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

2014–15 through 2016–17 Executive Summary

JULY 2020

Brenda D. Arellano | Neil Naftzger | Brenda Ramirez | Amanda Sutter American Institutes for Research

Joseph Shields | Rex Long Gibson Consulting Group

Dan Diehl Diehl Consulting Group

Submitted to the Texas Education Agency.

Funding Statement

This project was funded in its entirety from the federal Elementary and Secondary Education Act (ESEA), Title IV, Part B, 21st Century Community Learning Centers grant through a contract with the Texas Education Agency. The ESEA was reauthorized in 2015 by the Every Student Succeeds Act.

Copyright © **Notice.** The materials are copyrighted © and trademarked [™] as the property of the Texas Education Agency (TEA) and may not be reproduced without the express written permission of TEA, except under the following conditions: (1) Texas public school districts, charter schools, and Education Service Centers may reproduce and use copies of the Materials and Related Materials for the districts' and schools' educational use without obtaining permission from TEA; (2) residents of the state of Texas may reproduce and use copies of the Materials and Related Materials for individual personal use only without obtaining written permission of TEA; (3) any portion reproduced must be reproduced in its entirety and remain unedited, unaltered and unchanged in any way; and (4) no monetary charge can be made for the reproduced materials or any document containing them; however, a reasonable charge to cover only the cost of reproduction and distribution may be charged. Private entities or persons located in Texas that are **not** Texas public school districts, Texas Education Service Centers, or Texas charter schools or any entity, whether public or private, educational or non-educational, located **outside the state of Texas** *MUST* obtain written approval from TEA and will be required to enter into a license agreement that may involve the payment of a licensing fee or a royalty. For information contact: Copyrights Office, Texas Education Agency, 1701 N. Congress Ave., Austin, TX 78701-1494; phone 512-463-9041; email: copyrights@tea.texas.gov.

The State of Texas Assessments of Academic Readiness[®] (STAAR®) and Texas Afterschool Centers on Education[®] (Texas ACE®) are registered trademarks of the Texas Education Agency. Other product and company names mentioned in this report may be the trademarks of their respective owners.

List of Acronyms

21st CCLC	21st Century Community Learning Centers
AIR	American Institutes for Research
APT-O, APT-Q	Assessing Afterschool Program Practices Tool
ASB PQA	Academic Skill-Building Program Quality Assessment
СВО	community-based organization
CTE	career and technical education
ED	U.S. Department of Education
EL	English learners
EOC	end of course
ESEA	Elementary and Secondary Education Act
ESL	English as a second language
ESSA	Every Student Succeeds Act
FAFSA	Free Application for Federal Student Aid
GED	General Equivalency Diploma
HLM	hierarchical linear modeling
KPI	key performance indicator
LEAG	Local Evaluation Advisory Group
LESI	Local Evaluation Support Initiative
NCES	National Center for Education Statistics
NIOST	National Institute on Out-of-School Time
NYSAN	New York State Association of Neuropsychology
PD	professional development
PEIMS	Public Education Information Management System
PQA	program quality assessment
PSM	propensity score matching
QA	quality assessment
RFA	Request for Applications
RFP	Request for Proposals
SACERS	School-Age Care Environment Rating Scale
SAPQA	School-Age Program Quality Assessment
SAYO	Survey of Academic Youth Outcomes
SEL	social-emotional learning
STAAR	State of Texas Assessments of Academic Readiness
STEM	science, technology, engineering, and mathematics

Texas Academic Performance Report
Texas Education Agency
Texas Essential Knowledge and Skills
Texas Afterschool Centers on Education
Texas 21st Student Tracking System
Youth Program Quality Assessment

