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Washington 21st Century Community Learning Centers Program Evaluation

2017–18 Program Year

MAKING RESEARCH **RELEVANT**

DECEMBER 2019

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Matt Vinson | Feng Liu, PhD

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Executive Summary

The Washington Office of Superintendent for Public Instruction (OSPI) contracted with the American Institutes for Research (AIR) to conduct an evaluation of the statewide 21st Century Community Learning Centers (21st CCLC) program in Washington state. For more than a decade, 21st CCLC programs in Washington have provided afterschool and expanded learning programming to enhance the academic well-being of students in high-poverty communities.

Specifically, AIR conducted a comprehensive evaluation of the 21st CCLC program, which included data collection and support for the existing continuous quality improvement process. Our team built and monitored online data collection modules that not only supported program improvement efforts but also facilitated the ability to report required federal data, monitor programs at the state level, and collect data necessary for evaluation activities that culminated in an annual report.

Evaluation Questions

AIR's evaluation activities during the contract period were intended to help answer the following questions:

1. What were the primary characteristics associated with the grants and centers funded by 21st CCLC and the student population served by the program? (Chapter 1)
2. To what extent was there evidence that centers funded by 21st CCLC implement research-supported practices related to quality afterschool programming? (Chapter 2)
3. What does youth completion of the Youth Motivation, Engagement, and Beliefs Survey indicate about youth experiences in programming plus youth functioning on social and emotional skills, competencies, and noncognitive factors? (Chapter 3)
4. To what extent is there evidence that students participating in services at higher levels demonstrated better performance on youth outcomes compared with youth participating at lower levels? (Chapter 4)

The rest of this report provides our answers to each question, with the remainder of this executive summary highlighting key findings and recommendations from each chapter.

Findings on Program Characteristics

One hallmark of the 21st CCLC program is the wide diversity (a) of organizations involved in the provision of 21st CCLC programming, (b) of approaches to the way that programs deliver services and activities, and (c) in the nature of the student population served.

Evaluation Question

Evaluation Question 1: What were the primary characteristics associated with the grants and centers funded by 21st CCLC and the student population served by the program?

Summary of Findings

In the 2017–18 program year, 132 centers were associated with 50 active 21st CCLC grantees that served 15,402 youth in Grades K–12, of whom 9,490 were regular attendees. Generally, the domain of Washington 21st CCLC grantees and centers operating during 2017–18 was similar to prior years in terms of organizational and operational characteristics.

- Most of the programs occurred in school-based locations.
- Almost all Washington centers offered academic enrichment activities to students as well as some sort of programming to adult family members.
- Centers in Washington continue to mainly serve students in the elementary (54%) and middle grades (25%).
- Most centers were considered mature (i.e., in the second to fourth year of their funding cycle); a smaller proportion of the centers (24%) was new (i.e., in the first year of funding).
- More students attended more frequently.
- Most students were from low-income families.

Aligned Recommendations

- Consider the contextual aspects, such as new policies and communication efforts, that might have contributed to shifts in when programs operated, the degree to which programs provide services to adult family members, and the population of students being served. Things such as increased per student cost might be driving trends in the number of students served each year.
- Consider the different training and technical assistance needs of grantees based on their maturity so that programs receive the supports they need.
- Explore why more students are attending programs more frequently and what percentage of students are attending for multiple years to understand what keeps students engaged in the program.
- Implement data collection capacity to collect more detailed information on adult family member participation, including the types of activities in which they participate.

Findings on Quality Afterschool Practice Implementation

A primary goal of the statewide evaluation of 21st CCLC programs in Washington was to provide grantees with data to inform program improvement efforts regarding their implementation of research-supported best practices. AIR, the Weikart Center, and OSPI worked collaboratively to define a series of leading indicators predicated on data collected as part of the statewide evaluation.

Evaluation Question

Evaluation Question 2: To what extent was there evidence that centers funded by 21st CCLC implement research-supported practices related to quality afterschool programming?

Summary of Findings

Organizational Practices

Organizational Practices are a key component of implementing quality afterschool programming and often serve as the foundation on which all other quality practices rest. Practices related to continuous quality improvement, leadership, and management remained consistent with findings seen in the past:

- Most staff reported supportive and collaborative program climates, but they also cited that having adequate time to plan and focus on individual student needs are areas that they still struggle with.
- Both site coordinators and staff reported that they have frequent internal communication regarding program planning, setting goals, reviewing progress, and providing feedback to colleagues on their practice.
- The majority of centers reported that they (a) have qualified staff working in their programs who have established relationships with youth, (b) are committed to staff development and program improvement, and (c) solicit feedback regarding the program.

Instructional Practices

Of all the leading indicators, those within the Instructional Practices domain could be considered of greatest importance in ensuring high-quality programming because the point of service is where youth experience programming and arguably receive the most benefit.

- Site coordinators and staff reported that they are either frequently or always leading activities that support student growth and development in reading or mathematics. Provided activities are well planned, are tied to specific learning goals, build skills across multiple sessions, and promote skill building and mastery of state standards. Staff are more apt than site coordinators to report that they are always carrying out these practices.
- Point-of-service quality remained consistent with years past: Programs are doing very well in providing safe and supportive environments on a consistent basis for the students who attend their programs. As expected, there is room for improvement in consistently providing interesting and especially engaging opportunities that allow students to be active participants in their own learning.

- Youth-centered policies and practices saw an increase in the percentage of programs that were consistently incorporating youth interests, building multiple skills, and allowing students to have an influence on both the setting and activities of the program and the structure and policy of the organization.

Partnership Practices

Of the indicators represented in the Partnership Practices domain, the evaluation team believes that School Context is of greatest importance for ensuring high-quality 21st CCLC programming and aligned with the goal of supporting student growth and development in reading and mathematics. As with most indicators highlighted thus far, there are areas of strength and opportunities for growth.

- Site coordinators reported having communication sometimes or frequently with family members of the students they serve, but they could improve on how often they send information home about how students are progressing and encourage family members to participate in center-provided programming directed at adult learning.
- Site coordinators reported facilitating linkages to the school day by aligning programs to the school-day curriculum, helping students with their homework, regularly communicating with school-day staff and other school personnel, and monitoring student progress as major strategies. The least common strategy was hiring regular school-day teachers to work in the program.
- Similarly, staff reported participating in efforts to align to the school day by knowing what academic content is being covered during the school day and linking programming to that content, monitoring student progress, and communicating with school personnel.
- Both site coordinators and staff reported using student data to inform how they adjust their programs throughout the year; however, a larger number of staff members reported not having access to these data compared with site coordinators.
- Most programs consistently adopt policies and practices supportive of family engagement by addressing barriers to participation and building linkages with family and the community.

Aligned Recommendations

- Consider providing a forum or a formal process for project directors to discuss the results of their leading indicators regionally, share stories of successes and challenges, brainstorm solutions to common problems, and build community among programs.
- Dig deeper into who, at the center level, is participating in the program self-assessment process.
- Consider defining the supports available to grantees regarding access to and use of local student data to support program planning and design.
- Consider clarifying definitions and expectations on what constitutes family engagement for the purpose of adult attendance tracking.
- Consider additional ways to collect more objective information on relationships with community partners.

Findings on Youth Program Experiences and Social-Emotional Learning Outcomes

Although school-related outcomes have been commonly employed to assess the impact of 21st CCLC programming on participating youth, most 21st CCLC programs across the United States and specifically in Washington implement programming designed to support a broader array of more immediate youth development outcomes, including those related to the formation of positive mindsets and beliefs and social and emotional skills and competencies.

Evaluation Question

Evaluation Question 3: What does youth completion of the Youth Motivation, Engagement, and Beliefs Survey indicate about youth experiences in programming plus youth functioning on social and emotional skills, competencies, and noncognitive factors?

Summary of Findings

- The majority of youth respondents on the Youth Motivation, Engagement, and Beliefs Survey (YMEB Survey) expressed having a positive, engaging, and supportive experience when attending programming. In addition, the majority of responding youth indicated that the 21st CCLC program they attended helped them improve both academically and on social and emotional skills. We found a similar trend in relation to youth-reported program impact in the area of self-management. In this case, 38% of the youth indicated that they had been impacted in a positive way in this area by participating in the program.
- The evaluation team also explored change across time on youth functioning on their skills and beliefs. AIR hypothesized that youth with the most room for improvement in the 2016–17 program year would show more growth than those who were already performing well. The findings support this hypothesis.
- Our conclusion based on the domain of results summarized in this report is that the YMEB Survey continues to be a promising tool for measuring many important elements of youth functioning that afterschool and youth development programs are seeking to cultivate and are important to youth success in school and life more broadly.

Aligned Recommendations

- Explore the connection between quality practice and social and emotional competencies and skills as measured on the YMEB Survey. Understanding this connection would help ensure a pathway from program quality to changes in youth beliefs, skills, and knowledge to school-related outcomes. Understanding how this pathway works and where it fails to produce the desired results would help when making needed tweaks and adjustments to optimize the outcomes derived from the 21st CCLC system.
- The YMEB Survey is intended for use with students who are in Grades 4–12, which leaves the direct program outcomes for students in Grades K–3 largely unexplored. Consider other measures more applicable to the K–3 population to understand how the 21st CCLC program is impacting these students.

Findings on Youth Academic Outcomes

Generally, findings from the outcome analyses conducted in relation to the 2017–18 program year indicate positive findings across each outcome examined, replicating many of the findings identified in earlier programming periods. Important findings are summarized as follows:

Evaluation Question

Evaluation Question 4: To what extent is there evidence that students participating in services at higher levels demonstrated better performance on youth outcomes compared with youth participating at lower levels?

Summary of Findings

To what extent do higher levels of program participation impact growth on key youth development outcomes?

- For students who responded not at all true or somewhat true to items on the YMEB Survey, higher levels of participation in the 21st CCLC program had a positive significant impact on the growth students made between 2016–17 and 2017–18 on only the Academic Identity scale.

To what extent is there a relationship between growth on the youth survey scales and youth-reported program experiences?

- There was a statistically significant, positive effect on academic identity for increased academic behaviors plus belonging and engagement. This means that youth self-reports of increased academic behaviors plus belonging and engagement while participating in a program may have an effect on youth having a greater sense of academic identity.
- There was a statistically significant, positive effect on both interpersonal skills and self-management for increased retrospective self-management plus belonging and engagement. This means that youth self-reports of self-management plus belonging and engagement while participating in a program may have an effect on youth having a greater sense of interpersonal skills and a personal self-management.
- Finally, there was a statistically significant, positive effect on positive mindsets for all three variables of program experience. This means that increased academic behaviors, self-management, plus belonging and engagement while participating in a program may have an effect on youth's positive mindsets.

To what extent does the level of program participation impact school-related outcomes for students who needed to improve on those outcomes?

- There was statistically significant, negative impact in reading and mathematics test scores for students attending programming at 30 or more and 60 or more days compared with similar students not attending programming. However, the absolute value of the effect sizes is small (<0.20). This implies that students attending programming at both 30 or more and 60 or more days had lower reading and mathematics test scores than students not attending but with a small magnitude of difference.
- There was statistically significant, positive impact in cumulative grade point average (GPA) and the percentage of credits earned for students attending programming at 30 or more and 60 or more

days compared with similar students not attending programming. The absolute value of the effect sizes is small (<0.15). This means that students attending programming at both 30 or more and 60 or more days had a higher cumulative GPA and percentage of credits earned than similar students not attending programming but with a small magnitude of difference.

- There was marginally significant, negative impact in disciplinary incidents for students attending programming at 30 or more days and more significant, negative impact in disciplinary incidents for students attending programming at 60 or more days compared with similar students not attending programming. The effect sizes for both are small (<0.05). This means that students attending programming at 30 or more days are likely to have had less disciplinary incidents than students not attending programming, and students attending programming at 60 or more days are even more likely to have less disciplinary incidences than students not attending programming.
- There was statistically significant, negative impact in school absences for students attending programming at 30 or more and 60 or more days compared with similar students not attending programming. The absolute value of the effect sizes is small (<0.25). This means that students attending programming at 30 or more and 60 or more days had fewer absences than similar students not attending programming but with a small magnitude of difference.
- Regardless of the significance of the effect estimates, all effect sizes are small (Cohen, 1988).

To what extent does 2 years of program participation impact school-related outcomes for students who needed to improve on those outcomes?

- Students attending programming at high levels for 2 years had higher reading and mathematics test scores than comparison students who did not attend at these levels, and these differences are statistically significant. The absolute values of effect sizes is small (<0.25), however.
- Students attending programming at high levels for 2 years had a lower number of school absences than comparison students who did not attend at these levels, and the difference is statistically significant. The effect size (-0.138) is small.
- Students attending programming at high levels for 2 years had a higher percentage of credits earned than comparison students who did not attend at these levels, and the difference is marginally significant. The effect size (0.166) is small. A few points are noteworthy. Although many of the effects would be deemed small by traditional standards for interpreting effect sizes (Cohen, 1988), these effects should be considered substantive and commensurate with expectations for program impact based on the amount of time youth spend in programming. Youth were considered 21st CCLC participants if they participated in programming for either 30 or more or 60 or more days during the school year, which approximates to 60–120 hours or more of program participation. During the average school year, youth will spend close to 1,200 hours in school (Planty et al., 2008).

Aligned Recommendations

- Continue to use the YMEB Survey as a measure for direct program outcomes and consideration in a longitudinal study.
- When conducting impact analyses on school-related outcomes, test for additional sources of selection bias by running an analysis comparing high and low attenders.

Introduction

Beginning in the 2013–14 program year, the Washington Office of Superintendent for Public Instruction (OSPI) contracted with the American Institutes for Research (AIR) to conduct an evaluation of the statewide 21st Century Community Learning Centers (21st CCLC) program in Washington state. For more than a decade, 21st CCLC programs in Washington have provided afterschool and expanded learning programming to enhance the academic well-being of students in high-poverty communities.

Specifically, we conducted a comprehensive evaluation of the 21st CCLC program, which included data collection and support for the existing continuous quality improvement process (the Youth Program Quality Intervention [YPQI]) by providing center-level data back to grantees. AIR built and monitored online data collection modules that not only supported program improvement efforts but also facilitated the ability to report required federal data, monitor programs at the state level, and collect the data necessary for evaluation activities that culminated in an annual report. To facilitate these efforts, the work was organized under three primary areas to support purposes associated with program design, implementation, and the evaluation of outcomes:

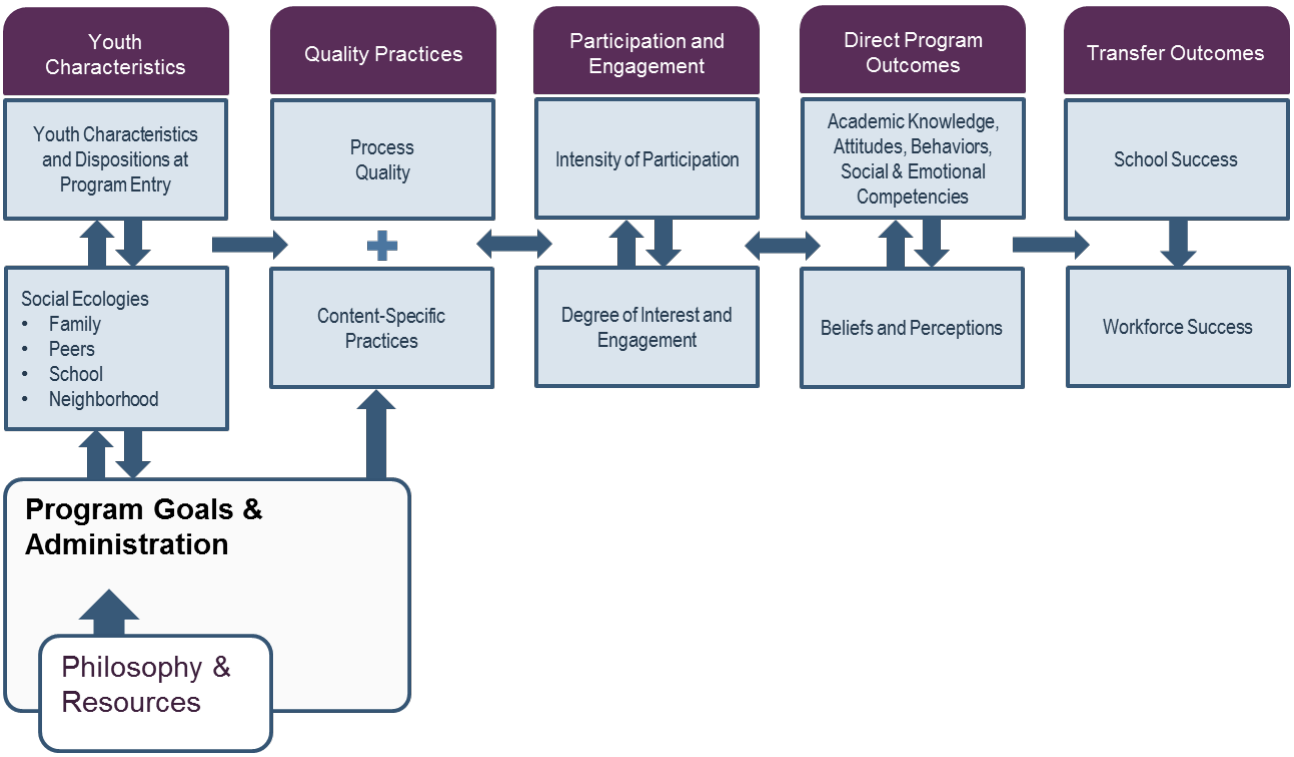
1. Support learning about program quality.
2. Monitor progress on youth outcomes and refine programming.
3. Assess program impact.

These three primary evaluation areas align with our conceptual framework for how change happens in 21st CCLC, to which we turn next.

A Conceptual Framework for Understanding Afterschool Impact

AIR's evaluation activities were grounded in a research-based theory regarding how afterschool programs can have an impact on youth. For more than a decade, researchers have explored how youth benefit from participation in high-quality afterschool programs (Auger, Pierce, & Vandell, 2013; Durlak, Weissberg, & Pachan, 2010; Eccles & Gootman, 2002; Vandell, Reisner, & Pierce, 2007). Based on this work, AIR created a conceptual framework that outlined the key elements that must exist for afterschool programs to have an impact. This conceptual framework (Figure 1), guides the approach used to carry out the statewide evaluation of the 21st CCLC program in Washington.

Figure 1. A Conceptual Framework for How Afterschool Programs Can Have an Impact on Youth Participants



The framework starts with the youth themselves and how they are influenced and supported by the environments in which they live and go to school. Past programming experiences, relationships with peers and teachers, the level of interest in programming topics and content, expectations regarding program experience, and the level of choice in attending all have a bearing on how youth will engage in and experience 21st CCLC programming (Durlak, Mahoney, Bohnert, & Parente, 2010). Typically, we relied on two primary sources of information to explore youth characteristics at program entry and their levels of interest and motivation to participate in 21st CCLC programming: (a) reports by school-day teachers on how youth are faring in the school-day classroom and (b) information provided by the youth themselves on youth surveys.

After considering the predispositions and contextual factors influencing youth before they even enter a program, several factors influence the experiences that youth have once they are participating in a program. First, programs must be of high quality to have an impact. The two broad categories of quality are process quality and content-specific practices. Process quality refers to the adoption of practices and approaches to service delivery that ultimately create a

developmentally appropriate setting for youth, where participants feel safe and supported and have opportunities to form meaningful relationships, experience belonging, and be active participants in their own learning and development. These practices are universal because they apply to any type of youth programming, regardless of content, approach, grade level, or setting.

Content-specific program practices intentionally cultivate a specific set of skills, beliefs, or knowledge. Often, such practices closely align with the direct outcomes a program is seeking to cultivate in participating youth. For example, content-specific practices include specific approaches to cultivating literacy skills, formal curricula for social and emotional learning, or methods for teaching technology skills. Content-specific practices adopted by the 21st CCLC grantees are remarkably diverse. We employ two approaches to collect information about content-specific practices: (a) reports directly by site coordinators on the types of approaches used to develop content-specific skills and (b) data on youth participation in specific types of activities with a specific content focus.

Of course, for youth to benefit from programming, they need to attend programming, ideally at high frequencies across multiple years and in a variety of distinct types of activities. Being "present" at a particular program is not enough, however, to ensure that youth will benefit from the activities. Youth need to experience engagement and interest during their activities to develop the beliefs, skills, and knowledge that can help them in school and beyond. In theory, the extent to which programs effectively adopt practices related to process quality and content-specific practices should heavily influence the degree of engagement and interest that youth experience while participating in 21st CCLC programming.

Once youth are engaged and participating, it is expected that they will begin to develop key skills, beliefs, and knowledge based on their participation in program activities. These features are termed *direct program outcomes* in Figure 1. Based on AIR's research into 21st CCLC programs during the past decade, direct program outcomes fall into two categories: (a) academic knowledge, attitudes, and behaviors plus (b) social and emotional skills and competencies. These types of skills, beliefs, and knowledge are the most immediate outcomes that can emerge from participation in high-quality afterschool programs. That is, youth growth and development across these outcomes happens within the confines of the program and often can be observed directly by the staff leading afterschool activities.

Finally, the skills, beliefs, and knowledge that youth develop by participating in high-quality 21st CCLC programming may be used in other settings outside the program to drive achievement and success in the school and the workplace—a concept commonly referred to as transfer.

