78	.076	-0.044	0.888
Black	0.314	0.226	1.39	.166	-0.130	0.758
Hispanic	0.403	0.223	1.81	.070	-0.034	0.840
White	0.393	0.222	1.77	.076	-0.041	0.828
Two or more races	0.490	0.228	2.16	.031	0.044	0.936
Special Education	-0.277	0.017	-16.56	.000	-0.310	-0.244
Sex	0.102	0.009	10.99	.000	0.084	0.120
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.019	0.020	0.97	.334	-0.020	0.058
Town	-0.060	0.033	-1.81	.070	-0.125	0.005
Rural	0.005	0.026	0.18	.857	-0.046	0.055
Campus Enrollment	0.000	0.000	1.30	.193	-0.000	0.000
Economically Disadvantaged Percentage	0.003	0.001	3.32	.001	0.001	0.004
2023 Campus mean score	0.089	0.030	3.00	.003	0.031	0.148
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.013	0.002			0.009	0.017
Campus	0.303	0.006			0.291	0.314

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 4,557 and the total number of comparison students was 31,234.

Table A16. Multilevel Logistic Regression Results for STAAR-RLA Performance Level, 1 Year, Cycle 12

Fixed Effects	OR	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	3.698	1.194	4.05	.000	1.963	6.964
Student-Level Variables						
Texas ACE participation	1.220	0.063	3.83	.000	1.102	1.351
2023 STAAR-RLA score	6.005	0.713	15.10	.000	4.758	7.578
Grade Level (Ref: Grade 4)						
Grade 5	0.680	0.051	-5.17	.000	0.588	0.787
Grade 6	0.598	0.045	-6.89	.000	0.517	0.692
Grade 7	0.480	0.041	-8.57	.000	0.406	0.568
Grade 8	0.920	0.073	-1.05	.294	0.788	1.074
Economically Disadvantaged	0.712	0.058	-4.18	.000	0.607	0.835
Emergent Bilingual/English Learner	1.038	0.058	0.67	.505	0.930	1.159
At risk	1.057	0.137	0.43	.670	0.820	1.363
Gifted and Talented	2.948	1.099	2.90	.004	1.420	6.120
Race/Ethnicity (Ref: Black)						
Hispanic	1.063	0.074	0.88	.380	0.927	1.218
White	1.266	0.159	1.88	.060	0.990	1.619
Other	1.160	0.261	0.66	.510	0.746	1.802
Special Education	0.345	0.018	20.54	.000	0.312	0.382
Sex	1.359	0.061	6.83	.000	1.244	1.484
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.970	0.060	-0.49	.626	0.860	1.095
Town	0.827	0.078	-2.00	.046	0.687	0.996
Rural	0.903	0.071	-1.31	.191	0.774	1.052
Campus Enrollment	1.000	0.000	-0.95	.342	1.000	1.000
Economically Disadvantage Percentage	1.006	0.003	2.26	.024	1.001	1.011
2024 Campus mean score	1.745	0.174	5.58	.000	1.435	2.121
Random Effects						
	Est.	St. Err.	[95% Confidence Interval]			
Campus	0.000	0.000	0.000 0.000			

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; OR = Odds Ratio; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 3,970 and the total number of comparison students was 18,921.

Table A17. Generalized Propensity Score Model Results for STAAR-RLA, 1 Year

	Coef.	Std. Err.	t	p	[95% Confidence Interval]	
Intercept	0.050	0.024	2.120	.034	0.004	0.096
2024 STAAR-RLA score	0.050	0.006	8.060	.000	0.038	0.062
Sex	0.020	0.010	1.980	.048	0.000	0.040
Race/Ethnicity (Ref: White)						
Black	0.350	0.023	15.100	.000	0.305	0.395
Hispanic	0.120	0.021	5.760	.000	0.079	0.161
Other	0.270	0.038	7.130	.000	0.196	0.344
Emergent Bilingual/English Learner	-0.090	0.014	-6.240	.000	-0.118	-0.062
At risk	0.020	0.014	1.460	.144	-0.007	0.047
Special Education	0.040	0.014	2.820	.005	0.012	0.068
Economically Disadvantaged	-0.140	0.015	-9.040	.000	-0.170	-0.110
Grade Level (Ref: Grade 4)						
Grade 5	-0.090	0.015	-5.900	.000	-0.120	-0.060
Grade 6	-0.610	0.016	-37.500	.000	-0.642	-0.578
Grade 7	-0.710	0.016	-43.800	.000	-0.742	-0.678
Grade 8	-0.800	0.017	-47.620	.000	-0.833	-0.767

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES 2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; t = t statistic; p-value = probability value; Ref = Reference group; statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 41,256.