Executive Summary

Since 2002, the Texas Education Agency (TEA) has provided funding through the 21st Century Community Learning Centers (21st CCLC) competitive grant program to support the provision of before school, afterschool and summer learning opportunities for students primarily attending eligible campuses. The program is authorized by Title IV, Part B of the Elementary and Secondary Education Act (ESEA), as renewed by the Every Student Succeeds Act (ESSA), providing funds to states to support "academic enrichment opportunities during non-school hours for children, particularly students who attend high-poverty and low-performing schools" (U.S. Department of Education [ED], 2018). Since the grant program launched in Texas in 2003–04, hundreds of grantees operating community learning centers, also known as Texas Afterschool Centers on Education[®] (Texas ACE[®]), across Texas have been funded. This report presents statewide program evaluation findings pertaining to Texas ACE programs funded as part of grant Cycles 7–9. The evaluation report focuses in particular on the program's operation and impact on student outcomes during 2014–15, 2015–16, and 2016–17 programming periods. TEA typically awards 21st CCLC grants for a 5-year period. In any given year, two cycles are in operation at different years of their grants. While grants generally operate on a fiscal year basis, beginning in August, the analyses in this report used data across three program years starting in June 2014 and running through May 2017. (Table ES.1).

Grant Year	Cycle 7	Cycle 8	Cycle 9	Notes
2011–12	Year 1	—	—	Cycle 7 starts
2012–13	Year 2	—	—	
2013–14	Year 3	Year 1	_	Cycle 8 starts
2014–15	Year 4	Year 2	—	
2015–16	Year 5	Year 3	—	
				Cycle 7 ends
2016–17	—	Year 4	Year 1	
				Cycle 9 starts
2017–18	—	Year 5	Year 2	Cycle 8 ends
2018–19	—	_	Year 3	
2019–20	—		Year 4	
2020–21			Year 5	Cycle 9 ends

 Table ES.1: 21st Century Community Learning Centers Cycles 7–9 Grantees, by Grant Year and

 Reporting Years for the Evaluation

Notes: Blue shaded rows depict the time period and grant cycles assessed for the report, referred to throughout the report as the "reporting period." Grant Years for the purposes of program evaluation begin with summer operations in June and end with the academic year in May. The fiscal operating year for grants begins in August with fall operations and ends in July upon the conclusion of summer programming.

The program evaluation for the years described was undertaken by the American Institutes for Research (AIR), in collaboration with the Gibson Consulting Group and the Diehl Consulting Group. The design of the evaluation of the Texas 21st CCLC program is meant to address the following six objectives and companion evaluation questions:

Objective 1. Conduct an evaluation of the implementation of the Texas ACE program statewide. This
involved providing a descriptive profile of Texas ACE program implementation based on
administrative data captured in the state's tracking system and information on program design and
delivery obtained from site visits conducted at a sample of programs. The primary question guiding
analyses related to this objective was as follows:

Evaluation Question Objective 1: What are the primary characteristics of Texas ACE programs?

• Objective 2. Conduct an evaluation of the impact of the Texas ACE program on a series of schoolrelated outcomes. This involved using a quasi-experimental design to explore how youth participating in Texas ACE programming at various levels of attendance performed on key outcomes relative to similar youth not participating in Texas ACE programming. This objective included an exploratory analysis of center-level effects on a series of school-related outcomes, which allowed the evaluation team to explore how different center characteristics and practices may be related to the achievement of different youth outcomes.

Evaluation Questions Objective 2:

- What impact does the program have for youth attending Texas ACE regularly during the school year relative to similar youth attending the same schools who did not participate in programming?
- What impact does the program have for youth attending Texas ACE regularly across the span of two school years relative to similar youth attending the same schools who did not participate in programming?
- What center-level characteristics derived from the Texas 21st Student Tracking System (Tx21st) are significantly related to center-level effect sizes pertaining to school-related outcomes among participating youth?
- For center-level characteristics found to be related to center-level effect sizes, what impact do select center characteristics have on Texas ACE program participants who participate in the program regularly relative to similar youth enrolled in centers lacking that characteristic?
- **Objectives 3–5.** Explore how the impact of the Texas ACE program may be related to different approaches to design and delivery and synthesize that information with the goal of identifying potential best practices to be shared with the Texas ACE community more broadly. Objectives 3 and 4 also were addressed through the exploratory analysis of center-level effects on a series of school-related outcomes mentioned in Objective 2.