These outcomes are typically measured by 21st CCLC programs by connecting participation data with school-related data available at the state or local level.

Evaluation Questions

Given the three evaluation purposes and the conceptual framework, AIR's evaluation activities during the 5-year contract period were intended to help us answer the following questions:

1. What were the primary characteristics associated with the grants and centers funded by 21st CCLC and the student population served by the program? (Chapter 1)
2. To what extent was there evidence that centers funded by 21st CCLC implement research-supported practices related to quality afterschool programming? (Chapter 2)
3. What does youth completion of the Youth Motivation, Engagement, and Beliefs Survey indicate about youth experiences in programming plus youth functioning on social and emotional skills, competencies, and noncognitive factors? (Chapter 3)
4. To what extent is there evidence that students participating in services at higher levels demonstrated better performance on youth outcomes compared with youth participating at lower levels? (Chapter 4)

The rest of this report provides our answers to all four questions, with findings for each question presented in the chapters indicated in parentheses. We also provide additional information about data sources and methodology in Appendix A.

Chapter 1. Program Characteristics

Evaluation Question 1: What were the primary characteristics associated with the grants and centers funded by 21st CCLC and the student population served by the program?

One hallmark of the 21st CCLC program is the wide diversity (a) of organizations involved in the provision of 21st CCLC programming, (b) of approaches to the way programs deliver services and activities, and (c) in the nature of the student population served. This chapter outlines the primary characteristics associated with grantees and centers funded by 21st CCLC and the student population served by the program for the 2017–18 program year.

Summary of Findings

In the 2017–18 program year, 132 centers were associated with 50 active 21st CCLC grantees that served 15,402 youth in Grades K–12, of whom 9,490 were regular attendees. Generally, the domain of Washington 21st CCLC grantees and centers operating during 2017–18 was similar to prior years in terms of organizational and operational characteristics.

- Most of the programs occurred in school-based locations.
- Almost all Washington centers offered academic enrichment activities to students as well as some sort of programming to adult family members.
- Centers in Washington continue to mainly serve students in the elementary (54%) and middle grades (25%).
- Most centers were considered mature (i.e., in the second to fourth year of their funding cycle); a smaller proportion of the centers (24%) was new (i.e., in the first year of funding).
- More students attended more frequently.
- Most students were from low-income families.

Aligned Recommendations

- Consider the contextual aspects, such as new policies and communication efforts, that might have contributed to shifts in when programs operated, the degree to which programs provide services to adult family members, and the population of students being served. Things such as increased per student cost might be driving trends in the number of students served each year.
- Consider the different training and technical assistance needs of grantees based on their maturity so that programs receive the supports they need.
- Explore why more students are attending programs more frequently and what percentage of students are attending for multiple years to understand what keeps students engaged in the program.
- Implement data collection capacity to collect more detailed information on adult family member participation, including the types of activities in which they participate.

Grantee Characteristics

OSPI is responsible for distributing the 21st CCLC funds it receives from the U.S. Department of Education through a competitive bidding process, which results in awarding new grants to entities that propose to operate centers in high-poverty communities. Grants active in the 2017–18 program year were initially awarded in 2013 (*n* = 10), 2014 (*n* = 19), 2015 (*n* = 5), 2016 (*n* = 4), and 2017 (*n* = 12). The term *grantee* in this report refers to an entity that applied for and received a 21st CCLC grant from OSPI and serves as the fiscal agent for the grant in question. This section considers elements examined only at the grant level, notably grantee maturity and organization type.

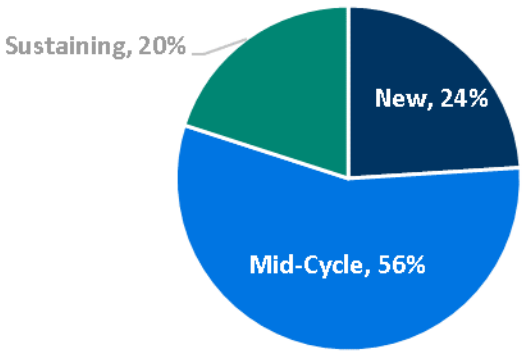
Grantee Maturity

The evaluation team examined grantee maturity to investigate the hypothesis that, because of their experience, mature centers found ways to provide higher quality services, adapt more readily to budget reductions, and have plans in place to sustain a program after the grant funding ends. We classified Washington grantees into three possible maturity categories:

- **New**—grantees in their first year of 21st CCLC funding
- **Mid-cycle**—grantees not in their first year but not in their last year of funding (i.e., mature grantees)
- **Sustaining**—grantees in their last year of 21st CCLC funding

Figure 2 shows the percentage of grantees in each maturity category. In the 2017–18 program year, of the 50 Washington state grantees, 24% were new, 56% were mid-cycle, and 20% were sustaining.

Figure 2. Percentage of Centers Identified as New, Mid-Cycle, and Sustaining



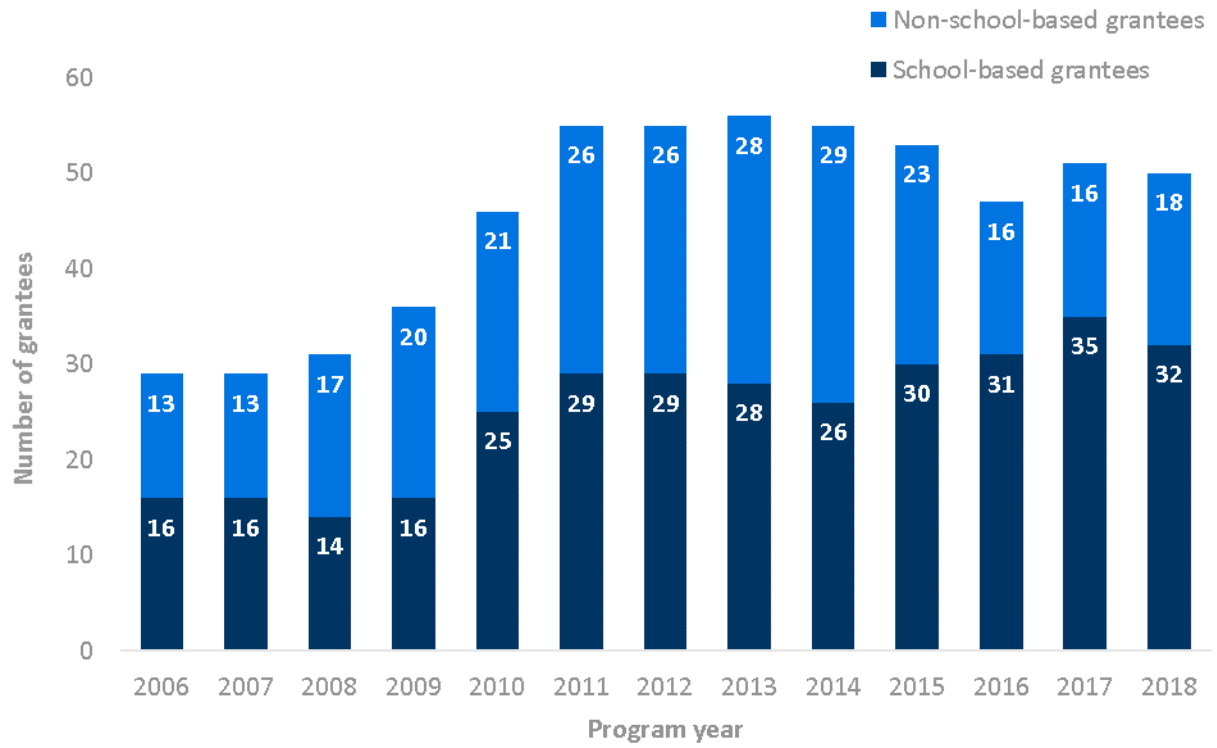
Note. OSPI awarded grants for a 5-year period. *Source*. OSPI records.

Grantee Organization Type

As established in the authorizing legislation for 21st CCLC programming, several types of grantee agencies may administer programs. The most relevant distinction is whether the grantee organization is a school-based entity. School-based organizations include public districts, charter schools, and private schools. Non-school-based organizations include, among other entities, community-based organizations, faith-based organizations, health-based organizations, and park districts. Both school-based and non-school-based organizations can look different in their staffing models, how they recruit and enroll youth in their programs, and how they communicate with school-day staff.

Of the 21st CCLC grantees funded, school-based and non-school-based organizations have historically been represented roughly equally since the state-administered program began. However, this trend began to change in the 2014–15 program year (Figure 3). During the most recent program year (2017–18), most grantees were funded through school-based entities.

Figure 3. Number of School-Based and Non-School-Based Grantees by Year, 2006–2018



Source. OSPI records.

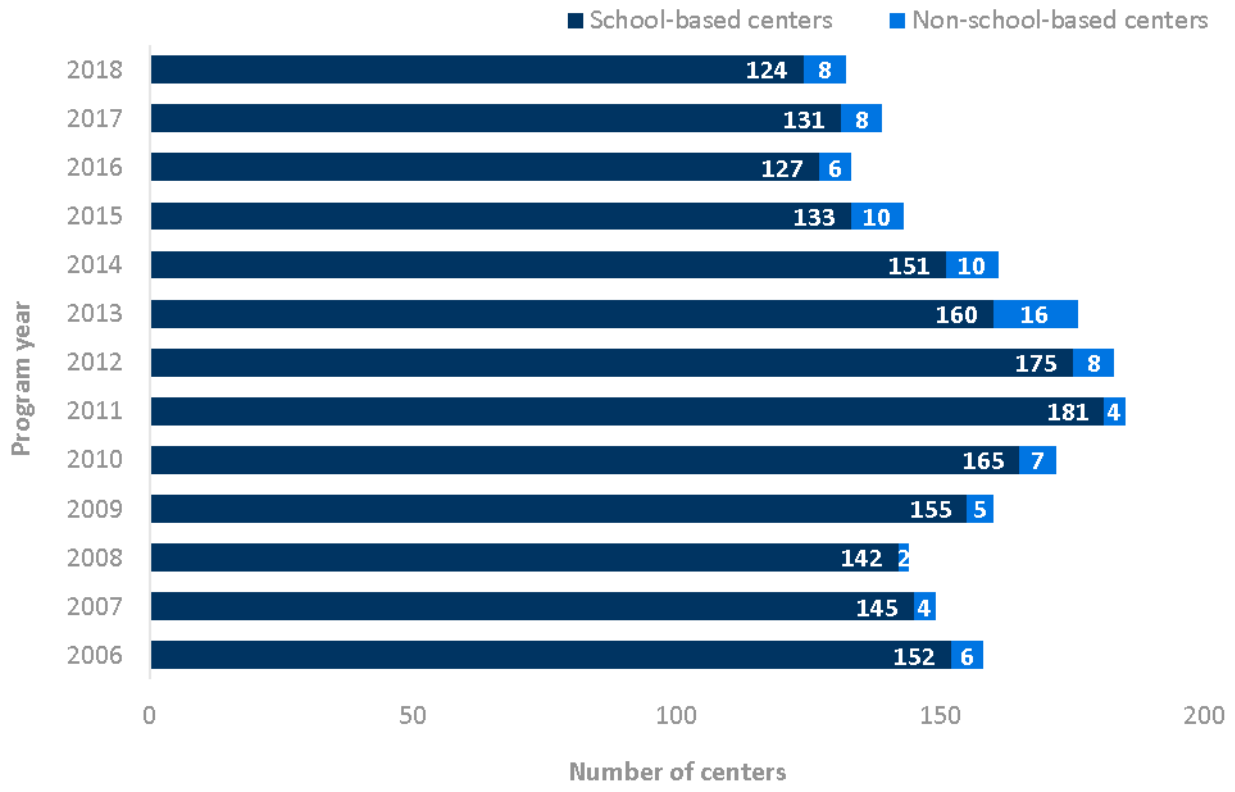
Center Characteristics

In this report, we use the term *center* to refer to the physical location where 21st CCLC–funded services and activities take place. Centers are characterized by defined hours of operation, have dedicated staff members, and usually have site coordinator positions. Each 21st CCLC grantee in Washington has at least one center; many grantees have more than one center. In the 2017–18 program year, 132 centers provided 21st CCLC–funded activities and services.

Center Organization Type

Like grantees, centers are classified as either school-based or non-school-based centers (Figure 4). In the 2017–18 program year, most of Washington's 132 centers were in schools.

Figure 4. Number of School-Based and Non-School-Based Centers by Year, 2006–2018

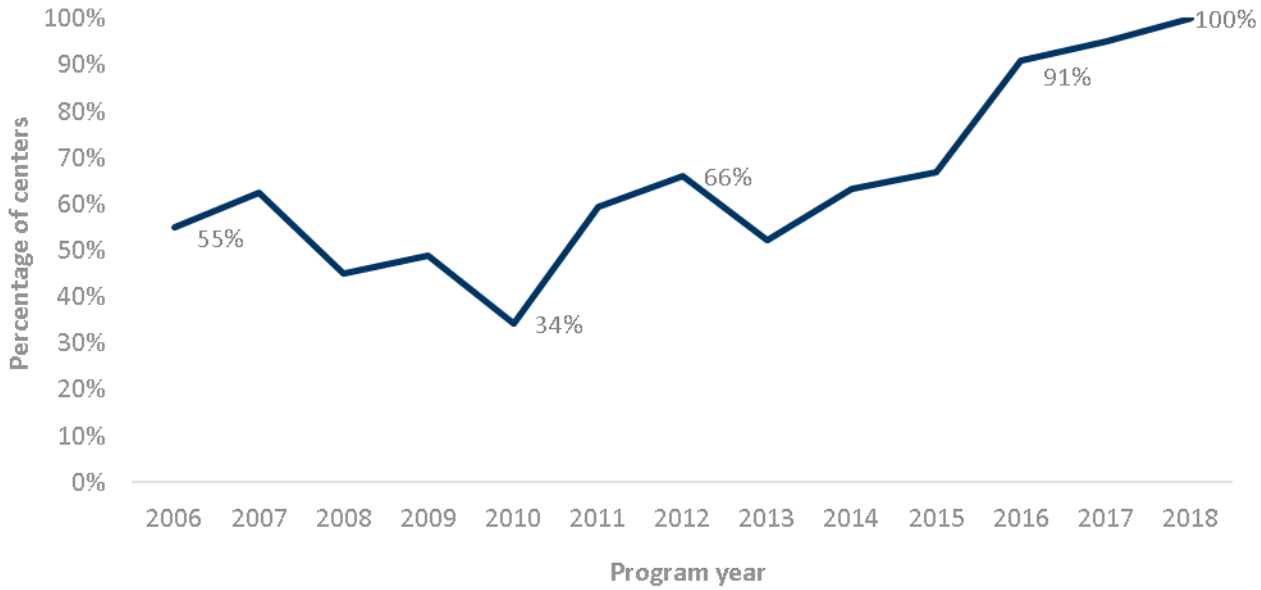


Source. Continuation reports.

Summer and School-Year Operations

The number of 21st CCLCs in Washington that offered summer programming increased from previous years, likely the result of a policy shift that all funded projects must offer summer programming (Figure 5). For most programs, this shift yielded almost 5 additional weeks of programming (Table 1). In the 2017–18 program year, 132 of Washington's centers (100%) offered summer programming. Washington centers operated, on average, 32.3 weeks in the school year; if they held summer programming (first year grantees do not have a summer program because their funding begins in the fall), this added another 4.8 weeks.

Figure 5. Percentage of Centers Offering Summer Programming, 2006–2018



Source. Continuation reports. *N* = 132 centers.

Table 1. Program Operations by Summer and School Year

Program operations	Summer (*N* = 101)	School year (*N* = 132)
Programming hours per week	20.6	13.5
Program days per week	4.4	4.9
Program weeks per school year	4.8	32.3

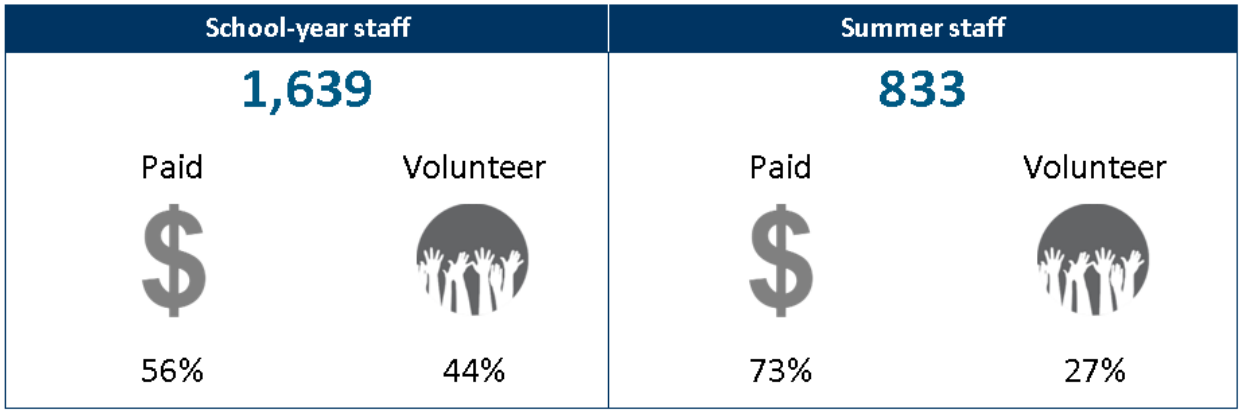
Source. Continuation reports.

Center Staffing

The quality of center staffing is crucial to the success of afterschool programming (Vandell et al., 2004). Many of the program improvement approaches used in the field emphasize the importance of staff for creating positive developmental settings for youth. The success of afterschool programs is critically dependent on students forming personal connections with the staff—especially for programs serving older students, in which a much wider spectrum of activities and options is available to youth (Eccles & Gootman, 2002).

Traditionally, Washington 21st CCLC programs have employed a variety of staff, including academic teachers, nonacademic teachers, college and high school students, counselors, paraprofessionals from the school day, and other program staff with a wide spectrum of backgrounds and training. Figure 6 shows the number of staff members who were paid and volunteered during the school year and the summer. Approximately 56% of the staff working in the school year were paid, whereas 73% of the staff working during the summer were paid.

Figure 6. Number of School Year and Summer Staff

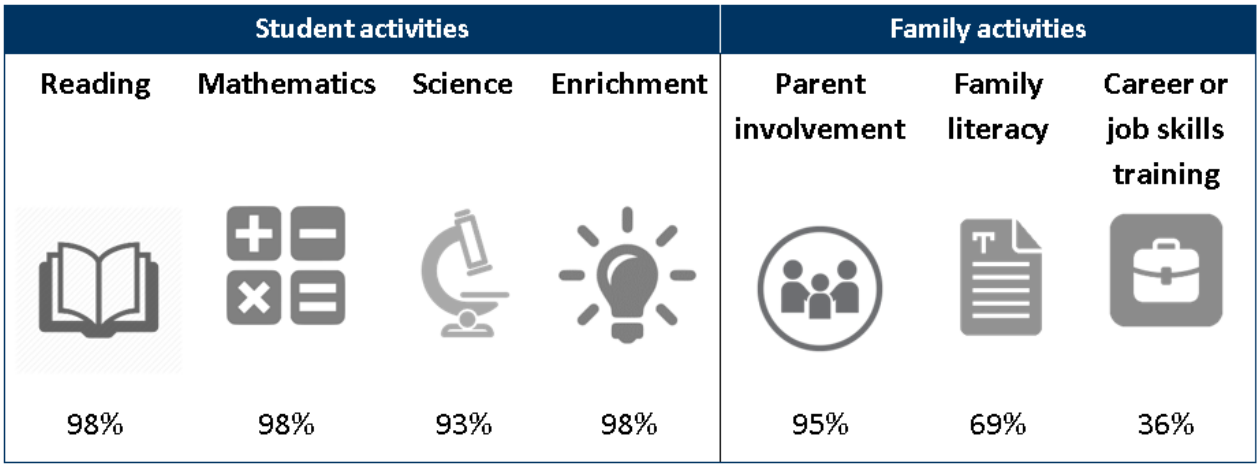


Source. Continuation reports. *N* = 132 centers.

Center Activities

The staff working at a given 21st CCLC program and the activities offered to students attending it are critical elements for how youth experience and potentially benefit from their participation in 21st CCLC programs. Nationally, the goal of the 21st CCLC program is to provide academic and nonacademic enrichment programs that reinforce and complement the regular academic program of participating students. This overarching charge is broad and encompasses multiple types of activities. Most centers offer parent involvement activities but are much less apt to offer career or job skills training activities to families (Figure 7). Most centers offer reading, mathematics, science, and enrichment activities for students.

Figure 7. Activities Offered to Students and Families



Source. Continuation reports. *N* = 132 centers.

