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Cycle 8 Afterschool Centers on Education Student Outcomes

Austin Independent School District

ACE Program at AISD

The Afterschool Centers on Education (ACE) program is administered through the Texas Education Agency for the federally funded 21st Century Community Learning Center grant. The purpose of the ACE program is to support the creation of community learning centers that provide academic enrichment opportunities during non-school hours for children who attend high-poverty schools. Over the past 4 years, ACE Cycle 8 used evidence-based out-of-school-time activities and collaborated with a range of partners to provide a comprehensive menu of before-school, afterschool, and summer programming for more than 5,250 students at 16 Austin Independent School District (AISD) schools. Funding for Cycle 8 ACE grants started in the 2013—2014 school year and will end in July 2018.

ACE Program Participants and Comparison Group

Analyses were conducted to determine if program participants' school outcomes were related to the length of program participation. Students who were enrolled at the Cycle 8 campuses during any years between 2013—2014 and 2016—2017 and who were still enrolled in AISD during the 2016-2017 school year were included in the analyses. Student outcomes are compared between five different groups of students: students who did not participate in the ACE program¹, and students who participated in the ACE program for 1 year, 2 years, 3 years, or 4 years during the last four school years.

How did ACE participants and non-participants' school attendance change from the 2015-2016 to 2016-2017 school year?

Average attendance rates for each student group were examined for 2015—2016 and 2016—2017. All student groups experienced decreases in school attendance rates from the 2015—2016 school year to the 2016—2017 school year. However, ACE participants had higher school attendance rates than did non-participants in both years. Additionally, ACE participants who stayed in the program for more years had better attendance rates than those who participated in the program for fewer years, and a smaller year-to-year decrease in attendance as well (Figure 1).

¹ Students were considered to have participated if they attended at least 30 times in a school year. All others were grouped with non-participants.

Figure 1.

Students with more years of ACE participation had better attendance rates and less decline in attendance from 2015—2016 to 2016—2017 than did students with fewer years or no ACE participation.



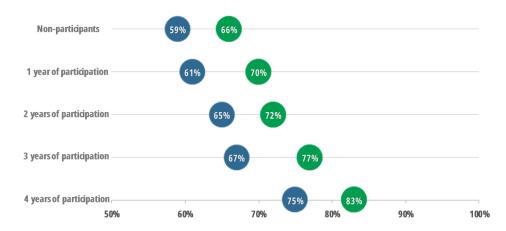
Source. ACE participant records; AISD student attendance records. *Note. N* = 15,995 students in kindergarten through grade 12.

How did ACE participants and non-participants perform on the State of Texas Assessments of Academic Readiness tests?

ACE program participants were more likely to pass the 2017 State of Texas Assessments of Academic Readiness (STAAR) reading and mathematics tests than were their peers who never participated in the ACE program. The results of the data analysis also indicate that the longer students stayed in the ACE program, the more likely they were to pass STAAR tests (Figure 2).

Figure 2.

More years of ACE participation was associated with better STAAR reading and mathematics test passing rates.



Source. ACE participant records; 2017 STAAR reading and mathematics. *Note. N* = 6,714 students in grades 3 to 8.

Cycle 8 Campuses and Participant Counts

Cycle 8 Campuses:

Linder
Ortega
Overton
Palm
Paredes
Perez
Sims

Number of participants by year:

Walnut Creek

2013—2014: 2,169 2014—2015: 2,113 2015—2016: 2,200 2016—2017: 2,070

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Standardizing STAAR and Course Grades

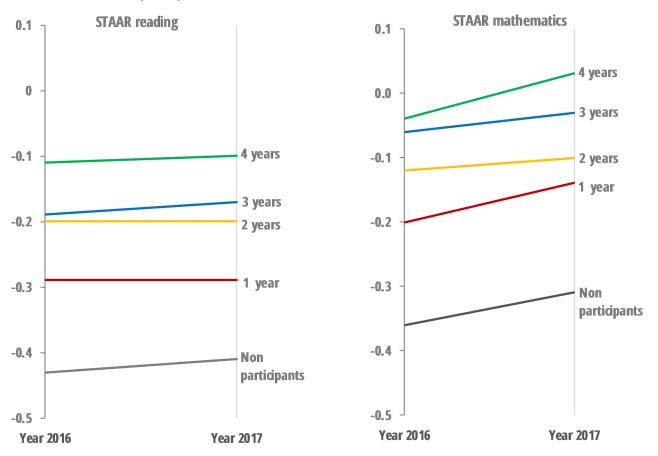
When scores are scaled differently (e.g., STAAR, is scaled at each grade level each year), it is impossible to compare them with each other. Transforming scores into z score is a way to standardize scores so they can be fairly compared between groups or over time.