Evaluation Questions Objective 3-4:

- Based on site visit data, how do centers vary in terms of program quality, student engagement, and other key program elements associated with Texas ACE implementation?
- Based on site visit data, how do center-level effects vary by key center characteristics?

Objective 5 did not have associated research questions in the statewide evaluation as it relates to a separate format for sharing of best practices with the Texas ACE community.

• **Objective 6.** Provide support and assistance to Texas ACE grantees and centers on how to undertake efficacious and meaningful local evaluation activities. This involved the design and piloting of the Local Evaluation Support Initiative (LESI), which involved guiding a sample of centers through an intentional process of local evaluation design and implementation.

Efforts to formulate the LESI as part of Objective 6 were not predicated on a set of formal evaluation questions but were guided by a set of principles. These principles involved a focus on collaborative

processes; intentional program design; the assessment of implementation; use of outcome measures that are locally derived, focused, easily accessible, and limited in scope; and the development of staff capacity to collect and use local evaluation data.

Analyses conducted to support each objective used the following data sources: (a) Texas ACE program characteristics from Tx21st data, (b) information about students served by the program and the schools they attend based on data collected from the Public Education Information Management System (PEIMS), (c) State of Texas Assessments of Academic Readiness[®] (STAAR[®]) Reading and Mathematics for students in Grades 3–8 and end-of-course (EOC) assessments for students in high school, and (d) 2014 National Center for Education Statistics (NCES) locale classification boundaries. Additional information about grantees and centers were gathered from interviews, focus groups, and observations conducted during on-site data collection activities during site visits conducted by the state evaluation team in spring 2017. Additional student and activity leader surveys were also collected at these centers. The following text highlights each chapter associated with the evaluation objectives.

Summary Evaluation findings

Chapter 2: Grantee and Center Characteristics

- Site visits at 20 centers operated by Texas ACE indicated that the primary program objectives are to strive toward increasing student academic performance, provide engaging enrichment opportunities, prepare students for college as well as the workforce, and build student social and emotional knowledge and skills.
- The primary program objectives cited by the centers during site visits resonate with the federal
 program requirements articulated in ESSA, which emphasize alignment with the regular academic
 program of the school and the academic needs of participating students, including performance
 indicators and measures that can track student academic success, program improvement, and
 increased career competencies.
- Based on analyses of Tx21st data, 108 grantees were in operation in 2014–15, 2015–16, and 2016– 17. These grantees operated 734 unique centers during the three reporting periods analyzed across Cycles 7–9 (see Table ES.2).¹
- The grantees included (a) Cycle 7 (5-year awards starting in August 2011 that had an extension and ended in 2015–16); (b) Cycle 8 (5-year awards starting in August 2013 with additional awards made in June 2014 and January 2015, with the initial awards set to end at the end of 2017–18); and (c) Cycle 9 (5-year awards starting in August 2016 and scheduled to operate through 2020-2021).

¹ 109 grantee records were initially identified from Tx21st data received from TEA by the statewide evaluation team. However, one grantee record did not have any associated center records. Also, operational and attendance data only exists for 728 centers as 6 centers from Cycle 7 and 8 grantees were found to not have operation and attendance data. Also, Cycle 7 grantees operated summer programming during the summer of 2016; however, since this period of operation represented only a portion of the total 2016-17 programming period, Cycle 7 grantees and centers have not been included in counts for 2016-17.

	Grantees				Centers			
Program Year	Cycle 7	Cycle 8	Cycle 9	Total	Cycle 7	Cycle 8	Cycle 9	Total
2014–15	42	34	n/a	76	266	213	n/a	479
2015–16	42	34	n/a	76	264	213	n/a	477
2016–17	n/aª	34	32	66	n/aª	209	251	460
Unduplicated count 2014–15 through 2016–17	42	34	32	108	267	216	251	734

 Table ES.2: Texas Afterschool Centers on Education (Texas ACE) Grantees by Programming

 Period

Source. American Institutes for Research analysis of Tx21st Student Tracking System data.