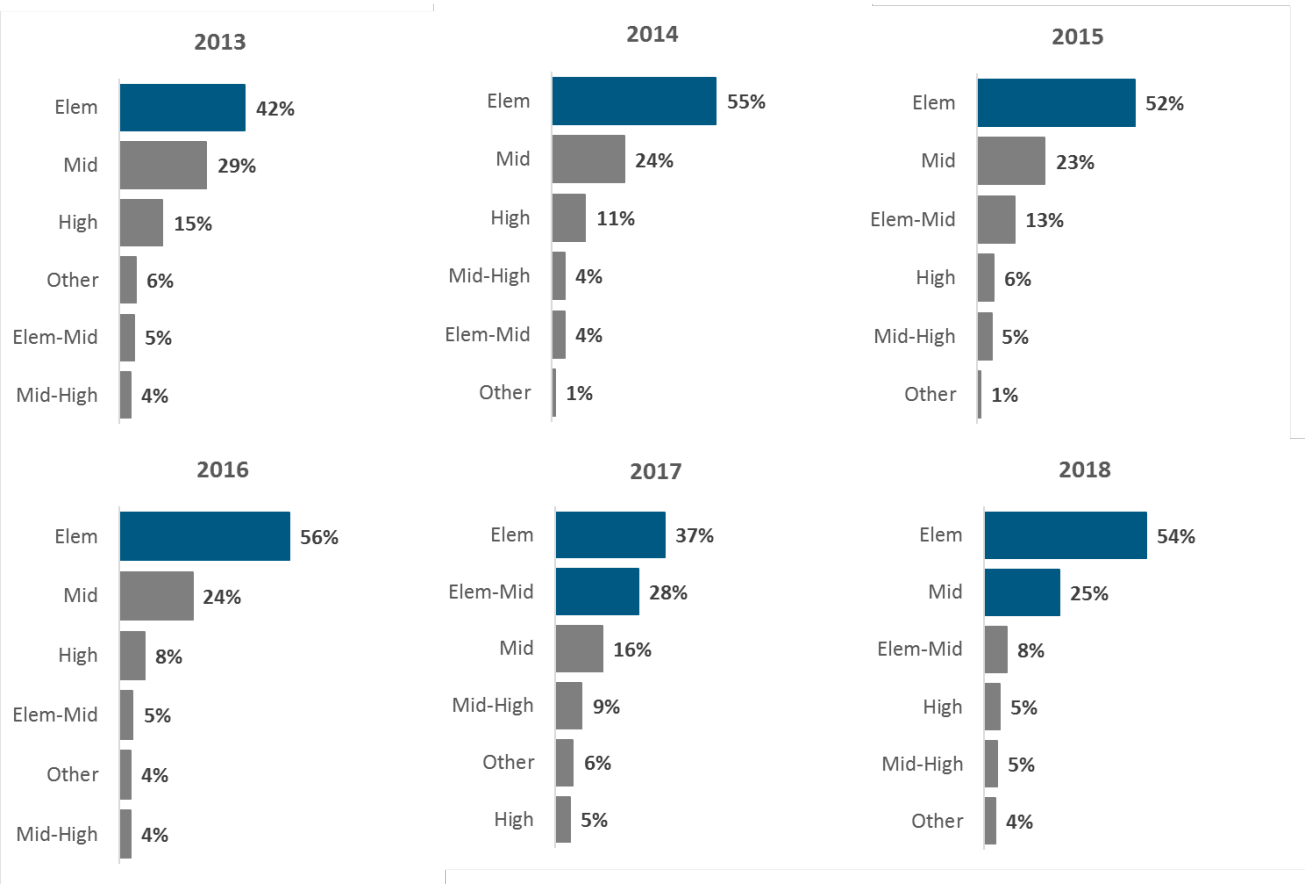
Grade Level Served

Using student-level data about the grade levels of students attending a program, the 21st CCLC programs were classified as follows:

- Elementary only—centers serving students up to Grade 6
- Elementary/middle school—centers serving students up to Grade 8
- Middle school only—centers serving students in Grades 5–8
- Middle/high school—centers serving students in Grades 6–12
- High school only—centers serving students in Grades 9–12
- Other—centers that did not fit into any grade-level category

Figure 8 shows that a greater percentage of centers in the 2017–18 program year served elementary-age youth than in the past, rising from 38% in 2011 to 52% in 2015 and 56% in 2016. Although 2017 saw a dip in the percentage of centers serving elementary-age only students, the percentage increased once again in 2018. During the program year ending in 2018, the majority of centers in Washington served elementary school students exclusively: 54% of all centers were classified as elementary only.

Figure 8. Percentage of Centers Serving Different Age Groups by Year, 2013–2018



Note. We did not report data from the 2006–2012 program years in this figure to maximize readability.
Source. Washington Attendee Module & Comprehensive Education Data and Research System (CEDARS).

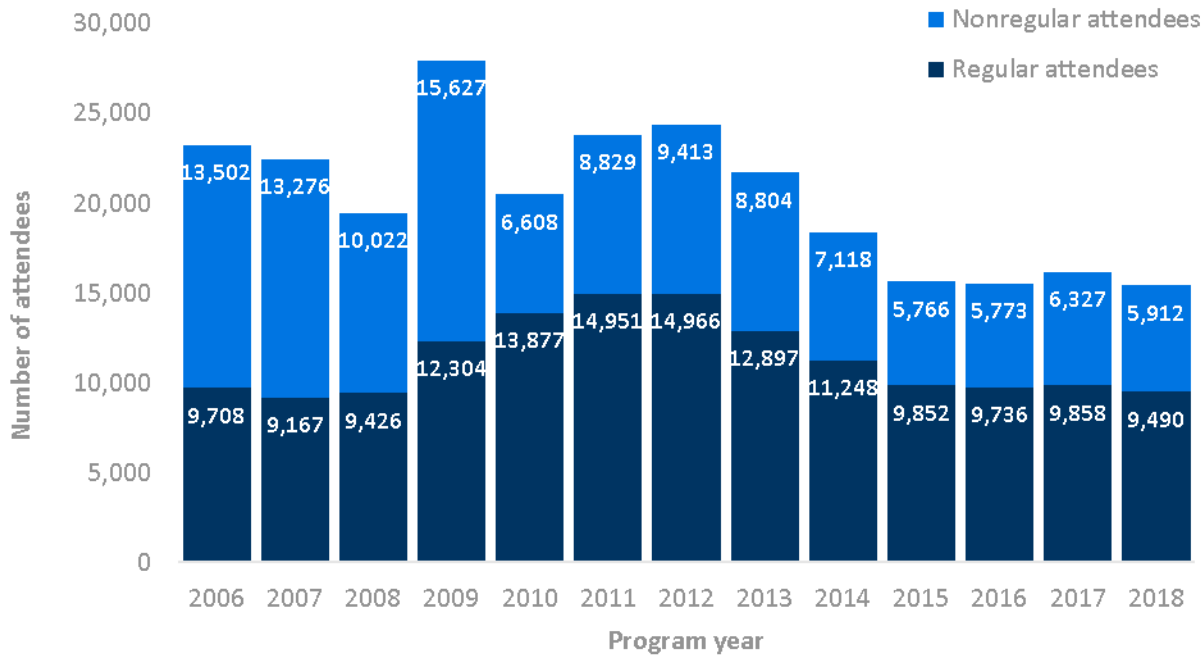
It is important to note that changes in the grade levels served (as well as changes in the number of overall students served) across years could be a direct result of the funding cycles operating within Washington. As large cohorts of programs shift out of and into their 5-year grant cycles, the number of centers serving students also changed.

Center Attendance

It often has been said that "youth vote with their feet," which becomes apparent when we examine attendance levels for 21st CCLC programming. Program attendance is an intermediate outcome indicator that reflects the potential breadth and depth of exposure to afterschool programming. In this regard, we considered attendance in two ways: (a) the total number of students who participated in the center's programming throughout the year and (b) the frequency and intensity with which students attended programming when it was offered. The

total number of students who participated measures the breadth of a center's reach, whereas frequency and intensity measure how successful the center was in retaining students in center-provided services and activities. Figure 9 shows the number of attendees across program years. Of the 15,402 students served in the 2017–18 program year, 62% were regular attendees (students who attended 30 or more days during the reporting period). The percentage of regular attendees was consistent across the 2011–2018 programming years.

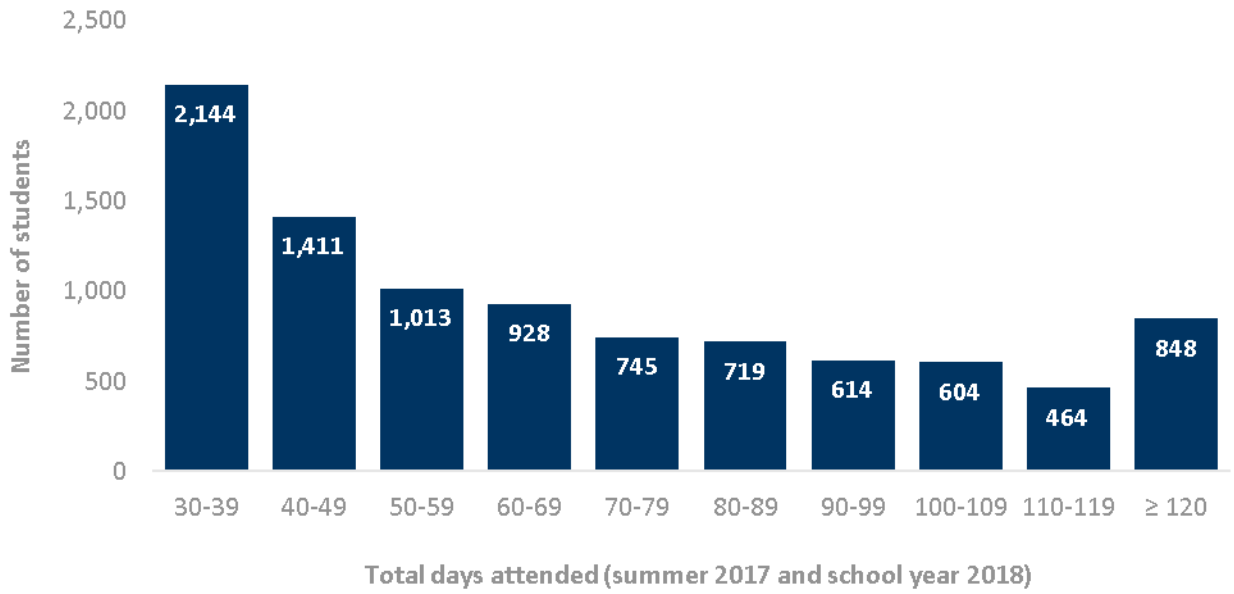
Figure 9. Number of Regular Versus Nonregular Attendees by Program Year



Note. The decline in attendance levels between 2009 and 2010 represents a policy change adopted by OSPI, which increased the number of days a student would need to attend to be counted as a participant. Subsequent declines in overall attendance are perhaps related to the decline in the number of grantees and centers awarded.
Source. Washington Attendee Module.

Figure 10 shows that the number of students attending 21st CCLC programming declined steadily with each increasing 10-day attendance band, except for the more than 120 days attendance band, which increased to 848 students. Approximately 23% of the regular attendees participated in 21st CCLC programming for 30–39 days.

Figure 10. Number of Students by Attendance Band



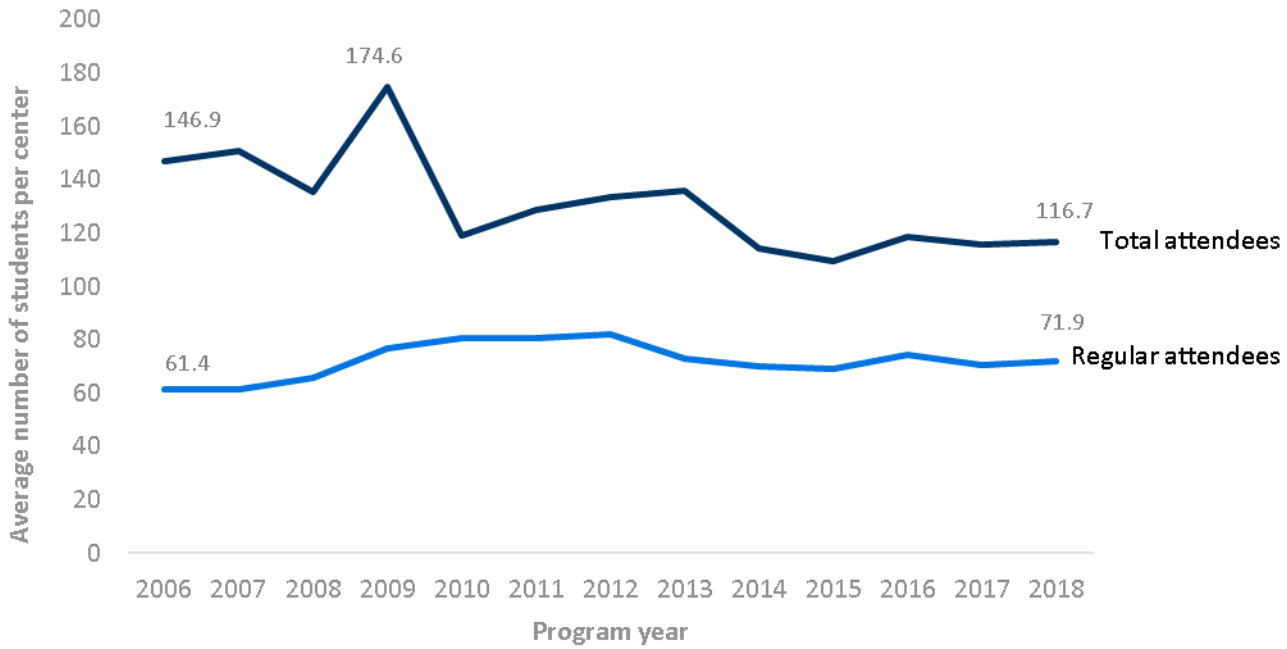
Source. Washington Attendee Module.

Overall, the mean school year attendance for regular attendees was 43.7 days in 2018, with a median of 35 days. For the summer, the mean attendance for regular attendees was 16.4 days, with a median of 14 days.

It is important to highlight the fact that more students attended programming in the 2016–17 program year on a more frequent basis. Research shows that the more a young person attends afterschool programming, the more his or her outcomes improve. The federal 21st CCLC program uses 30, 60, and 90 days as the benchmarks for which programs are held accountable. Research supports these benchmarks, showing that young people can have improved outcomes after 30 days, but those who participate 60 or more days tend to have even greater outcomes (Chaput, Little, & Weiss, 2004; Kauh, 2011; Naftzger, Manzeske, Nistler, & Swanlund, 2013).

On average, each 21st CCLC center in Washington had approximately 117 total students and 72 regular attendees during 2018. There was a slight increase in total attendance and regular attendance from 2015 to 2016, which leveled off in the following 2 years (see Figure 11).

Figure 11. Average Number of Total and Regular Attendees per Center by Year, 2006–2018

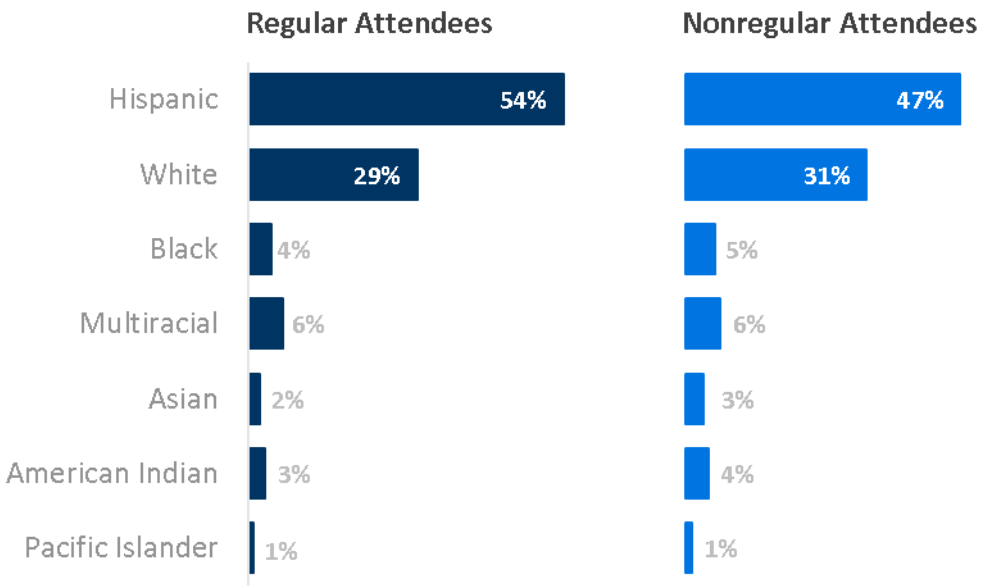


Source. Washington Attendee Module.

Approximately 54% of all regular attendees were identified as Hispanic, and 29% of regular attendees identified as White. Figure 12 outlines the racial/ethnic backgrounds of 21st CCLC attendees in Washington.[1]

[1] The data represented in Figures 12–15 are inclusive only of students we could match in the CEDARS data system (*n* = 14,999; 97%).

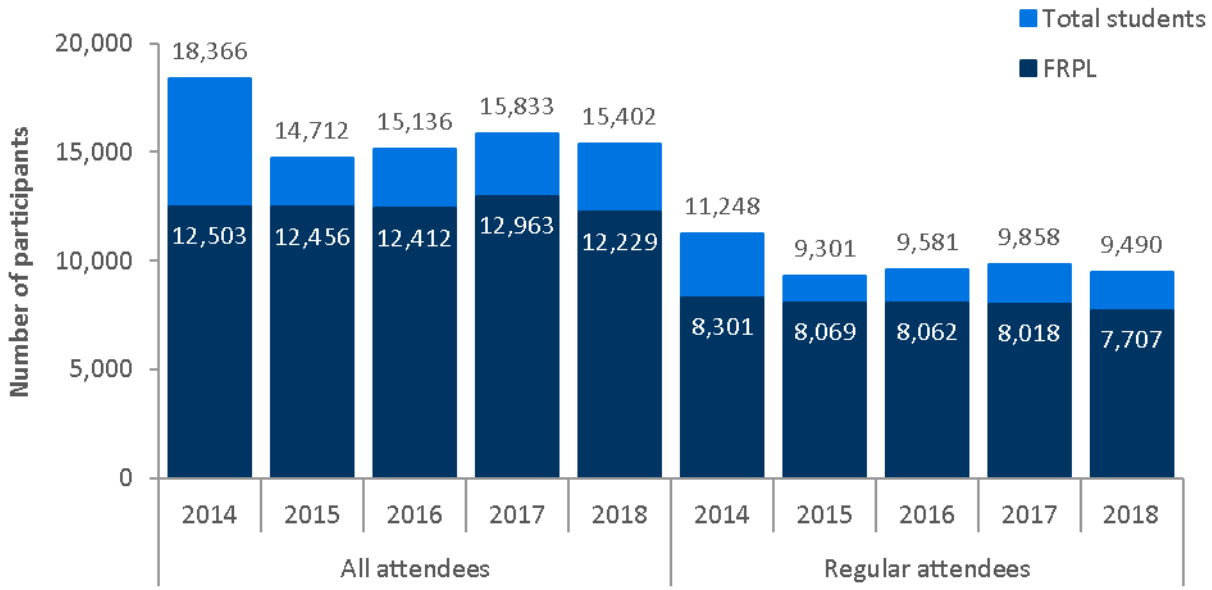
Figure 12. Number of Regular and Nonregular Attendees by Race/Ethnic Category for the 2017–18 Program Year



Source. Washington Attendee Module and CEDARS.

The 21st CCLC program is specifically designed to provide afterschool activities and services to students living in high-poverty communities. Typically, states rely on student eligibility for free or reduced-price lunch as the metric to assess how well states and grantees are reaching this target population. The number of attendees eligible for free or reduced-price lunch is shown in Figure 13. Roughly 79% of all attendees and 81% of regular attendees were eligible for free or reduced-price lunch in the 2017–18 program year. This value decreased slightly from the previous year (82% of all attendees and 81% of regular attendees) but still signals an approximate 10% increase from prior years. After 2014, we saw a large drop in the number of students served in the program, likely caused by increases in the per-student cost estimates for subsequent years.

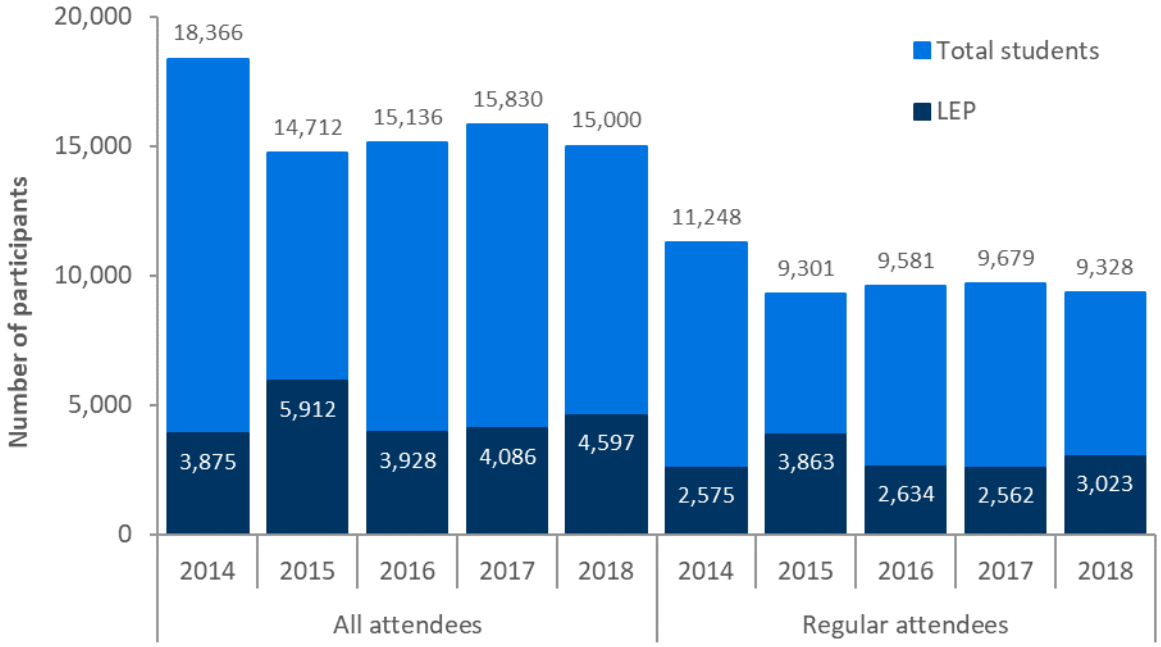
Figure 13. Number of All and Regular Attendees Receiving Free or Reduced-Priced Lunch by Year, 2014–2018



Note. FRPL = free or reduced-price lunch. We do not show the number of students whose FRPL status was unknown. We removed program year data for 2006–2013 from this figure to maximize readability.
Source. Washington Attendee Module and CEDARS.