Table A18. Generalized Propensity Score Model Results for STAAR-RLA, 2 Year

	Coef.	Std. Err.	t	p	[95% Confidence Interval]	
Intercept	-0.270	0.032	-8.490	.000	-0.332	-0.208
2023 STAAR-RLA score	0.060	0.008	7.310	.000	0.044	0.076
Sex	0.030	0.013	2.390	.017	0.005	0.055
Race/Ethnicity (Ref: White)						
Black	0.290	0.031	9.290	.000	0.229	0.351
Hispanic	0.160	0.027	5.900	.000	0.107	0.213
Other	0.220	0.053	4.180	.000	0.117	0.323
Emergent Bilingual	-0.140	0.018	-7.960	.000	-0.174	-0.106
At risk	0.020	0.023	0.860	.390	-0.026	0.066
Special Education	0.070	0.018	3.940	.000	0.035	0.105
Economic disadvantage status	-0.120	0.019	-6.290	.000	-0.157	-0.083
Grade Level (Ref: Grade 5)						
Grade 6	-0.400	0.019	-21.420	.000	-0.437	-0.363
Grade 7	-0.610	0.018	-34.480	.000	-0.645	-0.575
Grade 8	-0.770	0.019	-39.820	.000	-0.808	-0.732

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES 2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; t = t statistic; p-value = probability value; Ref = Reference group; statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 24,945.

STAAR Algebra I EOC

Table A19. Multilevel Regression Results for STAAR Algebra I EOC Score and Interaction Effect, 1 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	0.560	0.338	1.65	.098	-0.103	1.223
Student-Level Variables						
Texas ACE participation	-0.121	0.058	-2.08	.037	-0.234	-0.007
Did Not Meet Grade Level	-0.031	0.046	-0.66	.508	-0.121	0.060
Treatment x Did Not Meet	0.166	0.058	2.88	.004	0.053	0.280
2024 STAAR-Mathematics score	0.533	0.020	26.32	.000	0.493	0.572
Grade Level (Ref: Grade 7)						
Grade 8	-0.081	0.273	-0.30	.766	-0.615	0.453
Grade 9	-0.019	0.294	-0.06	.948	-0.596	0.558
Economically Disadvantaged	-0.055	0.034	-1.62	.105	-0.122	0.011
Emergent Bilingual/English Learner	-0.024	0.031	-0.79	.431	-0.085	0.036
At risk	-0.167	0.032	-5.24	.000	-0.230	-0.105
Gifted and Talented	0.102	0.035	2.93	.003	0.034	0.171
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	-0.207	0.152	-1.36	.174	-0.506	0.091
Black	-0.615	0.054	-11.30	.000	-0.721	-0.508
Hispanic	-0.537	0.048	-11.25	.000	-0.630	-0.443
White	-0.491	0.049	-10.03	.000	-0.587	-0.395
Two or more races	-0.587	0.101	-5.80	.000	-0.785	-0.389
Special Education	-0.233	0.035	-6.73	.000	-0.301	-0.165
Sex	0.029	0.019	1.49	.137	-0.009	0.066
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.069	0.084	0.81	.415	-0.097	0.234
Town	-0.381	0.088	-4.34	.000	-0.553	-0.209
Rural	-0.128	0.082	-1.57	.117	-0.288	0.032
Campus Enrollment	0.000	0.000	1.81	.070	-0.000	0.000
Economically Disadvantaged Percentage	0.002	0.002	1.08	.279	-0.002	0.007
2024 Campus mean score	0.167	0.082	2.03	.042	0.006	0.328
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.098	0.017			0.070	0.138
Campus	0.304	0.016			0.274	0.338

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 1,948 and the total number of comparison students was 3,585.

Table A20. Generalized Propensity Score Model Results for STAAR Algebra I EOC, 1 Year

	Coef.	Std. Err.	t	p	[95% Confidence Interval]	
Intercept	0.080	-0.148	-0.540	.589	0.370	-0.210
2024 STAAR-Mathematics score	0.050	0.022	2.310	.021	0.008	0.092
Sex	0.060	-0.033	-1.820	.069	0.125	-0.005
Race/Ethnicity (Ref: White)						
Black	0.280	0.075	3.740	.000	0.133	0.427
Hispanic	0.020	0.051	0.390	.697	-0.081	0.121
Other	0.170	0.124	1.370	.171	-0.073	0.413
Emergent Bilingual/English Learner	0.130	0.052	2.510	.012	0.028	0.232
At risk	0.000	0.000	0.020	.984	0.000	0.000
Special Education	0.100	0.060	1.660	.097	-0.018	0.218
Economically Disadvantaged	0.050	-0.051	-0.990	.322	0.149	-0.049
Grade Level (Ref: Grade 4)						
Grade 7	0.500	-0.134	-3.720	.000	0.763	0.237
Grade 8	1.010	-0.138	-7.320	.000	1.280	0.740

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES 2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; t = t statistic; p-value = probability value; Ref = Reference group; statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 3,628.