Note. n/a = not applicable because the cycle in question was not in operation during the specified academic year. Also, operational and attendance data only exists for 728 centers during this period as 6 centers from Cycle 7 and 8 grantees were found to not have operation and attendance data.

^aCycle 7 grantees operated summer programming during the summer of 2016; however, since this period of operation represented only a portion of the total 2016-17 programming period, Cycle 7 grantees and centers have not been included in counts for 2016-17.

- The largest share of centers was in urban areas, but increasingly during the final reporting period, a larger proportion of centers was in suburban areas.
- Across the three reporting periods, a combined total of 340,421 students were served in Texas ACE (not all students were unique across years). More than half of the students served in Texas ACE were in Grades 3–8, roughly one-fourth of the students were enrolled either in PreK–2 or in Grades 9–12, and two-thirds of the students were Hispanic.
- Students participating in Texas ACE largely resembled the larger makeup of schools being served by the programs across the following student characteristics: status as an English learner, racial/ethnic composition, at risk for dropping out of high school, rates for receiving special education services, average days of student absences, average number of disciplinary incidents (for those students who had any), and the likelihood of attaining a STAAR passing standard in reading and mathematics.²
- Texas ACE participants differed from students at the schools served by the program in the following ways: (a) slightly more Texas ACE students were classified as economically disadvantaged and (b) slightly more than half of Texas ACE students who took the English I EOC exam in 2016–17 achieved the passing standard, which was about five percentage points lower than the overall school passing rate, and c) nearly all of Texas ACE students who took the Algebra I EOC exam achieved a passing standard (88%), but this rate was still about five percentage points lower than the overall school passing rate in 2016–17.

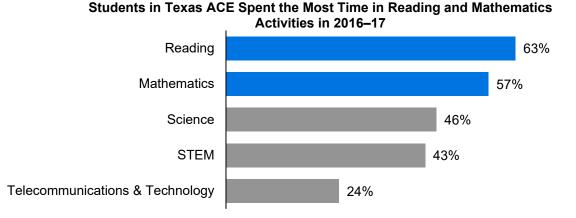
Chapter 3: Program Implementation Characteristics

• Analyses of the 2016-2017 Tx21st data found that students spent the most time in Texas ACE participating in recreation, homework help, or academic enrichment activities.

² At risk status is defined by TEC §29.081 and specified in PEIMS under criteria for identification (TEA, n.d.)

 Data from 2016–17 show that Texas ACE participants spent time in reading- and mathematicsrelated activities nearly two thirds of the time; slightly less than half of their time in science, technology, engineering, and mathematics (STEM)–related activities; and nearly one fourth of their time in activities addressing telecommunications and technology (see Figure ES.1). A similar pattern was found in prior years.

Figure ES.1: Percentage of Texas Afterschool Centers on Education (Texas ACE) Participants' Time (Hours) Spent on Activities Categorized by Subject in 2016–17



Source. American Institutes for Research analysis of Tx21st Student Tracking System, data for 2016–17. *Note*. STEM = science, technology, engineering, and mathematics. Centers could select more than one subject for activities, so the numbers do not total to 100%. These data are based on the percentage of time (in hours) spent on programming activities based on the following: n = 463 (centers) in 2016–17 averaged across centers.

- An exploration of staffing at centers operated by Texas ACE found three main models: (a) centers staffed mostly by school-day teachers (teachers); (b) centers staffed by paraprofessionals and/or college students (other staff); and (c) centers staffed by a mixture of staff classifications (mixed model) that included school-day teachers, paraprofessionals who also work during the school day, youth development staff who work with partner agencies, college students, and volunteers.
- Across all three programming years studied, an average of 49% of the centers used paraprofessionals and/or college students (i.e., other staff), followed by school-day teachers at an average of 45% of the centers. Centers were staffed through a mixed model fewer than 6% of the time.