In addition to free or reduced-price lunch eligibility, information about the student population served by 21st CCLC programming recorded in CEDARS includes students designated as being limited English proficient or as having special needs. Although the number of students overall has declined, we still see that students in the target populations are being served. As shown in Figure 14, the number of students who were limited English proficient decreased by approximately 15% after 2014. In 2017–18, 31% of all participants and 32% of regular attendees were limited English proficient.

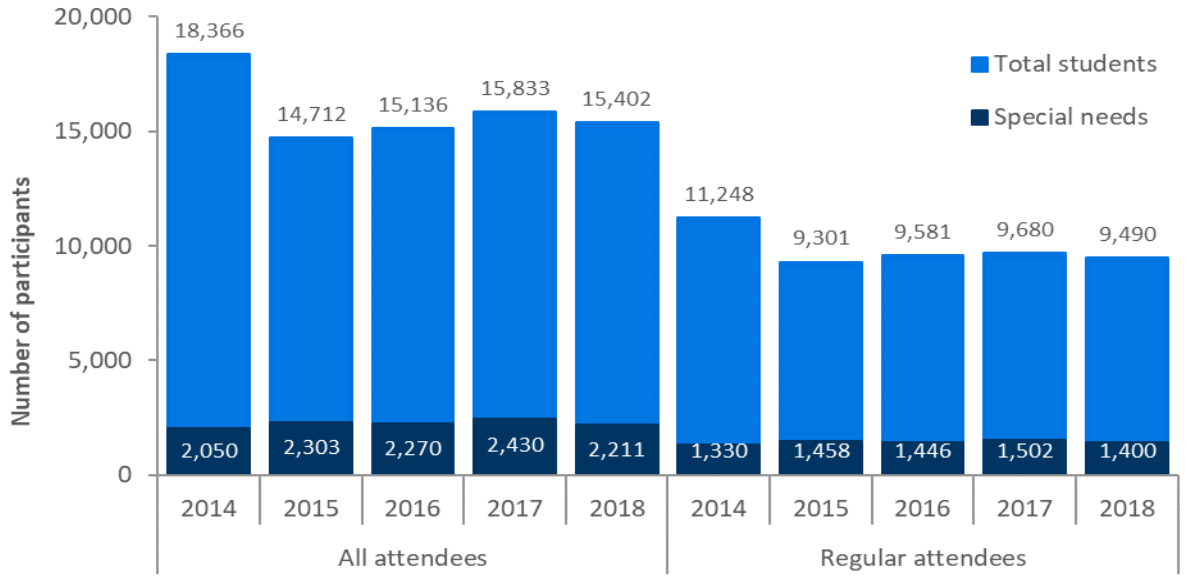
Figure 14. Number of All and Regular Attendees Classified as Limited English Proficient by Year, 2014–2018



Note. LEP = limited English proficient. We do not show the number of students whose LEP status was unknown. We removed program year data for 2006–2013 from this figure to maximize readability.
Source. Washington Attendee Module and CEDARS.

Figure 15 shows the total number of attendees, the number of regular attendees, and the number of attendees who have special needs. The number of students with special needs decreased by only 1% after 2014 for both groups. In 2017–18, 15% of all attendees and 15% of regular attendees had a special need of some sort.

Figure 15. Number of All and Regular Attendees Classified as Special Needs, 2014–2018



Note. We do not show the number of students whose special needs status was unknown. We removed program year data for 2006–2013 from this figure to maximize readability.
Source. Washington Attendee Module and CEDARS.

Enrollment Policies and Recruitment Approaches

Enrollment policies and recruitment practices may have a substantial bearing on program design and delivery. For example, a program that targets a relatively small number of students with high academic needs and proposes to provide them with intensive support in one-on-one and small-group settings will have different strategies for recruitment and enrollment than a program that aims to serve as many students as possible and provide those students with a rich array of academic and nonacademic enrichment activities. The evaluation team asked questions related to these areas on the site coordinator survey administered in spring 2018.

Enrollment Policies: Site coordinators indicated the degree to which activities provided at their site were

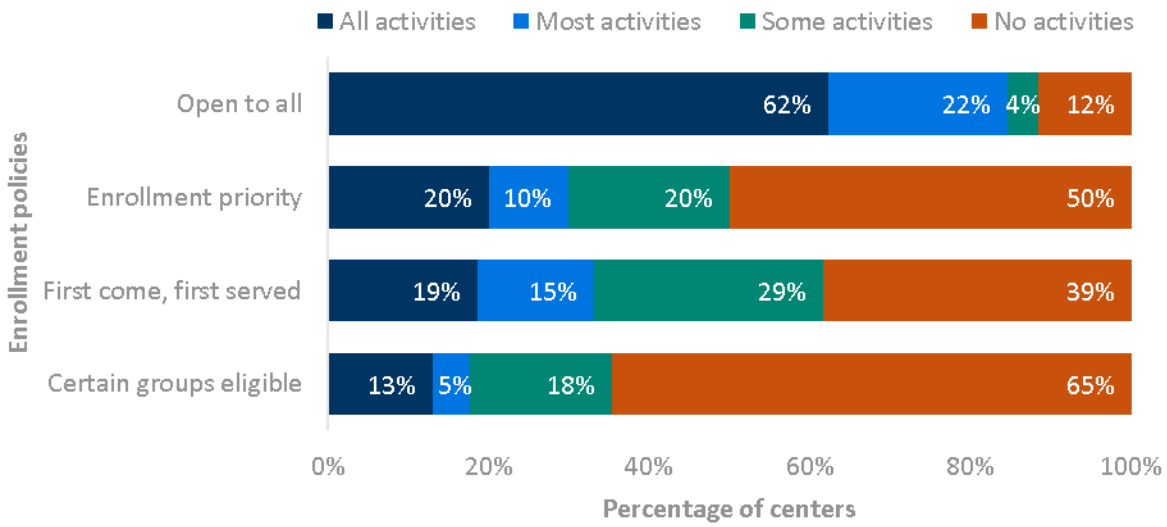
- open to all students who want to participate;
- based on giving enrollment priority to certain groups of students;
- able to support only limited enrollment and therefore filled on a first-come, first-served basis; and
- restricted in that only certain groups of students were eligible to participate.

Figure 16 shows the survey responses. Of the responding site coordinators, 62% indicated that all the activities provided at their site were open to all students who wanted to participate. Another 22% of the respondents indicated that most of their activities were open to all students. In contrast, only 13% of the centers in 2017–18 indicated that all activities provided at their site were restricted in that only certain groups of students were eligible to participate, whereas another 5% of the centers indicated that most of the activities they provided were restricted.

Recruitment Approaches: Site coordinators indicated the extent to which students served at their site were recruited for enrollment in the program based on the following:

- The student scored below proficient on local or state assessments.
- School-day staff referred the student because the student needed additional assistance in reading or mathematics.
- The student failed to receive a passing grade during a preceding grading period.
- The student was considered limited English proficient.

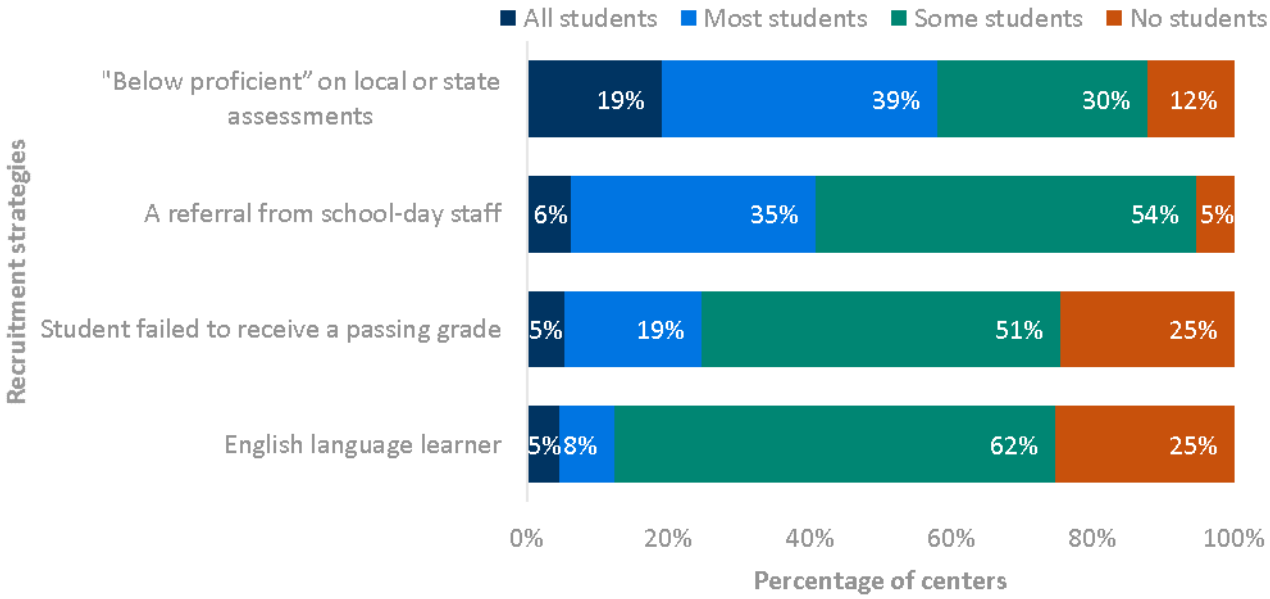
Figure 16. Site Coordinator Survey Responses to Program Enrollment Policies



Source. Site coordinator survey.

Figure 17 outlines students' academic and behavioral tendencies by percentage. These data show the general makeup of the participants at the centers. Approximately 58% of the responding site coordinators indicated that all or most students were recruited into the program because they had scored below proficient on local or state assessments.

Figure 17. Site Coordinator Survey Responses to Recruitment Strategies



Source. Site coordinator survey.

Chapter 2. Implementation of Quality Afterschool Practice

Evaluation Question 2: To what extent was there evidence that centers funded by 21st CCLC implement research-supported practices related to quality afterschool programming?

A primary goal of the statewide evaluation of 21st CCLC programs in Washington was to provide grantees with data to inform program improvement efforts regarding their implementation of research-supported best practices. AIR, the Weikart Center, and OSPI worked collaboratively to define a series of leading indicators predicated on data collected as part of the statewide evaluation. The leading indicators enhance existing information and data available to 21st CCLC grantees regarding how they fare in the adoption of program strategies and approaches associated with high-quality afterschool programming.

The leading indicator system is part of a larger infrastructure constructed by OSPI to support 21st CCLC–funded program improvement. This larger infrastructure includes the YPQI quality improvement process. In the 2017–18 program year, all centers participated in the YPQI initiative on a mandated basis, which, theoretically, contributed to the adoption of key organizational processes that are supportive of quality program implementation.

Summary of Findings

Organizational Practices

Organizational Practices are a key component of implementing quality afterschool programming and often serve as the foundation on which all other quality practices rest. Practices related to continuous quality improvement, leadership, and management remained consistent with findings seen in the past:

- Most staff reported supportive and collaborative program climates, but they also cited that having adequate time to plan and focus on individual student needs are areas that they still struggle with.
- Both site coordinators and staff reported that they have frequent internal communication regarding program planning, setting goals, reviewing progress, and providing feedback to colleagues on their practice.
- The majority of centers reported that they (a) have qualified staff working in their programs who have established relationships with youth, (b) are committed to staff development and program improvement, and (c) solicit feedback regarding the program.

Instructional Practices

Of all the leading indicators, those within the Instructional Practices domain could be considered of greatest importance in ensuring high-quality programming because the point of service is where youth experience programming and arguably receive the most benefit.

- Site coordinators and staff reported that they are either frequently or always leading activities that support student growth and development in reading or mathematics. Provided activities are well planned, are tied to specific learning goals, build skills across multiple sessions, and promote skill building and mastery of state standards. Staff are more apt than site coordinators to report that they are always carrying out these practices.
- Point-of-service quality remained consistent with years past: Programs are doing very well in providing safe and supportive environments on a consistent basis for the students who attend their programs. As expected, there is room for improvement in consistently providing interesting and especially engaging opportunities that allow students to be active participants in their own learning.
- Youth-centered policies and practices saw an increase in the percentage of programs that were consistently incorporating youth interests, building multiple skills, and allowing students to have an influence on both the setting and activities of the program and the structure and policy of the organization.

Partnership Practices

Of the indicators represented in the Partnership Practices domain, the evaluation team believes that School Context is of greatest importance for ensuring high-quality 21st CCLC programming and aligned with the goal of supporting student growth and development in reading and mathematics. As with most indicators highlighted thus far, there are areas of strength and opportunities for growth.

- Site coordinators reported having communication sometimes or frequently with family members of the students they serve, but they could improve on how often they send information home about how students are progressing and encourage family members to participate in center-provided programming directed at adult learning.
- Site coordinators reported facilitating linkages to the school day by aligning programs to the school-day curriculum, helping students with their homework, regularly communicating with school-day staff and other school personnel, and monitoring student progress as major strategies. The least common strategy was hiring regular school-day teachers to work in the program.
- Similarly, staff reported participating in efforts to align to the school day by knowing what academic content is being covered during the school day and linking programming to that content, monitoring student progress, and communicating with school personnel.
- Both site coordinators and staff reported using student data to inform how they adjust their programs throughout the year; however, a larger number of staff members reported not having access to these data compared with site coordinators.
- Most programs consistently adopt policies and practices supportive of family engagement by addressing barriers to participation and building linkages with family and the community.

Aligned Recommendations

- Consider providing a forum or a formal process for project directors to discuss the results of their leading indicators regionally, share stories of successes and challenges, brainstorm solutions to common problems, and build community among programs.
- Dig deeper into who, at the center level, is participating in the program self-assessment process.

- Consider defining the supports available to grantees regarding access to and use of local student data to support program planning and design.
- Consider clarifying definitions and expectations on what constitutes family engagement for the purpose of adult attendance tracking.
- Consider additional ways to collect more objective information on relationships with community partners.

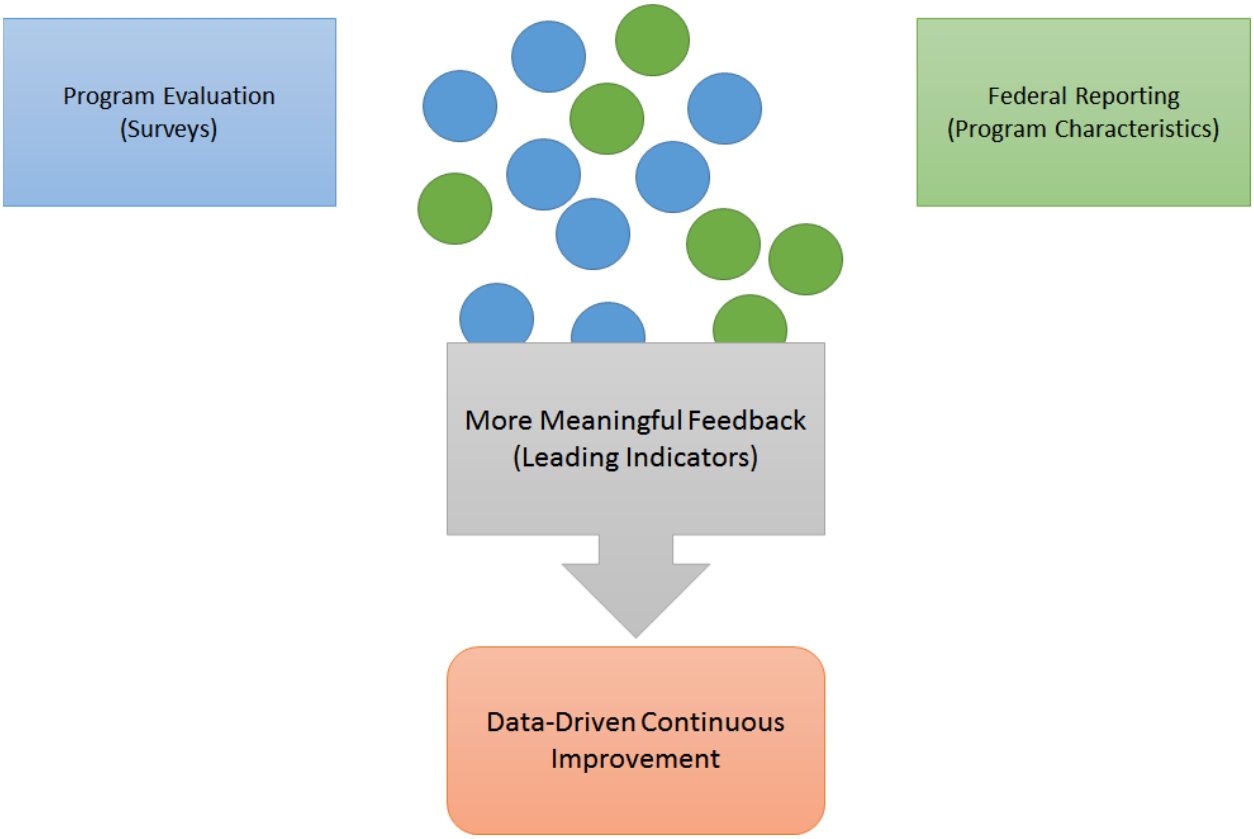
Overview of Leading Indicators

As noted earlier, the leading indicators enhance existing information and data available to 21st CCLC grantees regarding how they fare in the adoption of program strategies and approaches associated with high-quality afterschool programming. Specifically, the evaluation team designed the leading indicator system to do the following:

- Summarize data collected as part of the statewide evaluation in terms of how well the grantee and its respective centers are adopting research-supported best practices.
- Allow grantees to compare their level of performance on leading indicators with similar programs and statewide averages.
- Facilitate internal discussions about areas of program design and delivery that may warrant additional attention from a program improvement perspective.

The leading indicator system primarily focuses on quality program implementation versus youth or program outcomes. It is designed to provide existing data and program evaluation data back to programs regarding the adoption of research-supported practices so that programs can identify strengths and weaknesses and reflect on areas of program design and delivery in need of further growth and development. Figure 18 provides an overall depiction of the intention, purpose, and process of the leading indicator system. Theoretically, more consistent implementation of research-supported best practices will support the attainment of desired youth outcomes.

Figure 18. Leading Indicator Data Flow for Continuous Program Quality Improvement



Selected Leading Indicators

The seven adopted leading indicators are organized into three overarching domains or sets of practices:

- **Organizational Practices.** Practices that occur among staff and management
- **Instructional Practices.** Practices that occur at the point of service, where staff and youth directly interact
- **Partnership Practices.** Practices related to coordinating and aligning afterschool programming and activities with the regular school day, family, and community contexts

The evaluation team also included some data on youth outcomes in the leading indicator reports; however, this chapter will not address information on youth outcome indicators; those will be examined more closely in Chapter 4. Table 2 lists the leading indicators within each practice.

Table 2. Leading Indicator Practice Domains

1. Organizational Practices	
Leading Indicator 1.1	Continuous Improvement
Leading Indicator 1.2	Leadership and Management
2. Instructional Practices	
Leading Indicator 2.1	Instructional Quality (Content)
Leading Indicator 2.2	Instructional Quality (Processes)
3. Partnership Practices	
Leading Indicator 3.1	Family Engagement
Leading Indicator 3.2	School Context
Leading Indicator 3.3	Community Context

Although we drew these measures from the research literature, the evidence base linking performance on these measures with the achievement of desired student outcomes is limited. In addition, we based many of the measures on self-reported data and perceptions of program implementation provided by 21st CCLC staff. As such, readers should treat the results with caution and not use them to draw definitive conclusions about the quality, approaches, and practices adopted by centers in 2017–18. Technical details regarding data sources, analyses, and methods are in Appendix A.

Organization of This Chapter

We organized this chapter by the three broad contexts. Within each context, data associated with each leading indicator are summarized (for Washington centers overall). We used the following two primary approaches to summarize state-level leading indicator data:

- **Scaled Items.** Many questions on the site coordinator and staff surveys are part of a series of questions designed to assess an underlying construct or concept and result in a single scale score summarizing performance on aspects of a leading indicator (e.g., practices that support linkages to the school day). Site coordinator scale scores represent responses from one site coordinator, and center scale scores represent the average of scale scores for all staff respondents associated with a given center.