Table A21. Generalized Propensity Score Model Results for STAAR Algebra I EOC, 2 Year

	Coef.	Std. Err.	t	p	[95% Confidence Interval]	
Intercept	0.350	-0.152	-2.300	.022	0.648	0.052
2024 STAAR-Mathematics score	0.030	-0.021	-1.450	.147	0.071	-0.011
Sex	0.040	-0.039	-1.020	.308	0.117	-0.037
Race/Ethnicity (Ref: White)						
Black	0.140	0.081	1.730	.084	-0.019	0.299
Hispanic	0.060	0.062	0.970	.332	-0.061	0.181
Other	0.240	0.128	1.870	.062	-0.012	0.492
Emergent Bilingual/English Learner	0.020	-0.069	-0.290	.772	0.155	-0.115
At risk	0.090	-0.046	-1.940	.052	0.181	-0.001
Special Education	0.080	0.062	1.290	.197	-0.042	0.202
Economically Disadvantaged	0.140	-0.047	-3.010	.003	0.231	0.049
Grade Level (Ref: Grade 4)						
Grade 7	0.260	-0.143	-1.820	.069	0.540	-0.020
Grade 8	0.850	-0.142	-5.970	.000	1.129	0.571

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES 2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; t = t statistic; p-value = probability value; Ref = Reference group; statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 3,177.

STAAR English I EOC

Table A22. Multilevel Regression Results for STAAR English I EOC Score and Interaction Effect, 2 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	0.854	0.208	4.11	.000	0.447	1.261
Student-Level Variables						
Texas ACE participation	-0.081	0.038	-2.10	.036	-0.156	-0.005
Did Not Meet Grade Level	-0.035	0.031	-1.13	.258	-0.097	0.026
Treatment x Did Not Meet	0.116	0.035	3.30	.001	0.047	0.185
2023 STAAR-RLA score	0.682	0.020	33.61	.000	0.642	0.722
Grade Level (Ref: Grade 8)						
Grade 9	0.038	0.074	0.52	.605	-0.107	0.183
Grade 10	-0.154	0.080	-1.92	.054	-0.311	0.003
Economically Disadvantaged	-0.078	0.028	-2.76	.006	-0.134	-0.023
Emergent Bilingual/English Learner	-0.024	0.021	-1.16	.245	-0.064	0.016
At risk	-0.199	0.022	-8.95	.000	-0.243	-0.155
Gifted and Talented	0.159	0.035	4.47	.000	0.089	0.228
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	-0.484	0.235	-2.06	.040	-0.945	-0.023
Black	-0.449	0.167	-2.69	.007	-0.776	-0.121
Hispanic	-0.409	0.167	-2.45	.014	-0.737	-0.081
White	-0.411	0.158	-2.61	.009	-0.720	-0.102
Two or more races	-0.436	0.169	-2.58	.010	-0.767	-0.105
Special Education	-0.199	0.029	-6.75	.000	-0.257	-0.141
Sex	0.105	0.018	5.99	.000	0.071	0.139
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	-0.003	0.035	-0.08	.934	-0.071	0.066
Town	-0.136	0.063	-2.18	.030	-0.259	-0.013
Rural	-0.050	0.056	-0.89	.374	-0.159	0.060
Campus Enrollment	-0.000	0.000	-1.65	.098	-0.000	0.000
Economically Disadvantaged Percentage	0.001	0.001	0.82	.411	-0.001	0.003
2023 Campus mean score	0.151	0.057	2.65	.008	0.039	0.263
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	0.012	0.003			0.007	0.021
Campus	0.245	0.007			0.231	0.260

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 1,881 and the total number of comparison students was 5,004.