Data from site visits and interviews with center staff at 20 sites visited in spring 2017 revealed that Texas ACE programs focused on academic and enrichment activities the most, whereas college and career readiness and parental involvement were lower priority activities. Also, students spent most of their time in academic enrichment, recreation, and homework help in the subjects of reading and mathematics.

- Center staff who were interviewed generally felt that their activities aligned with local goals while also trying to support the statewide Texas ACE objectives related to quality programming and improving student outcomes.
- Logic models were underused to support monitoring of alignment to Texas ACE program goals and objectives, based on interview feedback with the centers visited. These models were infrequently used to orient new staff to program goals and objectives.

On Academic Alignment

"One of our program goals, . . . increase academic performance . . . our tutoring, they're very intentional tutorial groups. We progress monitor them with grades and benchmark tests and things throughout the year to make sure that students are actually improving and so that specifically is one of those ways that we meet one of those goals." —Site Coordinator

- Staff development occurred in a variety of ways according to the site visit data. Most Texas ACE programs offered staff orientation, either in traditional form or ways such as on-the-job training. Some Texas ACE programs had staff who were school-day teachers and participated in professional development (PD) through their school or district rather than Texas ACE. Other PD focused on student academic and behavior needs, as well as classroom management and program quality.
- Partners were important for Texas ACE implementation, and local nonprofit organizations were the most common partner provider, with many other types of organizations also supporting programs by providing enrichment activities, donations (e.g., monetary), and other opportunities, such as career days for participating students.
- Texas ACE program staff tended to view the program as an extension of the school day and sought to align the program with the school day. School-day and Texas ACE relationships were critical for creating strong school linkages, as seen through district and school support and site coordinator presence on campus.
- The role of Texas ACE advisory boards varied across centers, with approximately half of the centers reporting that both the advisory board and Texas ACE staff shared decision-making responsibilities. Advisory boards also generally supported programs in other ways, including contributing to planning, monitoring, and oversight.
- Family engagement was an important component of Texas ACE based on interviews and focus groups with program staff. Texas ACE programs connected with families through parent surveys, attendance at school events, communications sent home to parents, activities designed to build relationships with parents, attendance at citywide events, and home visits. Through the interviews, two broad categories of family activities emerged related to the types of activities that Texas ACE uses to engage with families: (a) activities to help family members support student development and (b) activities to advance parent life and job skills. English as a second language (ESL) classes paired with college and career readiness classes were most frequently cited as a high need for family members and offered at centers.
- Texas ACE felt that high-quality staff who connected with youth were by far the most important feature of a high-quality program, followed by relationships with youth and youth engagement.

• Formal quality assessment measures, however, were not widely used; informal observations were more common to support monitoring. Student-level data were commonly mentioned to support performance assessment efforts. Student data from teachers—both formal grades and informal

feedback—were the most important source of data for programs in relation to understanding student needs, whereas other data such as Texas ACE participation data or standardized test scores were secondary.

On Formal Quality Assessments

"We actually developed a rubric, a quality rubric, and we're still revamping it because we went through all these descriptors and so we make observations, we give feedback, we redirect when need be, and we adjust course."

-Project Director

Chapter 4: Program Quality and Youth Experiences in Programming

- Analysis of program quality data collected at 20 centers in spring 2017 found moderate levels of quality. This finding suggests that opportunities for growth exist across elementary, middle, and high school centers to achieve high and consistent quality program delivery.
- Overall, many centers are still developing practices and supports that facilitate meaningful interactions among participating youth and promote high levels of engagement.
- Higher scores on the program quality assessment (PQA) in the supportive environment domain give reason to believe that many centers are moderately successful in adopting practices that help create a supportive learning environment for participating youth (see Figure ES.2).
- The results also demonstrated that program quality may have an influence on youth experiences in programming. Youth participating in centers with higher PQA scores were more likely to report experiencing positive affect and a greater sense of relevance in terms of Texas ACE programming they participated in on a given day compared with centers with lower PQA scores.