- **Descriptive Items.** Other leading indicators are based on data that are not appropriate for the type of scale construction just described. For example, program objectives are stand-alone items that do not necessarily contribute to an underlying construct or concept. Items of this type are summarized descriptively.

Each broad context is described in full detail in this chapter.

Organizational Practices

Leading indicators within the Organizational Practices domain examine internal communication and collaboration among program staff. Organizational Practices that support staff in reflecting on and continually improving program quality are key components of effective youth development programs (Birmingham, Pechman, Russell, & Mielke, 2005; Glisson, 2007; Smith, 2007). Programs characterized by a supportive and collaborative climate permit staff to engage in self-reflective practice to improve overall program quality. Self-reflective practice is more likely to lead to high-quality programs that provide youth with positive and meaningful experiences. Two leading indicators fall under the Organizational Practices domain: (a) Continuous Improvement, which is assessed by scales measuring program climate, internal communication, and collaboration, and (b) Leadership and Management.

Leading Indicator 1.1: Continuous Improvement

The evaluation team calculated three scale scores for the Continuous Improvement indicator to summarize the following:

- **Program Climate.** The extent to which program staff report that a supportive and collaborative climate exists within the program (from the staff survey)
- **Internal Communication—Site Coordinator.** How frequently site coordinators engage in practices that support internal staff communication and collaboration (from the site coordinator survey)
- **Internal Communication—Staff.** How frequently staff engage in internal communication and collaboration (from the staff survey)

PROGRAM CLIMATE

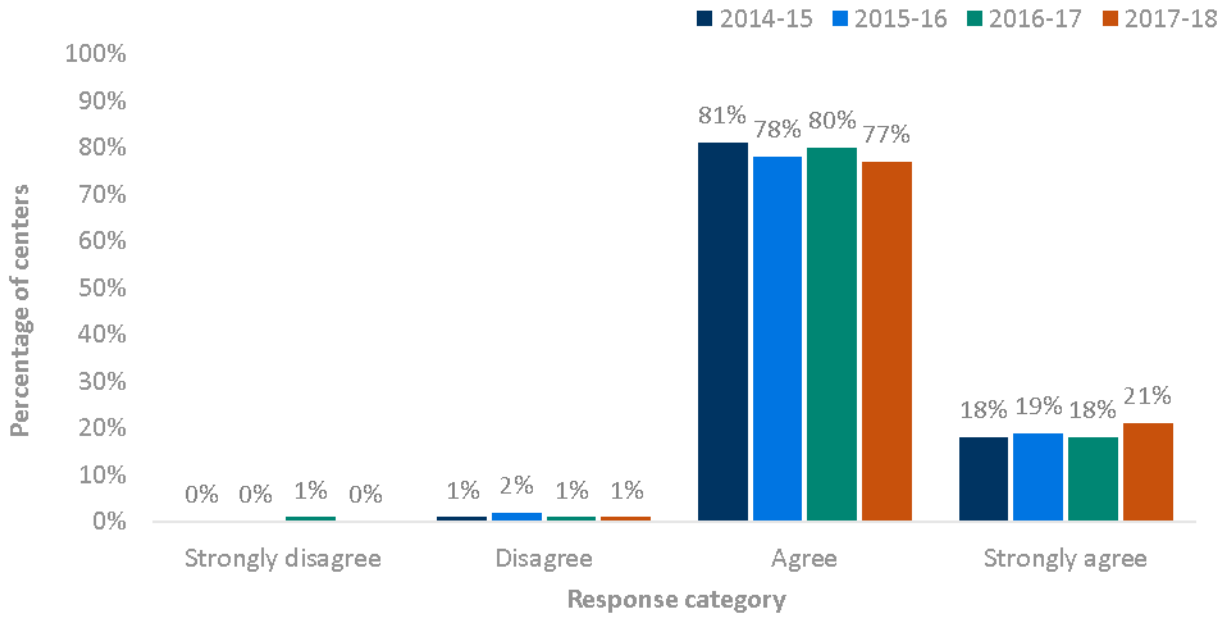
Scale scores for Program Climate are based on the following questions:

PROMPT: Please rate the extent to which you agree or disagree with the following:

- There is adequate time to focus on individual student needs within the program time frame.
- The program staff has shared control over the content.
- The staff is encouraged to try new and innovative approaches.
- Instructional collaboration among program staff is encouraged and supported.
- Staff are provided with training in current research on best practices in afterschool programs.
- Staff participate fully in program decision making.
- There is adequate time to plan individual activity sessions.

As Figure 19 shows, 77% of the centers in 2018 had a mean Program Climate scale score that fell within the agree range of the scale, suggesting that most staff reported supportive, collaborative program climates. In addition, approximately 21% of the centers in 2018 replied strongly agree.

Figure 19. Staff Reports of Program Climate



Source. Staff survey (810 responses from 143 centers in 2015, 774 responses from 133 centers in 2016, 804 responses from 141 centers in 2017, and 773 responses from 132 centers in 2018).

In 2017–18, staff continued to most likely disagree with statements that they had adequate time to plan activities. This issue has been cited annually as an area of disagreement since the 2010–11 program year. Also consistent with prior years, adequate time to focus on individual student needs also is an area of disagreement.

The trend in the data suggests that implementation of these practices continues to be difficult. In these instances, OSPI can better support afterschool staff. For example, OSPI can modify future requests for proposal to require that programs build in time for session planning or offer and support staff participation in trainings targeting the adoption of research-supported practices. It also might be worth examining staffing models and student-to-staff ratios to make sure that afterschool staff members are best able to support students.

INTERNAL COMMUNICATION

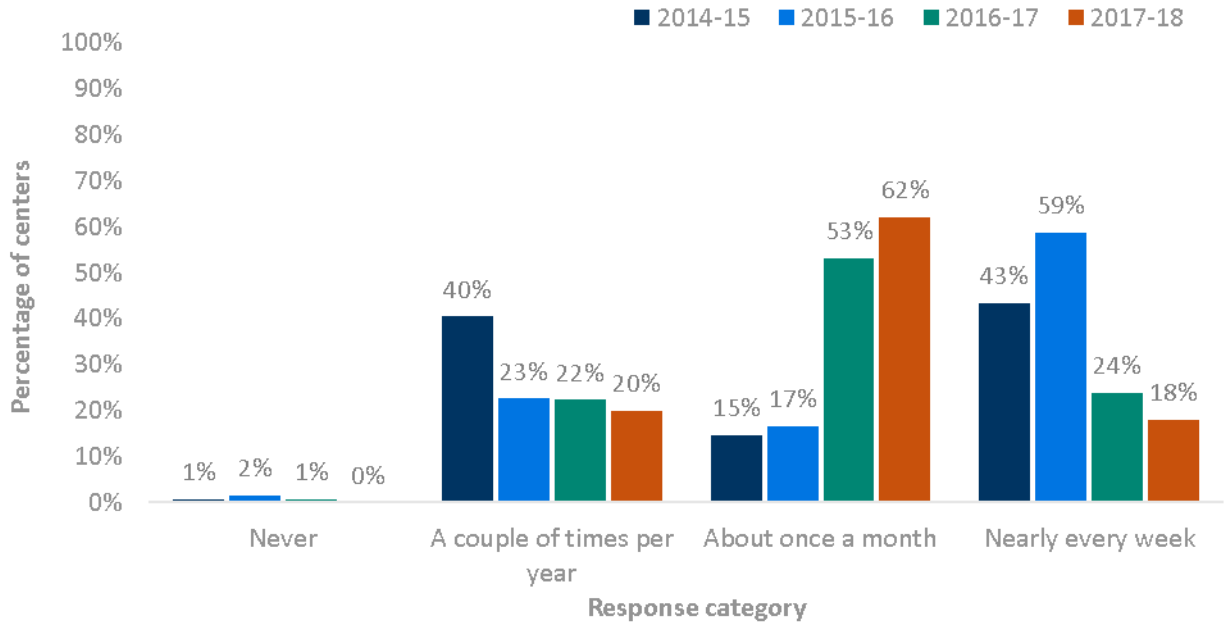
Scores for Internal Communication included staff and site coordinator responses to the following survey question:

PROMPT: How often do you engage in the following tasks with other staff working in the program?

- Conduct program planning based on a review of program data with other staff.
- Use data to set program improvement goals with other staff.
- Discuss progress on meeting program improvement goals with other staff.
- Observe other afterschool staff delivering programming to provide feedback on their practice.
- Conduct program planning with other staff to meet specific learning goals in coordinated ways across multiple activities.

On the Internal Communication portion of the survey, staff answered questions about planning, data use, and observations. Figure 20 shows the percentage of site coordinators who replied in each category. In 2017–18, 18% of the centers had site coordinators who reported internal communication taking place nearly every week, which is down from the previous year.

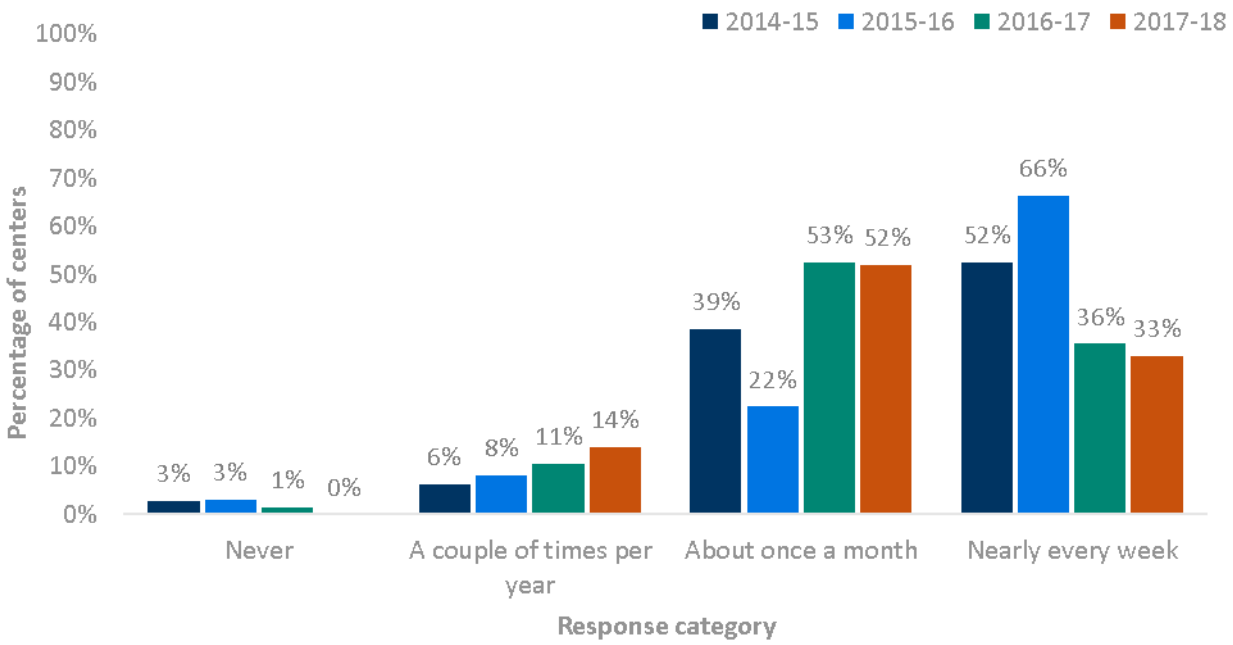
Figure 20. Site Coordinator Reports of Internal Communication



Source. Site coordinator survey (153 responses from 143 centers in 2015, 136 responses from 133 centers in 2016, 139 responses from 130 centers in 2017, and 140 responses from 132 centers in 2018).

Figure 21 shows the responses from staff members. Similarly, 33% of the centers had staff survey respondents who reported internal communication taking place nearly every week, which decreased from the previous year.

Figure 21. Staff Reports of Internal Communication



Source. Staff survey (810 responses from 143 centers in 2015, 774 responses from 133 centers in 2016, 804 responses from 141 centers in 2017, and 773 responses from 132 centers in 2018).

Most responses to the prompts were about once a month for both site coordinators and staff; there was little discrepancy on the second most frequently selected response category. This represents a shift from what we have seen in previous years, when staff members reported engaging in frequent internal communication.

In 2017–18, staff reported that the following internal communication activities were the least frequently implemented:

- Observe other afterschool staff delivering programming to provide feedback on their practice.
- Participate in training and professional development with other staff on how to better serve youth.
- Discuss research-based instructional practices with other staff.

These three activities also were noted as areas that were least implemented in 2015–16 and 2016–17. Observing other afterschool staff has been an area for improvement since 2010–11. These findings are noteworthy because OSPI has mandated that all 21st CCLC programs in Washington participate in a quality improvement process (the YPQI) as a requirement for

funding, and observation of other afterschool staff is central to this process. It is possible that these activities are being carried out at the site coordinator or project director level, not cascading down to direct service staff.

Leading Indicator 1.2: Leadership and Management

Leadership and Management captures the degree to which a program has taken steps to hire qualified staff, promote staff development, support program improvement, and solicit feedback. Some of these areas overlap with previously identified indicators in the Organizational Practices domain, but the data presented for this indicator directly represent how the program believes it is doing in carrying out leadership and management tasks. This indicator uses data obtained from program self-assessment on Form B of the Youth Program Quality Assessment (YPQA). Form B uses a 3-point rating scale to assign scores to a given element (1, 3, and 5). However, unlike Form A, the 3-point rating scale was found to be viable for Form B scales.

LEADERSHIP AND MANAGEMENT

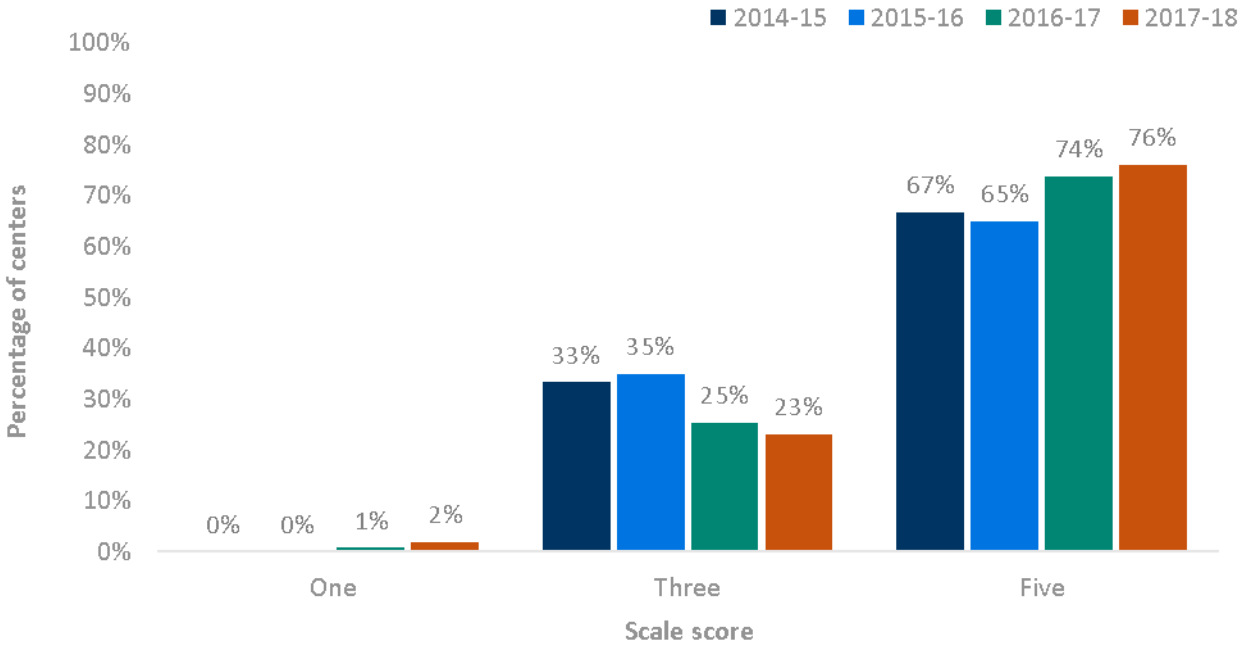
YPQA FORM B

Leadership and Management Scales

- Staff availability and longevity with the organization support youth-staff relationships.
- Staff qualifications support a positive youth development focus.
- Organization promotes staff development.
- Organization is committed to ongoing program improvement.
- Organization solicits feedback.

We asked staff a series of questions regarding staff availability and longevity with the center, qualifications, staff development, and ongoing program improvement. Figure 22 shows the percentage of centers that received a score of 1, 3, or 5 in 2014–15 through 2017–18. Most centers received a score of 5 in all four program years. These results seem to suggest that most staff reported that leadership and management practices within the center (a) support youth–staff relationships and a positive development focus, (b) promote staff development, and (c) are committed to ongoing program improvement.

Figure 22. Center-Level Scores for Leadership and Management



Source. YPQA Form B (from 138 centers in 2015, 127 centers in 2016, 118 centers in 2017, and 124 centers in 2018).

Instructional Practices

Leading indicators in the Instructional Practices domain focus on the practices and approaches adopted by frontline staff to design and deliver activity sessions that intentionally support youth skill building and mastery that align with the center's objectives and principles of youth development. A strong connection exists between the leading indicators in the Instructional Practices domain and components of the YPQI program improvement process. For example, the YPQI process assesses and supports staff practices at the point of service related to creating safe, supportive, interactive, and engaging environments. Effective afterschool programs commonly provide activities that were sequenced, involve active forms of learning, and focus on cultivating particular skills (Durlak & Weissberg, 2007), which highlights the importance of intentional program design. The two leading indicators in the Instructional Practices domain are Instructional Quality (Content) and Instructional Quality (Processes).

Leading Indicator 2.1: Instructional Quality (Content)

Instructional Quality (Content) captures the degree to which the time spent on activities corresponds to program objectives as identified by the site coordinators and how intentionally they designed and delivered the activities. We used both descriptive and Rasch scaling

approaches (see Appendix A) for these data. We calculated two separate metrics to describe aspects of this indicator, which are as follows:

- **Intentionality in Program Design—Site Coordinator Survey.** The frequency with which staff engage in practices that indicate intentionality in activity and session design for the delivery of activities meant to support student growth and development in reading and mathematics
- **Intentionality in Program Design—Staff Survey.** The frequency with which staff engage in practices that indicate intentionality in activity and session design for the delivery of activities meant to support student growth and development

As previously noted, a growing body of research suggests that program outcomes in the form of enhanced student academic achievement outcomes are realized by simply paying attention to how programming is delivered—specifically, whether programming is delivered in developmentally appropriate settings and grounded in core principles of youth development (Birmingham et al., 2005; Durlak & Weissberg, 2007). In addition to youth development principles, afterschool programs are more likely to attain the desired student academic outcomes if staff members responsible for planning the session content incorporate certain practices and strategies into their planning efforts. Both the site coordinator and staff surveys asked a series of questions about intentional program design.

INTENTIONALITY IN PROGRAM DESIGN

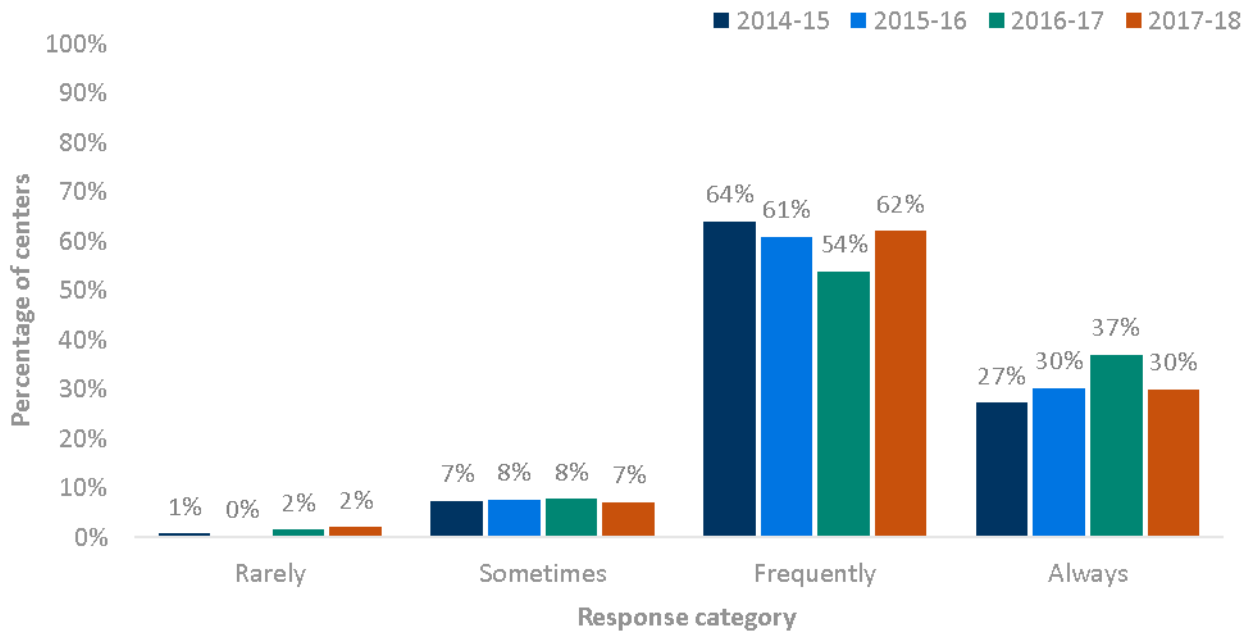
Scale scores for Intentionality in Program Design included staff and site coordinator responses to the following survey questions:

PROMPT: How often do staff lead activities that are especially meant to support student growth and development in reading or mathematics and provide program activities that are . . .