Table A23. Multilevel Logistic Regression Results for STAAR English I EOC Performance Level, 2 Years, Cycle 12

Fixed Effects	OR	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	1.042	1.700	0.03	.980	0.043	25.506
Student-Level Variables						
Texas ACE participation	1.617	0.311	2.50	.012	1.110	2.356
2023 STAAR English I EOC score	4.057	0.894	6.35	.000	2.634	6.249
Grade Level (Ref: Grade 8)						
Grade 9	0.641	0.846	-0.34	.736	0.048	8.494
Grade 10	0.169	0.224	-1.34	.180	0.013	2.270
Economically Disadvantaged	0.399	0.103	-3.56	.000	0.241	0.662
Emergent Bilingual/English Learner	0.702	0.104	-2.39	.017	0.525	0.938
At risk	0.887	0.224	-0.48	.634	0.541	1.454
Gifted and Talented	1.919	1.598	0.78	.434	0.375	9.816
Race/Ethnicity (Ref: Black)						
Hispanic	1.092	0.219	0.44	.663	0.736	1.618
White	0.624	0.191	-1.54	.123	0.343	1.136
Other	0.812	0.508	-0.33	.740	0.238	2.769
Special Education	0.326	0.057	-6.40	.000	0.232	0.460
Sex	1.405	0.204	2.34	.019	1.057	1.868
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	1.110	0.183	0.63	.527	0.804	1.533
Town	0.623	0.192	-1.53	.125	0.340	1.140
Rural	1.264	0.324	0.91	.360	0.765	2.090
Campus Enrollment	1.000	0.000	1.53	.127	1.000	1.001
Economically Disadvantage Percentage	1.018	0.009	1.94	.053	1.000	1.036
2023 Campus mean score	1.431	0.385	1.33	.183	0.844	2.425
Random Effects						
	Est.	St. Err.			[95% Confidence Interval]	
Campus	0.000	0.000			0.000	0.000

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: STAAR = State of Texas Assessments of Academic Readiness; OR = Odds Ratio; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 746 and the total number of comparison students was 2,458.

Attendance Rates

Table A24. Multilevel Regression Results for Attendance Rates, 1 Year, Cycle 11

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	32.060	1.090	29.40	.000	29.923	34.198
Student-Level Variables						
Texas ACE participation	0.367	0.076	4.85	.000	0.219	0.515
Attendance rate 2024	0.688	0.010	66.77	.000	0.668	0.708
Grade Level (Ref: Grade 1)						
Grade 2	-0.206	0.074	-2.79	.005	-0.351	-0.061
Grade 3	-0.224	0.066	-3.36	.001	-0.354	-0.093
Grade 4	-0.442	0.071	-6.21	.000	-0.581	-0.302
Grade 5	-0.462	0.073	-6.30	.000	-0.605	-0.318
Grade 6	-1.105	0.115	-9.64	.000	-1.330	-0.881
Grade 7	-1.227	0.117	-10.48	.000	-1.457	-0.998
Grade 8	-1.045	0.120	-8.67	.000	-1.281	-0.809
Grade 9	-1.790	0.278	-6.45	.000	-2.334	-1.245
Grade 10	-1.903	0.257	-7.40	.000	-2.407	-1.398
Grade 11	-2.012	0.255	-7.88	.000	-2.512	-1.512
Grade 12	-2.386	0.272	-8.79	.000	-2.918	-1.854
Economically Disadvantaged	-0.465	0.050	-9.31	.000	-0.563	-0.367
Emergent Bilingual/English Learner	0.427	0.053	8.12	.000	0.324	0.530
At risk	-0.467	0.056	-8.37	.000	-0.577	-0.358
Gifted and Talented	0.420	0.060	7.05	.000	0.304	0.537
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.363	0.353	1.03	.304	-0.329	1.055
Black	-0.493	0.330	-1.50	.135	-1.140	0.153
Hispanic	-0.472	0.328	-1.44	.150	-1.115	0.171
White	-0.532	0.335	-1.59	.112	-1.188	0.124
Two or more races	-0.599	0.353	-1.70	.090	-1.291	0.093
Special Education	-0.043	0.054	-0.79	.431	-0.149	0.063
Sex	0.031	0.034	0.90	.368	-0.036	0.098
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.167	0.092	1.82	.069	-0.013	0.347
Town	0.047	0.111	0.42	.673	-0.171	0.264
Rural	0.152	0.121	1.25	.211	-0.086	0.390
Campus Enrollment	-0.000	0.000	-3.08	.002	-0.001	-0.000
Economically Disadvantaged Percentage	-0.013	0.004	-3.45	.001	-0.020	-0.005
Random Effects	Est.	St. Err.	[95% Confidence Interval]			
Student	0.664	0.093	0.505 0.873			
Campus	22.101	1.023	20.185 24.200			

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 45,929 and the total number of comparison students was 60,996.