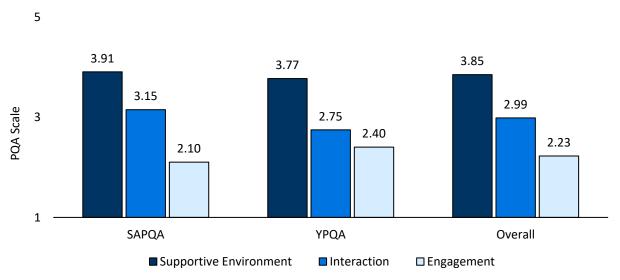


Figure ES.2: Average School-Age Program Quality Assessment and Youth Program Quality Assessment Scores by Program Quality Assessment Domain

Source. PQA scores obtained during spring 2017 site visits conducted at 20 centers. *Note*. PQA: program quality assessment; SAPQA: School-Age Program Quality Assessment; YPQA: Youth Program Quality Assessment.

- Youth in centers that referenced using an externally developed quality assessment tool to assess programming and inform quality improvement efforts reported more positive experiences than youth in centers that did not. Youth at these centers reported being significantly more challenged, experiencing a greater sense of relevance, and being more engaged.
- Center characteristics related to youth experiences differed the most when comparing elementary and middle and high school centers. Youth in middle and high school centers reported greater relevance, more positive affect, and greater engagement than youth in elementary centers. This result may be related to youth in middle and high school centers having more choice than youth in elementary centers and spending more time in activities that promote autonomy and leadership.
- Activities that resulted in positive experiences being more frequently reported by youth included working on group projects, making or building things, practicing a new skill, and exploring learning on their own. Such activities were perceived by youth as having greater relevance to their lives and as significantly more engaging than other types of activities examined.

Chapter 5: Impact on Texas ACE Program on Youth

- The objective of the analyses summarized in Chapter 5 was to understand whether Texas ACE programs can be linked to the academic development of participating youth and promote behaviors that will contribute to academic and overall student success.
- Results from the outcome analyses conducted for Texas ACE programming delivered during the 2014–15 to 2016–17 school years indicated that Texas ACE did not have a positive association with STAAR Reading and Mathematics scores for youth attending programming in Grades 4–8. This finding is a deviation from prior Texas ACE evaluations, which demonstrated that the program had a small, positive effect on mathematics scores when youth attended programming for 60 days or more

(Devaney et al., 2016; Naftzger et al., 2013). For the present evaluation, a positive effect on mathematics scores was found only when youth in Grades 4–8 participated in 120 days or more of programming during the 2015–16 and 2016–17 school years.

- Youth demonstrated higher levels of school-day attendance and fewer disciplinary incidents the more they attended Texas ACE programming.
- Texas ACE programming was found to have a statistically significant negative association with STAAR Reading and Mathematics scores across several of the attendance bands examined. Notably, as youth attended more programming, the negative statistical effects tended to grow smaller. This finding seems to indicate that participation in Texas ACE programming is negatively associated with reading and mathematics assessment scores at some levels of attendance, but the negative effects are reduced to an immeasurable level, at least for mathematics, once youth have higher program attendance. on the other hand, it may be the case that some important unobservable differences exist between Texas ACE participants and nonparticipants that are serving to bias results from the impact analyses related specifically to achievement that are not being controlled for through the matching process.
- Texas ACE was found to have a significant positive association with grade-level promotion, specifically for high school students. For all other groups, promotion to the next grade was found to be negatively associated with Texas ACE participation across specific attendance bands. These negative effects went away, however, when attendance bands were collapsed, and program effects were considered for youth who attended programming for 60 days or more across two consecutive years. Conducting these outcome analyses using more narrowly defined attendance bands perhaps served to result in more inconsistent findings that masked the broader manner in which Texas ACE participation was associated with this outcome.
- The study provided preliminary exploratory findings that centers using an external quality assessment tool to inform the design and delivery of programming and scoring higher on the PQA during site visit observations was positively associated with some youth outcomes under consideration.
- Although these findings are based on very small sample sizes, it is advised that use of these program quality tools continue to be explored in the future in terms of how tool use may be related to positive youth outcomes.