- based on written plans for the session, assignments, and projects?
- well planned in advance?
- tied to specific learning goals?
- meant to build on skills cultivated in a prior activity or session?
- explicitly meant to promote skill building and mastery in relation to one or more state standards?
- explicitly meant to address a specific developmental domain (e.g., cognitive, social, emotional, civic, physical)?
- structured to respond to youth feedback on what the content or format of the activity should be?
- informed by the express interests, preferences, or satisfaction of participating youth?

We asked site coordinators to indicate how frequently the staff who lead activities support skill building in reading or mathematics engaged in the previously discussed practices (Figure 23). Ninety-two percent of the centers had site coordinators who reported frequently or always implementing program design strategies.

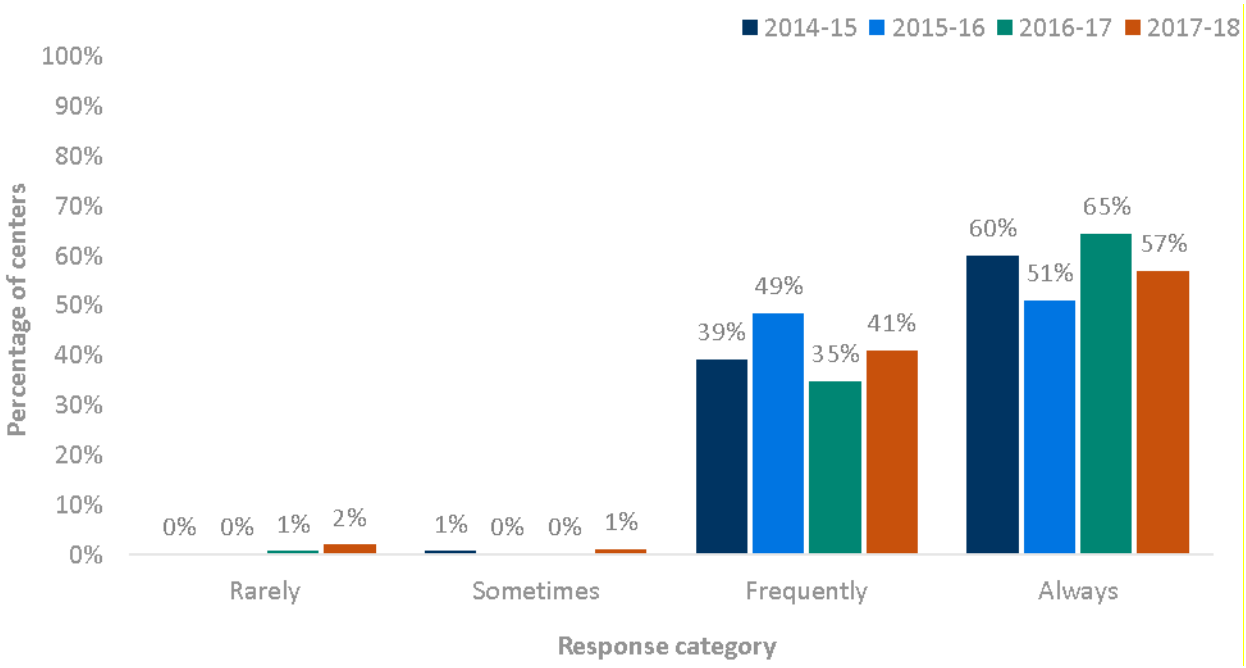
Figure 23. Site Coordinator Responses to Questions About Program Design



Source. Site coordinator survey (153 responses from 143 centers in 2015, 136 responses from 133 centers in 2016, 139 responses from 130 centers in 2017, and 140 responses from 132 centers in 2018).

Staff were asked how frequently they engaged in these practices. Most centers had staff who described themselves as always adopting practices related to program design and delivery. Some differences between the site coordinator and staff responses to the survey questions may be associated with the fact that staff who are not responsible for leading activities that support skill building and mastery in reading and mathematics also completed surveys and were included in the analysis (Figure 24). These results indicate that staff were more likely to report engaging in practices related to intentional program design than were site coordinators. Fifty-seven percent of the centers had a mean staff scale score on the Intentionality in Program Design scale that fell within the always portion of the scale.

Figure 24. Staff Responses to Questions About Program Design



Source. Staff survey (810 responses from 143 centers in 2015, 774 responses from 133 centers in 2016, 804 responses from 141 centers in 2017, and 773 responses from 132 centers in 2018).

Leading Indicator 2.2: Instructional Quality (Processes)

Instructional Quality (Processes) captures the processes and practices that staff members use and are consistent with high-quality instruction and core youth development principles. These processes and practices also emphasize providing developmentally appropriate activities at the point of service (see the conceptual framework in Figure 1). Conceptually, many practices associated with this indicator relate to concepts embedded in the YPQA. We calculated the following scale scores to assess aspects of this leading indicator:

- **Point-of-Service Quality—YPQA Form A (program external and self-assessment).** The extent to which program staff provide supports and opportunities to create safe, supportive, interactive, and engaging settings for participating youth
- **Youth-Centered Policies and Practices—YPQA Form B (program self-assessment).** The extent to which the program adopts youth-centered policies and practices conducive to a supportive learning environment

Point-of-Service Quality consists of scales measuring safety, a supportive environment, interaction, and engagement. The data outlined in this section display both self-assessment and external assessment data obtained by scoring the YPQA Form A or the School-Age Program

Quality Assessment observational tool. We calibrated scores using many facet Rasch measurement approaches and adjusted them to account for the bias introduced by the type of assessment (i.e., external or self-assessment) and the type of activity observed (i.e., enrichment, tutoring and homework help, or recreation). The goal in making these adjustments was to eliminate the systematic impact on scores that may be related to the type of assessment done and the type of activity observed.

POINT-OF-SERVICE QUALITY: YPQA FORM A

Safe Environment scales

- Emotional Safety
- Healthy Environment
- Emergency Preparedness
- Accommodating Environment
- Nourishment

Supportive Environment scales

- Warm Welcome
- Session Flow
- Active Engagement
- Skill-Building
- Encouragement
- Reframing Conflict

Interaction scales

- Belonging
- Collaboration
- Leadership
- Adult Partners

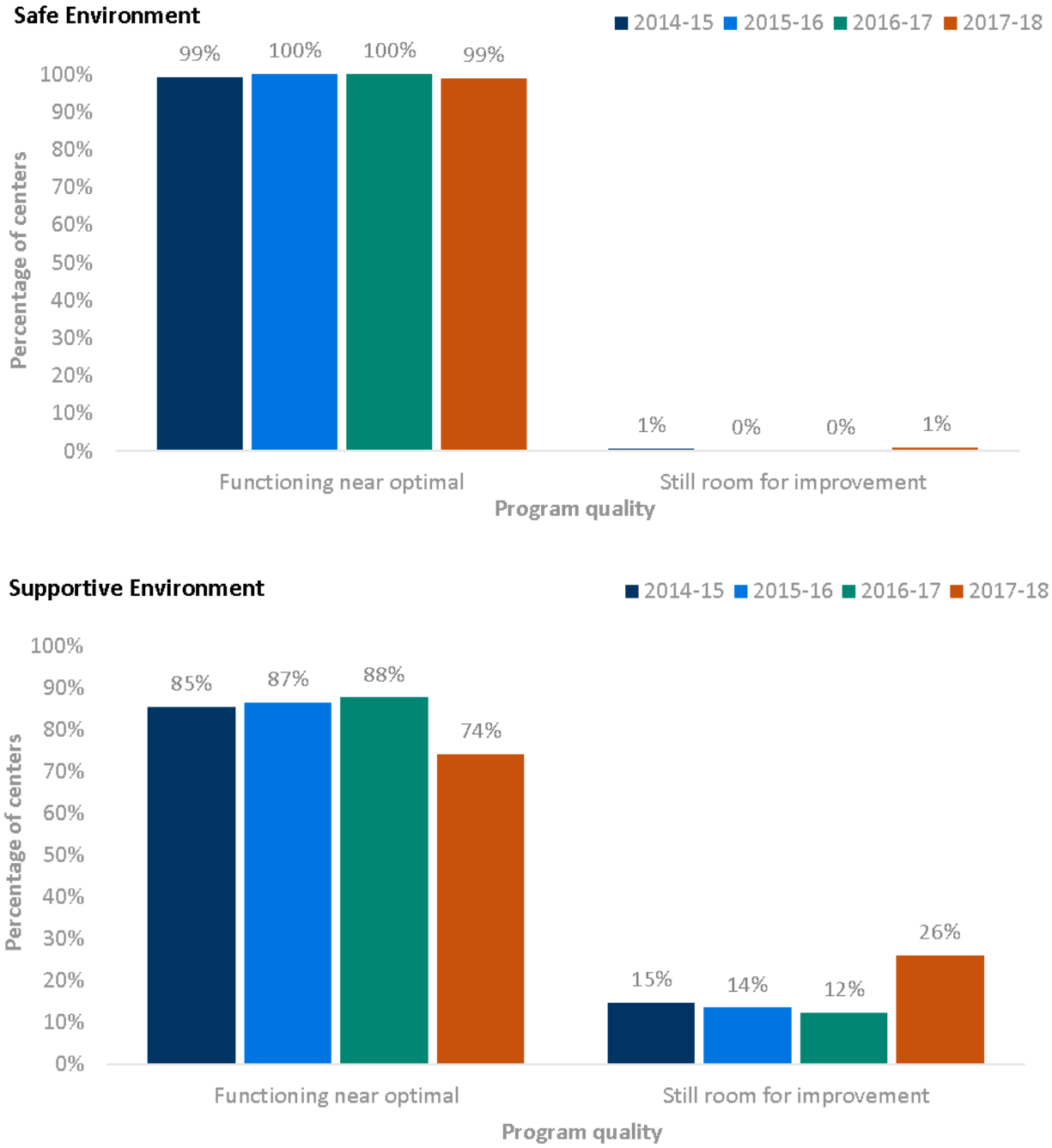
Engagement scales

- Planning
- Choice
- Reflection

These analyses showed that although the YPQA uses a 3-point scale (1, 3, and 5), the tool appears to function more reliably for the 21st CCLC context in Washington if the 1 and 3 scores are collapsed into a single category. In this sense, although the YPQA scores were typically reported using the 1, 3, and 5 scale associated with the tool, in Figures 25 and 26, we report results using the collapsed 1 and 3 score categories (still room for improvement) and the 5 category (functioning near optimal).

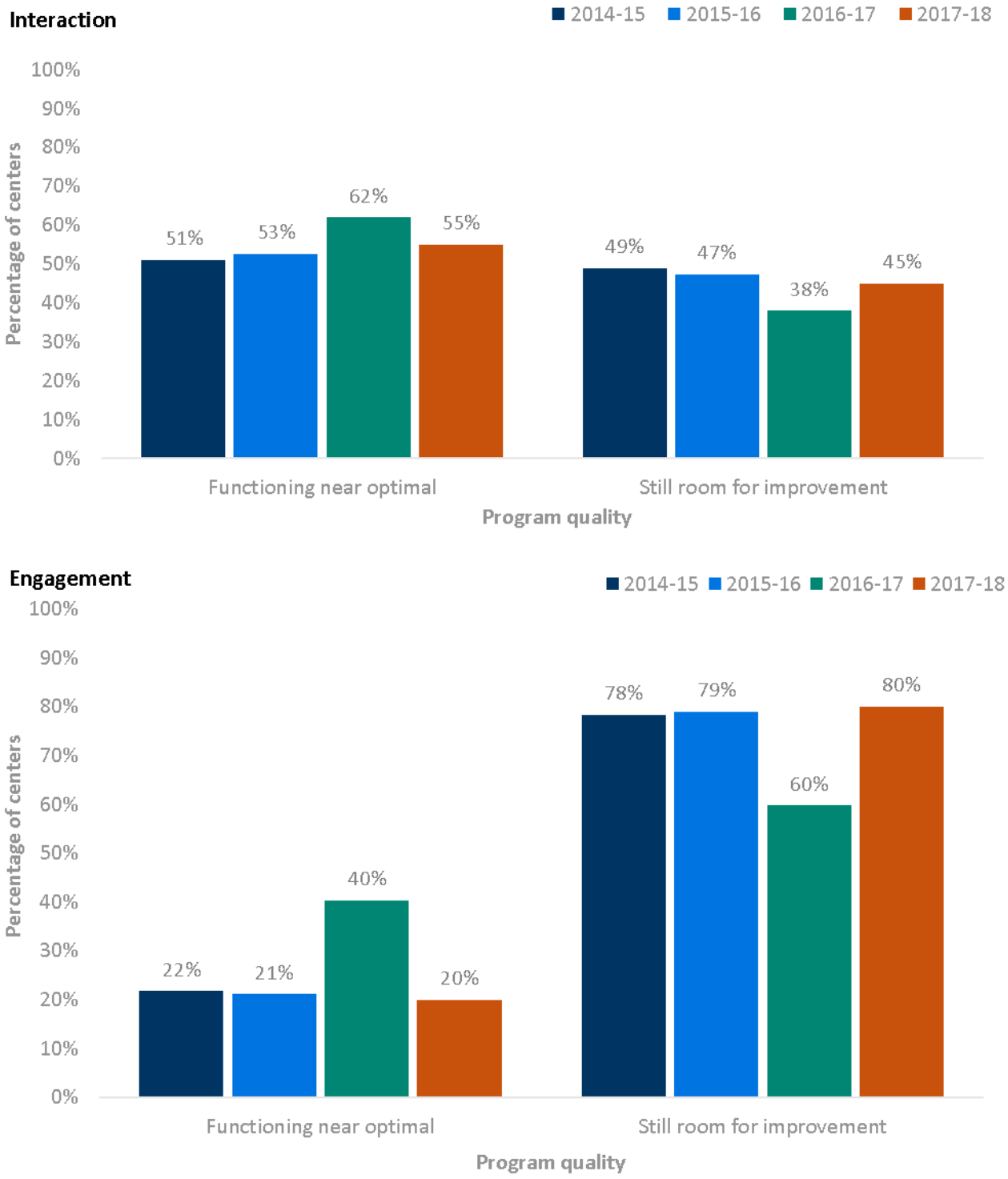
According to the survey results, most respondents indicated that the program provides a safe environment for students (Figure 25). Most programs also offer a supportive environment on a consistent basis. Figure 26 shows the survey results for the interaction and engagement scales; the survey respondents indicated that there is room for improvement on these measures.

Figure 25. Center-Level Functioning on Safe and Supportive Environment



Source. YPQA Form A (from 143 centers in 2015, 133 centers in 2016, 129 centers in 2017, and 127 centers in 2018).

Figure 26. Center-Level Functioning on Interaction and Engagement



Source. YPQA Form A (from 143 centers in 2015, 133 centers in 2016, 129 centers in 2017, and 127 centers in 2018).

The findings in Figure 26 are not surprising because many programs often have more difficulty consistently implementing quality practices related to interaction and engagement. Centers had room for improvement in both the Interaction and Engagement domains across all three program years, with a larger percentage of centers needing improvement in the Engagement domain.

Youth-Centered Policies and Practices capture the degree to which the program adopts youth-centered policies and practices conducive to a supportive learning environment. The data presented for this indicator are based on data obtained from YPQA Form B. We asked staff a series of questions about the program's relevance to youth interests and skills, as well as youth's influence on the setting, activities, structure, and policy of the center. Like Form A, Form B uses a 3-point rating scale to assign scores to a given element (1, 3, and 5). However, unlike Form A, the 3-point rating scale was found to be viable for the program self-assessment on the YPQA Form B scales, so the findings reported in Figure 27 use the 1, 3, and 5 convention, with a 5 indicating more consistent application of the practice.

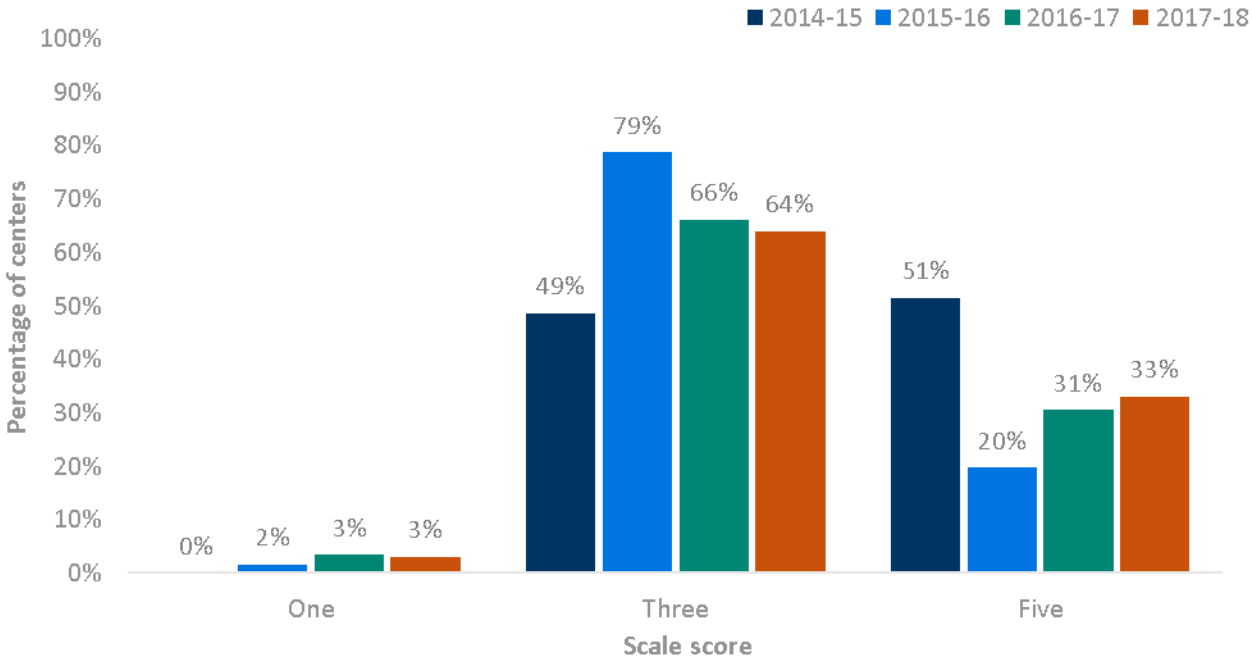
YOUTH-CENTERED POLICIES AND PRACTICES

YPQA FORM B

- Programs tap youth interests and build multiple skills.
- Youth have an influence on the setting and activities in the organization.
- Youth have an influence on the structure and policy of the organization.

Overall, all or nearly all responses were in the 3-point or 5-point category (Figure 27). This finding signals a very small increase in the percentage of centers that fell within the 5-point category from the previous program year. These data indicate that some centers reported that programs tap youth interests; build multiple skills; and involve youth in the settings, activities, structure, and policy of the program, but there is room for improvement for those that report implementing these practices less consistently.

Figure 27. Center-Level Scores on Youth-Centered Policies and Practices



Source. YPQA Form B (from 138 centers in 2015, 127 centers in 2016, 118 centers in 2017, and 124 centers in 2018).

Partnership Practices

The Partnership Practices domain focuses on relationships between the 21st CCLC program and contexts external to the program that significantly impact the success of the program. Community partners, families, and schools play a vital role in 21st CCLC programs by expanding program activities, facilitating program sustainability, and providing essential information about student needs. Three leading indicators are associated with the Partnership Practices domain: Family Engagement, School Context, and Community Context.

Indicator 3.1: Family Engagement

Engaging families in programming and providing family learning events is a key component of 21st CCLC programs. Programs may engage families by communicating with them about center programming and events, collaborating to enhance their child's educational success, and providing family literacy or social events. Survey questions on the site coordinator survey measured the center's approaches to family communication.