Z scores are used in this report to transform students' STAAR scale scores and grades. Z scores range from –3 to +3, 0 indicates the mean score, negative values indicate scores below the mean, and positive values indicate scores above the mean.

In order to examine differences in STAAR scores, the scale scores of the 2016 and 2017 STAAR reading and mathematics tests were converted into z scores. Creating standardized scores, such as z scores, provides a way to fairly compare scores that are scaled and distributed differently, as are STAAR scores between grades and subjects, elementary and secondary grades (e.g., 0% to 100%, A to F, or 1 to 4). ACE participants had higher average z scores in STAAR reading and mathematics in both years than did non-participants. Generally, more years of ACE participation was associated with higher average STAAR z scores (Figure 3).

Figure 3.

Students with more years of ACE participation had better standardized scores in both 2016 and 2017 STAAR reading and mathematics than did non-participants.



Source. ACE participant records; 2016 and 2017 STAAR scores.

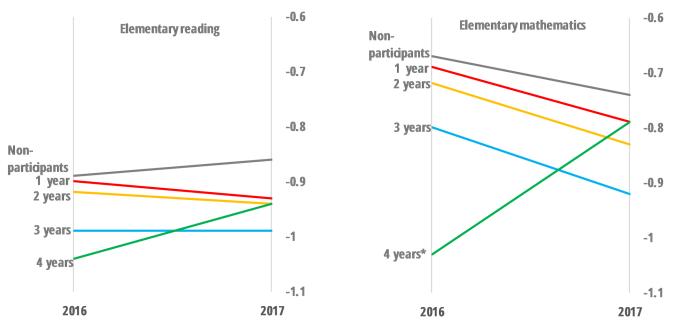
Note. STAAR score are standardized as z scores here (N = 5,114 students in grades 3 to 8).

How did ACE participants' and non-participants' grades change from 2015—2016 to 2016—2017?

In order to examine grades across different grading scales, students' reading and mathematics grades were also standardized into z scores, with reference populations of either elementary school students or all secondary school students in AISD, as appropriate, for both 2015—2016 and 2016—2017. ACE participants in elementary schools who were in the program for 4 years improved in mathematics, while all other groups declined (Figure 4). Changes in ACE participants' z scores for grades were not significantly different than that of non-participants' at secondary schools.

Figure 4.

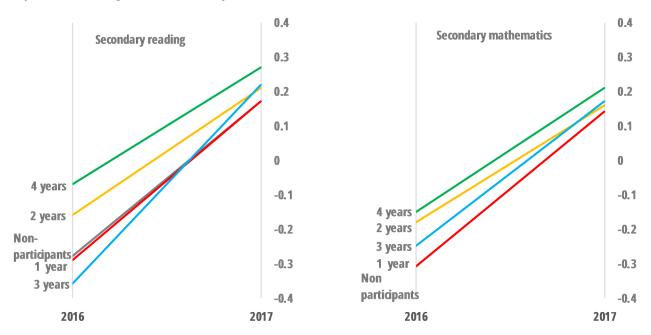
ACE Program elementary school participants who stayed in the program for 4 years improved their mathematics grades from 2015—2016 to 2016—2017, while all other groups declined. Differences between elementary groups on reading grades were non-significant.



Source. ACE participant records; AISD student grades records, standardized as z scores here (*N* = 5,735 students for grades 3 to 5).

Figure 5.

ACE Program secondary school participants did not perform significantly different from each other or from non-participants. On average, all students improved in 2017.



Source. ACE participant records; AISD student grades records, standardized as z scores here (N = 2,616 students in grades 6 to 8).

^{*} Note. Those with 4 years in ACE had significantly improved math grades in 2017.

Overall, positive outcomes were observed for ACE participants:

- Positive relationship between years in ACE and school attendance in both 2015—2016 and 2016—2017 school years, i.e., more years in ACE was associated with better school attendance.
- Less decline in school attendance than non-participants
- Positive relationship between years in ACE and STAAR passing rates, i.e., more years in ACE was associated with higher passing rates.
- 4-year participants had year to year improvement in math grades at the elementary level, when all others declined.

Appendix. Demographics of the ACE Participants and Non-Participants

	ACE years				
_	0	1	2	3	4
Female	4,978	1,446	703	323	102
Male	5,763	1,598	663	325	94
Elementary	7,108	1,724	771	388	151
Secondary	3,633	1,320	595	260	45
American Indian or Alaska Native	20	6	1		
Asian	128	34	12	3	5
Black or African American	1,468	498	201	121	29
Hispanic	8,403	2,350	1,077	488	149
Native Hawaiian/Pacific Islander	8		2	1	
Two or More Races	155	36	20	15	4
White	559	120	53	20	9

Source. ACE participant records; AISD enrollment and demographic records.

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