Chapter 6: Local Evaluation Summary

- AIR and the Diehl Consulting Group began work in summer 2017 to enhance the local evaluation support that TEA provides for Texas ACE, with the goal of producing a new Texas ACE Local Evaluation Guide.
- The new Texas ACE Local Evaluation Guide, which replaced the Texas ACE Independent Evaluation Guide, along with a supplemental Texas ACE Toolkit, was completed in August 2018.
- The guide walks grantees step-by-step through how to plan and conduct an evaluation and provides a toolkit of templates, tools, and measures to support implementation of the new guide. To aid the development process, the statewide evaluation team engaged a Local Evaluation Advisory Group (LEAG) made up of key Texas ACE stakeholders and conducted an evaluation initiative (LESI), with a group of centers to test out new evaluation approaches and gather feedback. The two groups provided feedback on the Texas ACE Local Evaluation Guide and the supplemental toolkit during the 2017–18 academic year.

- Another part of the work included the opportunity to test out new local evaluation approaches that could support further development before rollout to grantees statewide through LESI. This initiative consisted of training and hands-on support with up to 20 centers on a variety of topics related to program involvement and quality improvement from fall 2017 through summer 2018. Eleven grantees and 19 centers completed the entire LESI process, which included three core approaches to conducting a local evaluation:
 - Implementing a quality assessment process
 - Using key performance indicators
 - Deriving local evaluation questions
- As part of LESI, participating centers were trained on the three core approaches through a webinar training series as well as regular reminders and check-ins from the statewide evaluation team and hands-on activities and assignments for centers in which feedback from the state evaluation team was provided.
- One of the primary successes of LESI was the diverse stakeholder participation and the teamwork that it encouraged, providing space for many voices and perspectives to be heard.
- Feedback from respondents indicated that the process gave them the time and space to observe, reflect, and think about their vision for the center, allowing them to see both strengths and areas of improvement.
- Many respondents commented on the specific tools, resources, webinars, and trainings they received as being helpful to understanding quality programs and evaluation, as well as helping them feel valued. They also found the connections to other districts and a local evaluator as key supports. Overall, many respondents noted that this initiative helped them understand their impact and areas that they can act on to improve that impact.
- Feedback on challenges with the initiative centered on timing of the initiative because the timeline was short and off schedule from a number of the required Texas ACE evaluation activities. Other feedback included the need for additional training on the content either through webinars or in person with the state evaluation team. Also, that the content itself was challenging because the content was unfamiliar to many of the centers.

Future Evaluation Reports

Steps will be taken in future evaluation reports to build from the findings described in this report to further explore the relationship between key center characteristics and student outcomes. In particular, a focus will be placed on those characteristics that distinguish higher and lower implementing Texas ACE centers and how certain types of student experiences in programming may be related to positive student outcomes.

This page intentionally left blank



Established in 1946, the American Institutes for Research (AIR) is an independent, nonpartisan, not-for-profit organization that conducts behavioral and social science research on important social issues and delivers technical assistance, both domestically and internationally, in the areas of education, health, and workforce productivity.

MAKING RESEARCH RELEVANT

AMERICAN INSTITUTES FOR RESEARCH 1000 Thomas Jefferson Street NW Washington, DC 20007-3835 | 202.403.5000 www.air.org

LOCATIONS

Domestic: Washington, DC (HQ) | Monterey, Sacramento, and San Mateo, CA | Atlanta, GA | Honolulu, HI | Chicago and Naperville, IL Indianapolis, IN | Metairie, LA | Waltham, MA | Frederick and Rockville, MD | Chapel Hill, NC | New York, NY | Columbus, OH | Cayce, SC Austin, TX | Arlington and Reston, VA | Seattle, WA

International: Algeria | Ethiopia | Germany | Haiti | Zambia