FAMILY ENGAGEMENT

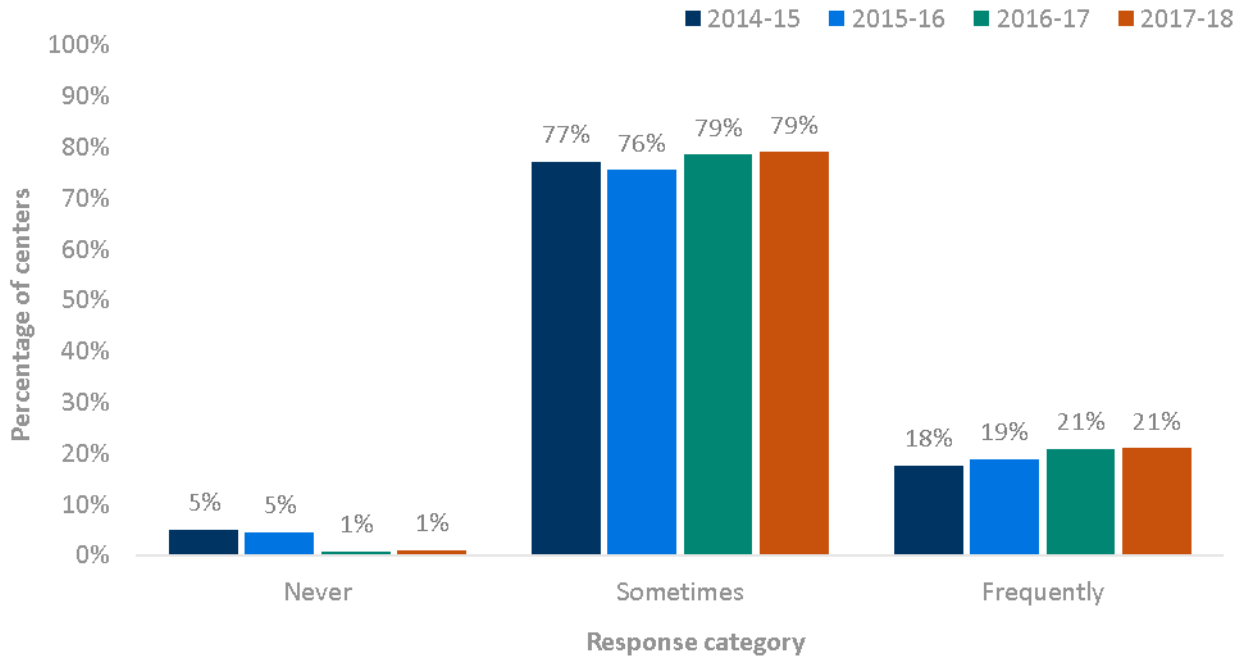
Scale scores for Family Engagement included the following:

PROMPT: How often do you . . .

- send materials about program offerings home to parents or adult family members?
- send information home about how the student is progressing in the program?
- hold events or meetings to which parents or adult family members are invited?
- have conversations with parents or adult family members on the phone?
- meet with one or more parents or adult family members?
- ask for input from parents or adult family members on what and how activities should be provided?
- encourage parents or adult family members to participate in center-provided programming meant to support their acquisition of knowledge or skills?
- encourage parents or adult family members to participate in center-provided programming with their children?

Figure 28 shows the frequency of respondents who answered never, sometimes, or frequently to the family engagement prompts. In all four program years, 90% or more of the respondents indicated sometimes or frequently; these results show that programs communicate with families once or twice a semester.

Figure 28. Site Coordinator Responses to Questions About Family Engagement



Source. Site coordinator survey (153 responses from 143 centers in 2015, 136 responses from 133 centers in 2016, 139 responses from 130 centers in 2017, and 140 responses from 132 centers in 2018).

The least common family communication strategies included sending information home about how a student is progressing in the program and encouraging family members to participate in center-provided programming directed at adult learning. The former finding is not surprising given the difficulty associated with providing individual progress reports on specific students. However, the latter finding is more surprising considering that all programs are required to offer services to the family members of students who participate in the program. There might be an opportunity to do more outreach to parents or adult family members regarding the services offered by the program that are directed toward adult learning.

Indicator 3.2: School Context

School Context captures the degree to which 21st CCLC staff align the design and delivery of programming to the school day and individual student needs. These practices are particularly important to 21st CCLC program quality, given the explicit goal of supporting the growth of students who are low performing in reading and mathematics. The evaluation team scored the data reported for this leading indicator with Rasch-created scale scores, in which higher scores

indicate higher performance or endorsement on a given scale. We calculated the following scale scores for this indicator:

- **Linkages to the School Day—Site Coordinator Survey.** The extent to which the site coordinator reports taking steps to establish links to the school day and uses student data to inform programming
- **Linkages to the School Day—Staff Survey.** The extent to which program staff report taking steps to establish links to the school day and use student data to inform programming
- **Data Use—Site Coordinator Survey.** The extent to which the site coordinator reports the program using student data to inform programming
- **Data Use—Staff Survey.** The extent to which program staff report taking steps to use student data to inform programming

It is important to note that the items for Linkages to the School Day scales on the site coordinator and staff surveys were quite different. On the site coordinator survey, we designed items to ask about the specific strategies adopted by the program to establish meaningful links to the school day. We asked site coordinators to indicate whether the strategy described in a given item was a major strategy, a minor strategy, or not a strategy to support links with the school day. In contrast, the staff survey asked respondents to indicate their level of agreement with a series of items regarding their knowledge of school-day practices, student academic needs, the use of student data to inform programming, and communication with school-day staff to better support the design and delivery of afterschool programming.

LINKAGES TO THE SCHOOL DAY: SITE COORDINATOR RESPONSES

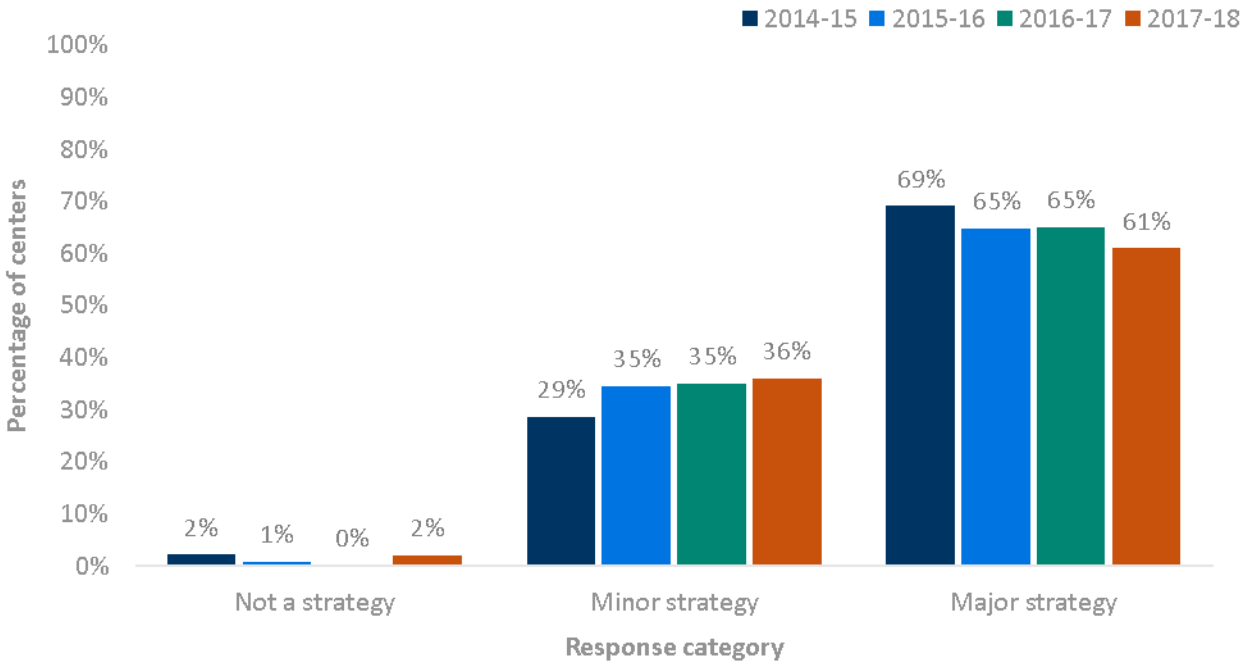
Scale scores included the following:

PROMPT: What strategies are used to link the program to the regular school day?

- Align programming to school-day curriculum and standards.
- Help with homework.
- Hire regular school-day teachers.
- Use student assessment or grades to inform programming.
- Meet face-to-face with school-day staff regularly.
- Communicate electronically with school-day staff regularly.
- Communicate electronically with principals and other school-day administrative staff regularly.
- Monitor students' academic performance on district- or building-level assessments across the school year regularly and use this information to inform activity provision.
- Ensure that activities are informed by and meant to support schoolwide improvement targets related to student performance.

The responses to the prompt about strategies used to link programming to the school day are shown in Figure 29. Nearly all site coordinators responded that the strategies were a minor or major strategy. This finding suggests that programs adopted multiple strategies during these periods. According to the survey results, the least frequently adopted strategy was hiring regular school-day teachers. The most common strategy was helping with homework.

Figure 29. Site Coordinator Responses to Questions About Linkages to the School Day



Source. Site coordinator survey (153 responses from 143 centers in 2015, 136 responses from 133 centers in 2016, 139 responses from 130 centers in 2017, and 140 responses from 132 centers in 2018).

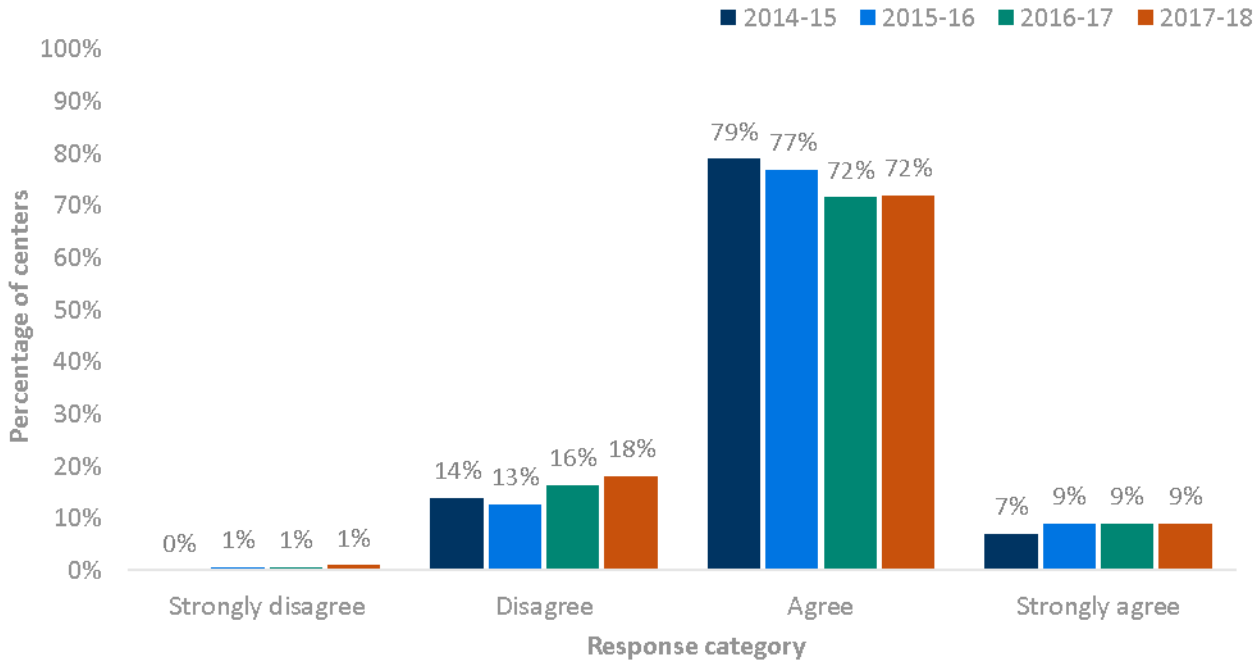
LINKAGES TO THE SCHOOL DAY: STAFF RESPONSES

PROMPT: Please rate the extent to which you agree or disagree with the following statements regarding linkages to the school day:

- On a week-to-week basis, I know what academic content will be covered during the school day with the students they work with in the afterschool program.
- I coordinate the content of the afterschool activities they provide with my students' school-day homework.
- I know who to contact at their students' day school if they have a question about their progress or status.
- The activities I provide in the afterschool program are tied to specific learning goals that are related to the school-day curriculum.
- I use student assessment data to provide different types of instruction to students attending their afterschool activities based on their ability level.
- I monitor students' academic performance on district- or building-level assessments across the school year and use this information to inform activities they provide.
- I help manage a formal three-way communication system that links parents, program, and day school information.
- I participate in regular, joint staff meetings for afterschool and regular school-day staff, where steps to further establish linkages between the school day and afterschool are discussed.
- I meet regularly with school-day staff not working in the afterschool program to review the academic progress of individual students.
- I participate in parent-teacher conferences to provide information about how individual students are faring in the afterschool program.

Responses to the survey suggest that, on average, most staff who seek to connect afterschool programing with school-day content have a good sense of both student academic needs and school-day curriculum or instruction (Figure 30). It is important to note that when reviewing the staff survey results, staff could indicate whether a given item was not related to their role in the program. In this sense, the survey responses likely reflect those staff responsible for the delivery of academic content and who perceived a value in connecting their practice to what was happening during the school day.

Figure 30. Staff Responses to Questions About Linkages to the School Day



Source. Staff survey (810 responses from 143 centers in 2015, 774 responses from 133 centers in 2016, 804 responses from 141 centers in 2017, and 773 responses from 132 centers in 2018).

DATA USE: SITE COORDINATOR RESPONSES

Questions appearing on the site coordinator and staff surveys included the following:

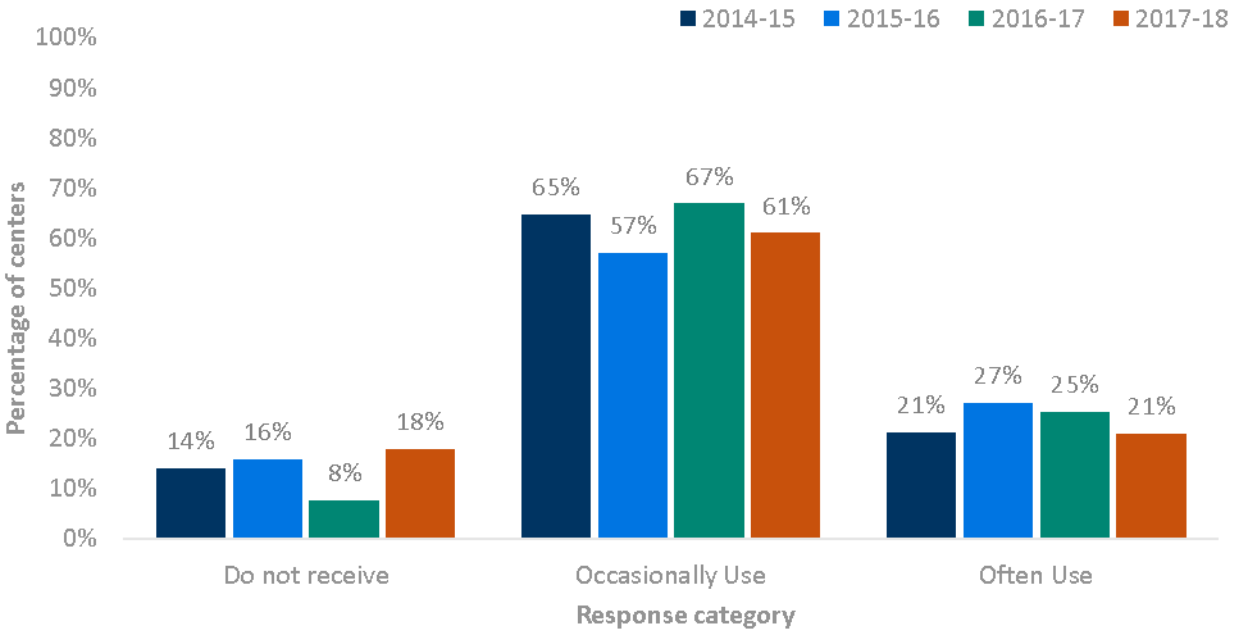
PROMPT: Please indicate whether you [program staff] receive each of the following and to what extent you [program staff] use it in planning for the activities you provide:

- Individualized education plans
- Students' state assessment scores
- Students' scores on district- or building-level assessments
- Students' grades
- Teacher-provided student progress reports

The site coordinator and staff surveys included questions regarding the extent to which staff had access to and made use of student data. Figure 31 shows the data use results of the site coordinator survey. Most respondents indicated that they occasionally use the strategies. This

number is down slightly from 2016–17, where fewer site coordinators reported using these data more often.

Figure 31. Site Coordinator Responses to Questions About Data Use



Source. Site coordinator survey (153 responses from 143 centers in 2015, 136 responses from 133 centers in 2016, 139 responses from 130 centers in 2017, and 140 responses from 132 centers in 2018).

DATA USE: STAFF RESPONSES

Questions appearing on the site coordinator and staff surveys included the following:

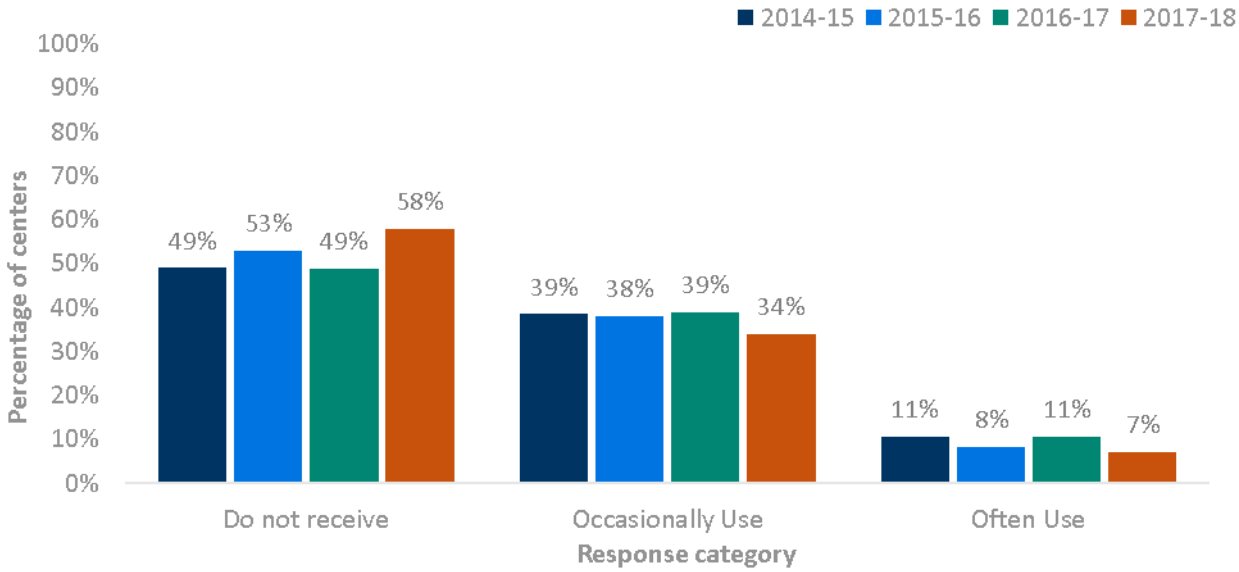
PROMPT: Please indicate whether you [program staff] receive each of the following and to what extent you [program staff] use it in planning for the activities that you provide:

- Individualized education programs
- Students' state assessment scores
- Students' scores on district- or building-level assessments
- Students' grades
- Teacher-provided student progress reports

The responses to survey items related to the use of student data to inform programming indicated that these practices were less likely to be used as a strategy by staff to intentionally

link programming to the school day (Figure 32). This finding has been common among 21st CCLC evaluations conducted by the evaluation team. Generally, we could investigate how programs use student data and where opportunities exist to identify and share best practices with the field more broadly.

Figure 32. Staff Responses to Questions About Data Use



Source. Staff survey (810 responses from 143 centers in 2015, 774 responses from 133 centers in 2016, 804 responses from 141 centers in 2017, and 773 responses from 132 centers in 2018).

Indicator 3.3: Community Context

Encouraging partnerships between schools and community organizations is a critical component of the national 21st CCLC program. We defined a partner as any organization other than the grantee that actively contributes to a 21st CCLC–funded program to help programs meet their goals and objectives. Partners may play a variety of roles in supporting a 21st CCLC–funded program. For example, they may provide programming and staff, provide physical space and facilities, and facilitate fundraising efforts. In many instances, partners can play a critical role in providing activities and services in which the grantee lacks expertise or training to enhance the variety of learning opportunities available to youth. From a quality perspective, mutually beneficial partnerships are most effective when staff from the partner organization work directly with youth and are involved in regular program processes related to staff orientation, training, evaluation, feedback, and professional development.