Table A25. Multilevel Regression Results for Attendance Rates, 1 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	29.862	1.089	27.41	.000	27.727	31.997
Student-Level Variables						
Texas ACE participation	0.326	0.075	4.34	.000	0.179	0.473
Attendance rate 2024	0.705	0.011	61.68	.000	0.683	0.728
Grade Level (Ref: Grade 1)						
Grade 2	-0.169	0.078	-2.18	.030	-0.321	-0.017
Grade 3	-0.270	0.078	-3.46	.001	-0.423	-0.117
Grade 4	-0.396	0.080	-4.92	.000	-0.554	-0.238
Grade 5	-0.475	0.081	-5.84	.000	-0.634	-0.315
Grade 6	-0.900	0.123	-7.32	.000	-1.141	-0.659
Grade 7	-0.937	0.125	-7.52	.000	-1.181	-0.693
Grade 8	-1.039	0.150	-6.93	.000	-1.332	-0.745
Grade 9	-1.476	0.258	-5.73	.000	-1.980	-0.971
Grade 10	-1.719	0.218	-7.88	.000	-2.147	-1.292
Grade 11	-1.685	0.227	-7.44	.000	-2.129	-1.241
Grade 12	-1.886	0.239	-7.88	.000	-2.355	-1.417
Economically Disadvantaged	-0.422	0.052	-8.20	.000	-0.523	-0.321
Emergent Bilingual/English Learner	0.376	0.064	5.91	.000	0.251	0.501
At risk	-0.433	0.052	-8.35	.000	-0.534	-0.331
Gifted and Talented	0.496	0.056	8.88	.000	0.386	0.605
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.355	0.466	0.76	.446	-0.558	1.269
Black	-0.563	0.437	-1.29	.197	-1.419	0.293
Hispanic	-0.313	0.419	-0.75	.455	-1.134	0.508
White	-0.521	0.428	-1.22	.224	-1.360	0.319
Two or more races	-0.399	0.450	-0.89	.375	-1.281	0.483
Special Education	-0.053	0.058	-0.92	.356	-0.167	0.060
Sex	0.010	0.038	0.26	.794	-0.064	0.084
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.155	0.101	1.53	.126	-0.043	0.353
Town	-0.106	0.107	-0.98	.325	-0.316	0.105
Rural	0.112	0.106	1.06	.290	-0.095	0.319
Campus Enrollment	-0.000	0.000	-1.86	.063	-0.001	0.000
Economically Disadvantaged Percentage	-0.009	0.003	-3.14	.002	-0.015	-0.004
Random Effects						
Student	0.678	0.114			0.488	0.944
Campus	22.640	1.152			20.490	25.015

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 41,550 and the total number of comparison students was 59,297.

Table A26. Multilevel Regression Results for Attendance Rates, 2 Year, Cycle 11

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	43.132	1.217	35.44	.000	40.747	45.518
Student-Level Variables						
Texas ACE participation	0.405	0.101	4.03	.000	0.208	0.603
Attendance rate 2023	0.584	0.012	50.62	.000	0.561	0.607
Grade Level (Ref: Grade 2)						
Grade 3	-0.359	0.069	-5.23	.000	-0.493	-0.224
Grade 4	-0.602	0.077	-7.85	.000	-0.753	-0.452
Grade 5	-0.870	0.079	-10.95	.000	-1.026	-0.715
Grade 6	-1.640	0.133	-12.31	.000	-1.901	-1.379
Grade 7	-2.288	0.143	-15.99	.000	-2.568	-2.007
Grade 8	-1.927	0.140	-13.77	.000	-2.201	-1.653
Grade 9	-3.618	0.442	-8.19	.000	-4.485	-2.752
Grade 10	-3.495	0.387	-9.03	.000	-4.253	-2.737
Grade 11	-3.689	0.405	-9.11	.000	-4.484	-2.895
Grade 12	-3.956	0.422	-9.38	.000	-4.783	-3.129
Economically Disadvantaged	-0.686	0.064	-10.76	.000	-0.811	-0.561
Emergent Bilingual/English Learner	0.653	0.076	8.58	.000	0.504	0.802
At risk	-0.770	0.081	-9.48	.000	-0.929	-0.611
Gifted and Talented	0.627	0.067	9.32	.000	0.495	0.759
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	0.125	0.571	0.22	.826	-0.995	1.245
Black	-0.938	0.557	-1.68	.092	-2.029	0.153
Hispanic	-0.941	0.561	-1.68	.093	-2.040	0.158
White	-1.044	0.571	-1.83	.068	-2.164	0.075
Two or more races	-1.212	0.601	-2.01	.044	-2.391	-0.033
Special Education	-0.113	0.072	-1.57	.117	-0.255	0.028
Sex	0.031	0.047	0.66	.506	-0.060	0.122
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.286	0.110	2.61	.009	0.071	0.501
Town	-0.071	0.181	-0.39	.695	-0.425	0.283
Rural	0.132	0.146	0.90	.366	-0.154	0.417
Campus Enrollment	-0.000	0.000	-1.23	.220	-0.001	0.000
Economically Disadvantaged Percentage	-0.011	0.005	-2.50	.012	-0.020	-0.002
Random Effects						
	Est.	St. Err.			[95% Confidence Interval]	
Student	1.304	0.318			0.809	2.102
Campus	31.221	1.552			28.323	34.416

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 40,733 and the total number of comparison students was 61,757.

Table A27. Multilevel Regression Results for Attendance Rates, 2 Year, Cycle 12

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	41.727	1.301	32.06	.000	39.177	44.278
Student-Level Variables						
Texas ACE participation	0.381	0.100	3.82	.000	0.185	0.576
Attendance rate 2023	0.598	0.013	47.56	.000	0.573	0.622
Grade Level (Ref: Grade 2)						
Grade 3	-0.387	0.076	-5.12	.000	-0.536	-0.239
Grade 4	-0.554	0.081	-6.81	.000	-0.714	-0.395
Grade 5	-0.760	0.084	-9.10	.000	-0.924	-0.597
Grade 6	-1.325	0.142	-9.30	.000	-1.604	-1.046
Grade 7	-1.800	0.158	-11.39	.000	-2.110	-1.490
Grade 8	-1.774	0.159	-11.17	.000	-2.085	-1.463
Grade 9	-2.177	0.309	-7.04	.000	-2.783	-1.571
Grade 10	-2.727	0.274	-9.96	.000	-3.264	-2.190
Grade 11	-2.919	0.267	-10.95	.000	-3.441	-2.396
Grade 12	-3.266	0.310	-10.54	.000	-3.874	-2.659
Economically Disadvantaged	-0.679	0.059	-11.58	.000	-0.793	-0.564
Emergent Bilingual/English Learner	0.552	0.077	7.16	.000	0.401	0.703
At risk	-0.762	0.072	-10.52	.000	-0.904	-0.620
Gifted and Talented	0.599	0.069	8.67	.000	0.464	0.735
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	-0.312	0.679	-0.46	.646	-1.644	1.020
Black	-1.404	0.614	-2.29	.022	-2.608	-0.200
Hispanic	-1.284	0.612	-2.10	.036	-2.483	-0.084
White	-1.350	0.624	-2.16	.030	-2.573	-0.127
Two or more races	-1.477	0.640	-2.31	.021	-2.730	-0.223
Special Education	0.009	0.072	0.12	.901	-0.132	0.150
Sex	-0.020	0.049	-0.41	.684	-0.117	0.077
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	0.201	0.137	1.47	.141	-0.067	0.469
Town	-0.320	0.157	-2.04	.042	-0.627	-0.012
Rural	0.013	0.135	0.10	.920	-0.250	0.277
Campus Enrollment	-0.000	0.000	-2.14	.032	-0.001	-0.000
Economically Disadvantaged Percentage	-0.006	0.003	-1.74	.081	-0.012	0.001
Random Effects	Est.	St. Err.	[95% Confidence Interval]			
Student	1.263	0.195			0.933	1.710
Campus	29.789	1.667			26.694	33.243

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 37,202 and the total number of comparison students was 57,438.

Table A28. Generalized Propensity Score Model Results for School-Day Attendance, 1 Year

	Coef.	Std. Err.	t	p	[95% Confidence Interval]	
Intercept	-3.210	0.069	-46.270	.000	-3.346	-3.074
2024 School-Day Attendance	0.030	0.001	48.770	.000	0.029	0.031
Sex	0.030	0.007	4.180	.000	0.016	0.044
Race/Ethnicity (Ref: White)						
Black	0.300	0.016	18.800	.000	0.269	0.331
Hispanic	0.130	0.014	9.300	.000	0.103	0.157
Other	0.210	0.025	8.330	.000	0.161	0.259
Emergent Bilingual/English Learner	-0.140	0.010	-14.730	.000	-0.159	-0.121
At risk	0.020	0.009	2.290	.022	0.003	0.037
Special Education	0.010	0.009	1.060	.289	-0.008	0.028
Economically Disadvantaged	-0.060	0.010	-5.900	.000	-0.080	-0.040
Grade Level (Ref: Grade 1)						
Grade 2	0.010	0.016	0.610	.542	-0.022	0.042
Grade 3	-0.010	0.012	-0.830	.407	-0.034	0.014
Grade 4	-0.060	0.016	-3.670	.000	-0.092	-0.028
Grade 5	-0.160	0.016	-9.980	.000	-0.191	-0.129
Grade 6	-0.650	0.017	-38.090	.000	-0.683	-0.617
Grade 7	-0.730	0.017	-42.920	.000	-0.763	-0.697
Grade 8	-0.810	0.018	-46.200	.000	-0.844	-0.776
Grade 9	-1.130	0.022	-51.100	.000	-1.173	-1.087
Grade 10	-1.140	0.022	-51.750	.000	-1.183	-1.097
Grade 11	-1.200	0.022	-53.600	.000	-1.244	-1.156
Grade 12	-1.200	0.023	-52.960	.000	-1.244	-1.156

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES 2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; t = t statistic; p-value = probability value; Ref = Reference group; statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 86,521.

Table A29. Generalized Propensity Score Model Results for School-Day Attendance, 2 Year

	Coef.	Std. Err.	t	p	[95% Confidence Interval]	
Intercept	-3.390	0.075	-45.240	.000	-3.537	-3.243
2023 School-Day Attendance	0.030	0.001	43.220	.000	0.029	0.031
Sex	0.040	0.008	5.260	.000	0.025	0.055
Race/Ethnicity (Ref: White)						
Black	0.260	0.018	14.760	.000	0.225	0.295
Hispanic	0.130	0.015	8.860	.000	0.101	0.159
Other	0.180	0.029	6.250	.000	0.124	0.236
Emergent Bilingual/English Learner	-0.160	0.010	-15.450	.000	-0.180	-0.140
At risk	-0.010	0.018	-0.560	.575	-0.045	0.025
Special Education	0.030	0.012	2.530	.011	0.007	0.053
Economically Disadvantaged	-0.070	0.011	-6.240	.000	-0.092	-0.048
Grade Level (Ref: Grade 1)						
Grade 3	0.010	0.019	0.540	.589	-0.026	0.046
Grade 4	0.020	0.014	1.410	.159	-0.008	0.048
Grade 5	-0.040	0.017	-2.310	.021	-0.074	-0.006
Grade 6	-0.430	0.018	-23.650	.000	-0.466	-0.394
Grade 7	-0.620	0.017	-35.770	.000	-0.654	-0.586
Grade 8	-0.730	0.017	-42.510	.000	-0.764	-0.696
Grade 9	-1.080	0.022	-49.200	.000	-1.123	-1.037
Grade 10	-1.140	0.021	-53.530	.000	-1.182	-1.098
Grade 11	-1.210	0.021	-56.950	.000	-1.252	-1.168
Grade 12	-1.180	0.022	-54.190	.000	-1.223	-1.137

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; STAAR data from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES 2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; t = t statistic; p-value = probability value; Ref = Reference group; statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 67,979.

CTE Course Passing Rates

Table A30. Multilevel Regression Results for CTE Course Passing Rates, 1 Year, Cycle 11

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	-13.609	17.378	-0.78	.434	-47.669	20.451
Student-Level Variables						
Texas ACE participation	8.462	3.442	2.46	.014	1.715	15.209
Attendance rate 2024	1.018	0.102	10.02	.000	0.819	1.217
Grade Level (Ref: Grade 9)						
Grade 10	3.002	1.506	1.99	.046	0.050	5.953
Grade 11	7.079	1.345	5.26	.000	4.443	9.715
Grade 12	12.220	1.684	7.26	.000	8.919	15.520
Economically Disadvantaged	-0.536	0.712	-0.75	.452	-1.932	0.861
Emergent Bilingual/English Learner	0.687	1.010	0.68	.496	-1.293	2.667
At risk	-3.967	0.865	-4.58	.000	-5.663	-2.271
Gifted and Talented	2.955	1.278	2.31	.021	0.451	5.459
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	-4.858	9.948	-0.49	.625	-24.356	14.640
Black	-9.416	9.251	-1.02	.309	-27.548	8.716
Hispanic	-6.935	9.496	-0.73	.465	-25.546	11.677
White	-7.579	9.865	-0.77	.442	-26.915	11.757
Two or more races	-7.562	9.107	-0.83	.406	-25.411	10.286
Special Education	-0.296	1.089	-0.27	.786	-2.432	1.839
Sex	1.371	0.797	1.72	.085	-0.191	2.932
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	1.656	7.907	0.21	.834	-13.841	17.154
Town	5.132	4.199	1.22	.222	-3.098	13.362
Rural	8.820	5.142	1.72	.086	-1.258	18.898
Campus Enrollment	-0.003	0.002	-1.03	.302	-0.007	0.002
Economically Disadvantaged Percentage	0.033	0.099	0.33	.739	-0.161	0.227
Random Effects	Est.	St. Err.			[95% Confidence Interval]	
Student	290.018	119.755			129.105	651.488
Campus	848.294	66.381			727.675	988.906

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; and Locale Boundaries User's Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 5,491 and the total number of comparison students was 7,213.

Table A31. Multilevel Regression Results for CTE Course Passing Rates, 2 Year, Cycle 11

Fixed Effects	Coef.	St. Err.	z	p-value	[95% Confidence Interval]	
Intercept	-1.593	15.142	-0.11	.916	-31.270	28.084
Student-Level Variables						
Texas ACE participation	10.695	3.844	2.78	.005	3.161	18.228
Attendance rate 2023	0.847	0.094	8.99	.000	0.663	1.032
Grade Level (Ref: Grade 9)						
Grade 10	4.013	1.328	3.02	.003	1.410	6.615
Grade 11	6.943	1.429	4.86	.000	4.141	9.744
Grade 12	12.535	1.841	6.81	.000	8.926	16.144
Economically Disadvantaged	-1.530	0.852	-1.80	.073	-3.200	0.141
Emergent Bilingual/English Learner	-1.839	1.220	-1.51	.132	-4.230	0.552
At risk	-4.110	0.893	-4.60	.000	-5.859	-2.361
Gifted and Talented	2.933	1.124	2.61	.009	0.729	5.137
Race/Ethnicity (Ref: Nat. Am.)						
Asian/Pacific Islander	-6.242	5.492	-1.14	.256	-17.006	4.522
Black	-8.118	5.561	-1.46	.144	-19.018	2.782
Hispanic	-7.049	5.269	-1.34	.181	-17.377	3.279
White	-9.465	5.252	-1.80	.072	-19.759	0.829
Two or more races	-6.944	5.377	-1.29	.197	-17.482	3.594
Special Education	-0.641	1.089	-0.59	.556	-2.776	1.494
Sex	0.793	0.763	1.04	.299	-0.703	2.289
Campus-Level Variables						
Campus Locale (Ref: City)						
Suburb	6.060	6.345	0.96	.340	-6.376	18.496
Town	8.425	4.633	1.82	.069	-0.655	17.505
Rural	12.768	5.463	2.34	.019	2.061	23.475
Campus Enrollment	-0.001	0.002	-0.60	.547	-0.005	0.003
Economically Disadvantaged Percentage	0.018	0.112	0.16	.875	-0.201	0.237
Random Effects						
	Est.	St. Err.			[95% Confidence Interval]	
Student	331.351	93.505			190.584	576.090
Campus	825.266	65.218			706.849	963.522

Source: Tx21st Student Tracking System data 2023–24 and 2024–25 federal programming period; Public Education Information Management System from 2022–23 to 2024–25; and Locale Boundaries User’s Manual (NCES2016-012), U.S. Department of Education, National Center for Education Statistics.

Note: Coef. = Coefficient; St. Err. = Standard Error; z = z statistic; p-value = probability value; Texas ACE = Texas Afterschool Centers on Education; Ref = Reference group; Nat. Am. = Native American/Alaska Native; Est. = Estimate for variance components; Statistical significance was determined at the .05 alpha level (p-value < .05); the total number of Texas ACE students included in the analysis was 5,402 and the total number of comparison students was 6,889.

About the American Institutes for Research®

Established in 1946, the American Institutes for Research® (AIR)® is a nonpartisan, not-for-profit institution that conducts behavioral and social science research and delivers technical assistance both domestically and internationally in the areas of education, health, and the workforce. With headquarters in Arlington, Virginia, AIR has offices across the U.S. and abroad. For more information, visit [AIR.ORG](https://www.air.org).



AIR® Headquarters

1400 Crystal Drive, 10th Floor
Arlington, VA 22202-3289
+1.202.403.5000 | [AIR.ORG](https://www.air.org)

Notice of Trademark: "American Institutes for Research" and "AIR" are registered trademarks. All other brand, product, or company names are trademarks or registered trademarks of their respective owners.

Copyright © 2026 American Institutes for Research®. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, website display, or other electronic or mechanical methods, without the prior written permission of the American Institutes for Research. For permission requests, please use the Contact Us form on [AIR.ORG](https://www.air.org).