The leading indicator for Community Context captures the degree to which partners associated with the center are actively involved in planning, decision making, evaluating, and supporting program operations. We calculated the following metric to describe aspects of this indicator:

- **Family and Community—YPQA Form B.** The extent to which the program adopts policies and practices supportive of family and community engagement

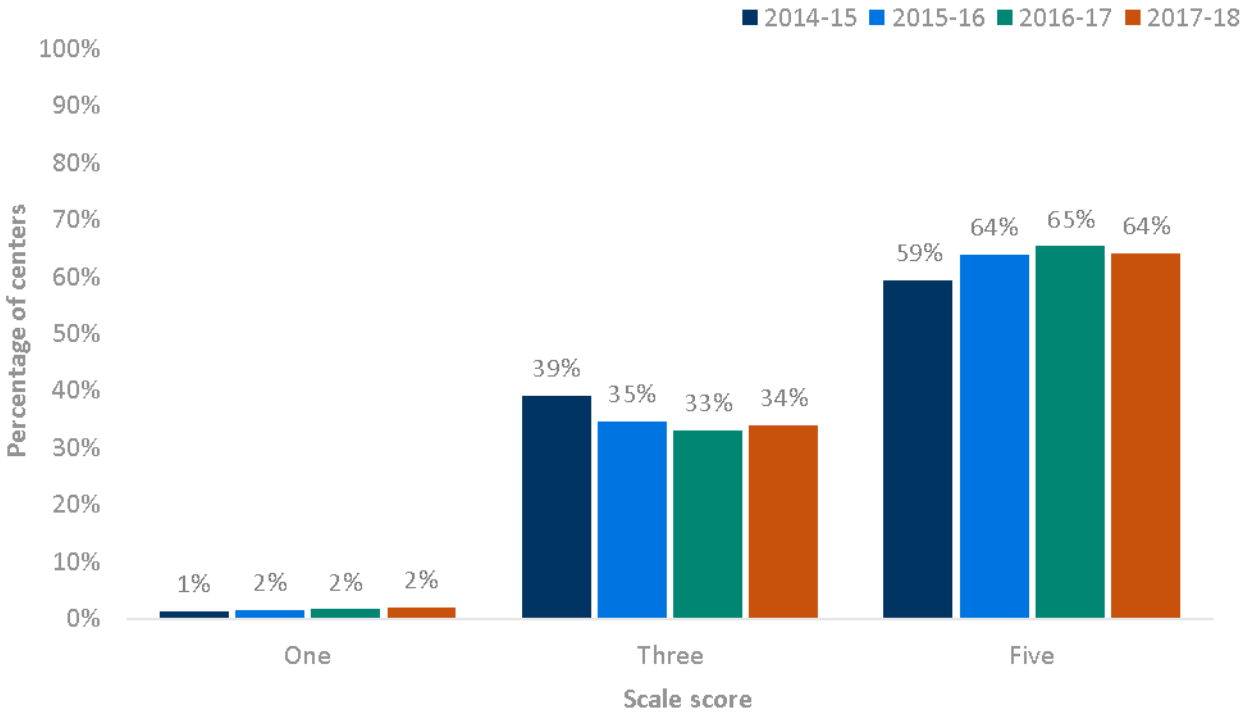
FAMILY & COMMUNITY: YPQA FORM B

Family and Community Scale

- Barriers to participation are addressed.
- The program builds linkages with families.
- The program builds linkages with the community.

Like other scores on YPQA Form B, centers were classified as falling in the 1, 3, and 5 response categories. Higher scores indicate greater adoption of the practices in question. Figure 33 shows the percentage of respondents who answered 1, 3, or 5 in 2014–15 through 2017–18.

Figure 33. Center-Level Scores on Family and Community Engagement



Source. YPQA Form B (from 138 centers in 2015, 127 centers in 2016, 118 centers in 2017, and 124 centers in 2018).

Chapter 3. Youth Motivation, Engagement, and Beliefs Survey

Although school-related outcomes have been commonly employed to assess the impact of 21st CCLC programming on participating youth, most 21st CCLC programs across the United States (and specifically in Washington) implement programming designed to support a broader array of more immediate youth development outcomes, including those related to the formation of positive mindsets and beliefs and social and emotional skills and competencies.

> *Evaluation Question 3: What does youth completion of the Youth Motivation, Engagement, and Beliefs Survey indicate about youth experiences in programming plus youth functioning on social and emotional skills, competencies, and noncognitive factors?*

Summary of Findings

- The majority of youth respondents on the Youth Motivation, Engagement, and Beliefs Survey (YMEB Survey) expressed having a positive, engaging, and supportive experience when attending programming. In addition, the majority of responding youth indicated that the 21st CCLC program they attended helped them improve both academically and on social and emotional skills. We found a similar trend in relation to youth-reported program impact in the area of self-management. In this case, 38% of the youth indicated that they had been impacted in a positive way in this area by participating in the program.
- The evaluation team also explored change across time on youth functioning on their skills and beliefs. AIR hypothesized that youth with the most room for improvement in the 2016–17 program year would show more growth than those who were already performing well. The findings support this hypothesis.
- Our conclusion based on the domain of results summarized in this report is that the YMEB Survey continues to be a promising tool for measuring many important elements of youth functioning that afterschool and youth development programs are seeking to cultivate and are important to youth success in school and life more broadly.

Aligned Recommendations

- Explore the connection between quality practice and social and emotional competencies and skills as measured on the YMEB Survey. Understanding this connection would help ensure a pathway from program quality to changes in youth beliefs, skills, and knowledge to school-related outcomes. Understanding how this pathway works and where it fails to produce the desired results would help when making needed tweaks and adjustments to optimize the outcomes derived from the 21st CCLC system.
- The YMEB Survey is intended for use with students who are in Grades 4–12, which leaves the direct program outcomes for students in Grades K–3 largely unexplored. Consider other measures more applicable to the K–3 population to understand how the 21st CCLC program is impacting these students.

Overview

Social and emotional skills, beliefs, and knowledge are hypothesized to be the most immediate outcomes that can emerge from participation in high-quality afterschool programs. That is, youth growth and development across these areas occurs within the program and can be observed directly by the staff leading afterschool activities, making them a natural place to start when assessing the impact of 21st CCLC programming on youth. In addition, social and emotional outcomes are increasingly gaining traction in the educational and workforce development fields as key determinants of youth success (Eccles & Gootman, 2002; Farrington et al., 2012; Wilson-Ahlstrom, Yohalem, DuBois, & Ji, 2011). However, efforts to measure youth development in social and emotional skills, beliefs, and knowledge within afterschool programs are still new.

Consequently, measures that address social and emotional outcomes are being developed and refined. Since 2013, the Youth Development Executives of King County have worked with community-based providers of youth development programming to define how afterschool programs impact youth and developed the YMEB Survey. This tool measures the extent to which youth report having skills and dispositions that are critical for positive youth growth and development. For the past several years, AIR and OSPI have worked with the Youth Development Executives of King County to refine the tool for use with the state's 21st CCLC programs. The 2017–18 program year marked the fourth year this tool was administered in all 21st CCLC programs to understand what the survey responses indicate about youth experiences in programming, youth functioning on social and emotional skills, competencies, and noncognitive factors. Specifically, the evaluation team investigated the following questions:

1. How have youth benefited from participation in program activities?
2. To what extent do youth grow on a series of constructs related to positive social and emotional development, mindsets, and attitudes during a programming year?

Three types of scales are included on the YMEB Survey. A full copy of the survey is in Appendix B.

- **Items pertaining to how youth reported functioning at present when taking the survey on a series of areas related to positive youth development.** The purpose of these items was to gauge how well youth described themselves in four key areas: (a) Academic Identity, (b) Positive Mindsets, (c) Self-Management, and (d) Interpersonal Skills. Examples of items appearing on these scales include the following: "Doing well in school is an important part of who I am" (Academic Identity), "I can solve difficult problems if I try hard enough"

(Positive Mindsets), "I can calm myself down when I'm excited or upset" (Self-Management), and "I work well with others on shared projects" (Interpersonal Skills).

- **Items pertaining to youth sense of belonging and engagement in the 21st CCLC program.** The purpose of these items was to obtain authentic feedback from youth on their experiences at the 21st CCLC program they were enrolled in during the school year. Examples of items of this type included "I fit in at this program," "This program helps me build new skills," and "What we do in this program is challenging in a good way." For all items appearing on the survey, youth were asked to respond to each item by endorsing one of the following response options: not at all true, somewhat true, mostly true, or completely true.
- **Items pertaining to youth's sense of how they may have been impacted by participation in the program.** The purpose of these items was to explore the extent to which youth believed the program might have helped them in terms of developing positive academic behaviors and better self-management skills. Examples of items of this type included "This program has helped me become more interested in what I'm learning in school" and "This program has helped me get better at staying focused on my work."

In spring 2018, AIR administered the survey in all 21st CCLC programs serving youth in Grades 4–12. In addition to surveying students who were likely to meet the regular attendee definition for the 2017–18 program year, we advised programs to collect responses from students who also took the survey in spring 2017, to give us a sample of students who completed surveys in both years. In spring 2017, 4,066 completed surveys were collected from 21st CCLC programs, with approximately 30 surveys completed per center, and 4,096 responses were collected in spring 2018, with approximately 32 surveys completed per center. In some centers, data were collected from youth who were not in Grades 4–12. These students were removed from the sample, resulting in 3,558 responses from 2017 and 4,060 responses from 2018 that could be used in analyses.

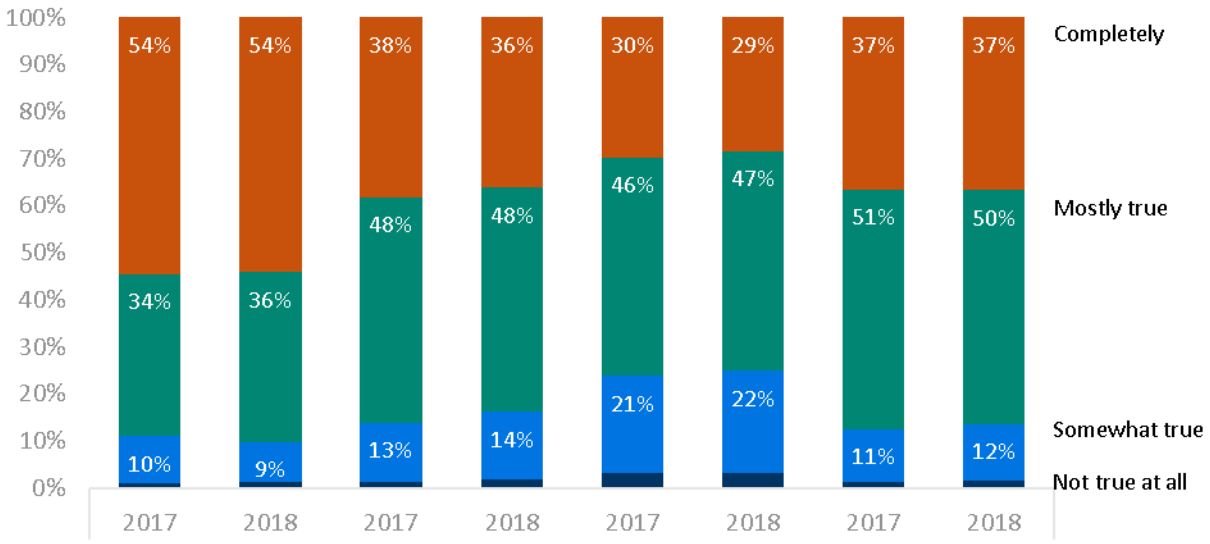
More than 79% of the completed surveys were taken by youth in Grades 4–8; most respondents were in Grades 4–6. In each year, 7%–10% of the completed surveys were missing grade-level information for the respondent. Surveys with missing grade-level information were retained for the analyses summarized in this report because date-of-birth information was provided for these respondents. Youth who were age 9 or older at the start of the school year in question were retained as part of the study sample.

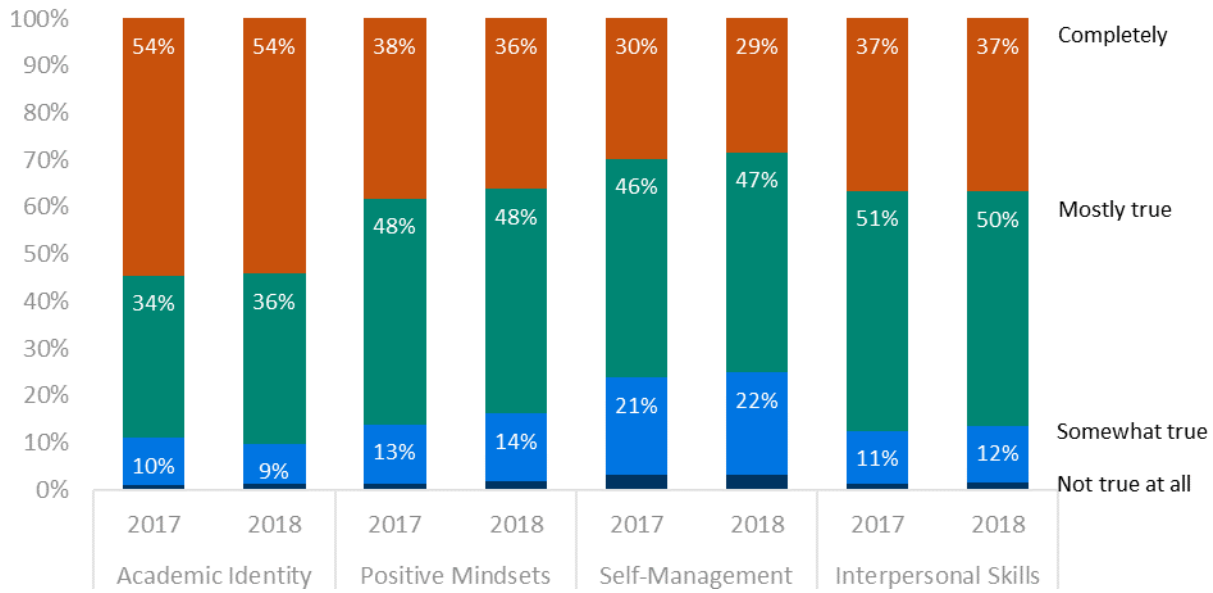
To answer the research questions, we also must understand the distribution of students within a given response category. The evaluation team used Rasch analysis approaches to calculate a

scale score for each survey scale, which was then used to determine what response category (not at all true, somewhat true, mostly true, or completely true) best described a youth's experience in the program, perception of program impact, or current level of functioning. First, we examined youth reports on positive youth development skills and beliefs.

The percentage of youth who responded mostly true and completely true ranged from 90% for the Academic Identity scale to 75% for the Self-Management scale (see Figure 34). The scale demonstrating the most opportunity for growth was the Self-Management scale; more than 24% of the respondents replied not at all true or somewhat true.

Figure 34. Frequency Distribution of Youth Responses on Academic Identity, Positive Mindsets, Self-Management, and Interpersonal Skills Scales

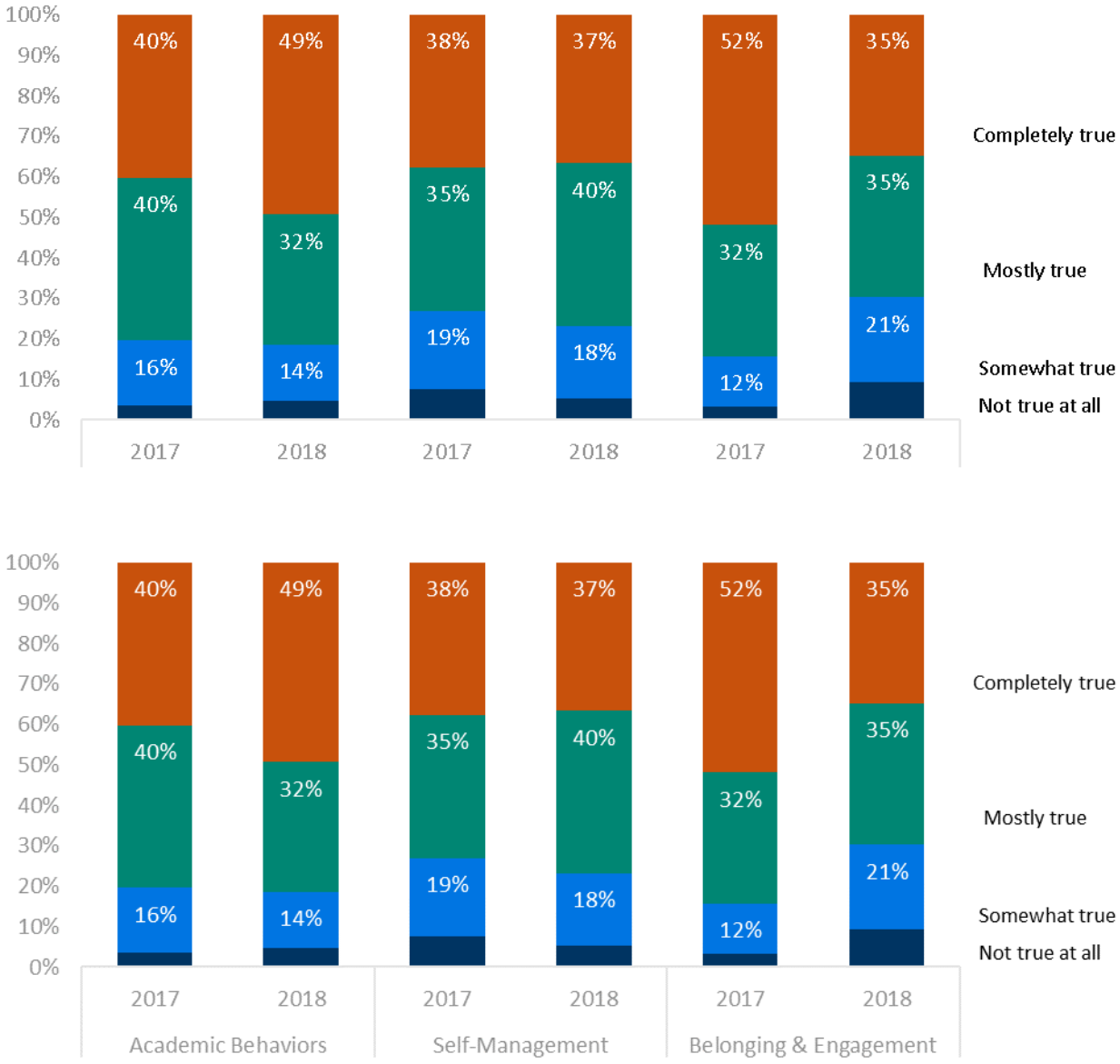




Our sense is that youth in the not at all true or somewhat true portions of the scale represent the domain of youth where there may be opportunities to further develop and reinforce positive beliefs and skills in each area.

We also examined the distribution of youth responses across scales related to self-reported program impact and feelings of program belonging engagement. There is more variation across the response categories for both the Academic Behaviors and Self-Management scales (see Figure 35) than what was observed in the scales outlined in Figure 34, although most responses were mostly true and completely true. In terms of the Belonging and Engagement scale, more than 80% of the youth in 2017 responded mostly true or completely true to items describing a positive experience in programming, but in 2018 that percentage dropped to less than 70%.

Figure 35. Frequency Distribution of Youth Responses on Program Impact on Academic Behaviors, Self-Management, and Belonging and Engagement Scales



One purpose of the YMEB Survey is to measure growth on the domain of youth outcomes measured on the survey. However, because of the high percentage of youth who responded mostly true or completely true, the viability of using the survey for this purpose could be called into question. To explore this issue further, the evaluation team conducted a comparison of pre-

post data from youth taking the survey in spring 2018. A total of 813, or 20%, of the youth in the 2018 sample took the survey in both years.

When examining the full sample of 813 youth who took the survey in both years, the overall mean scores decreased slightly from time 1 to time 2.[2] Although these decreases were found to be significant for all four scales in question based on a paired sample *t*-test, the degree of decline was, for all practical purposes, close to 0. The large sample size likely caused the significant results. Also, the correlation between 2017 and 2018 scores was weak for each scale, ranging from .325 to .351.

Next, the evaluation team explored how changes in the survey scores might be different for youth who (a) responded not at all true or somewhat true in spring 2016 and (b) youth receiving a scale score in the bottom 50th percentile for the scale in question (i.e., students who had room to grow). As shown in Table 3, youth scoring in the not at all true and somewhat true response categories of the survey demonstrated substantive growth between 2017 and 2018. Improvements in the mean scores between 2017 and 2018 ranged from .11 to .26 scale score points. The 2017 and 2018 scores for this group were weakly and significantly correlated for all four scales.

Table 3. Comparison of Means and Correlations Between 2017 and 2018 for Youth Responding Not at All True or Somewhat True in Spring 2017

Subscale	Paired sample *t*-test			Bivariate correlation	
	2017 mean	2018 mean	*p*-value	Correlation coefficient	*p*-value
Academic Identity (*n* = 409)	2.99	3.13	.000***	.186	.000***
Positive Mindsets (*n* = 471)	2.82	2.93	.000***	.200	.000***
Self-Management (*n* = 424)	2.52	2.78	.000***	.231	.000***
Interpersonal Skills (*n* = 405)	2.73	2.93	.000***	.201	.000***

***$p < .001$.

Table 4 shows that youth falling below the 50th percentile of each scale demonstrated substantive growth between 2017 and 2018. Improvements ranged from .26 to .41 scale score

[2] In calculating these means, the logit value resulting from Rasch calibrations was converted to a 1–4 scale to better represent the 4-point response scale associated with the survey.

points, and all scores on the scales between 2017 and 2018 were found to be weakly and significantly correlated.

Table 4. Comparison of Means and Correlations Between 2017 and 2018 for Youth in the Bottom 50th Percentile of Each Scale Score in Spring 2017

Subscale	Paired sample *t*-test			Bivariate correlation	
	2017 mean	2018 mean	*p*-value	Correlation coefficient	*p*-value
Academic Identity (*n* = 202)	2.63	3.04	.000***	.122	.000***
Positive Mindsets (*n* = 307)	2.61	2.87	.000***	.176	.000***
Self-Management (*n* = 424)	2.52	2.78	.000***	.231	.000***
Interpersonal Skills (*n* = 318)	2.61	2.89	.000***	.195	.000***

****p* < .001.

These results suggest the following conclusions on the utility of the YMEB Survey to assess changes in youth functioning across time:

- The mean scores for the full sample with both 2017 and 2018 scores were stable, demonstrating a very slight decrease between the two administration periods; pre-post scores were found to be only moderately correlated.
- When there was room for youth to grow on the scales in question, however, significant and substantive growth was shown for youth who scored in the bottom two response categories in spring 2017 and those who were below 50th percentile of a given scale in spring 2017.

Preliminary hypotheses can be made about the nature of this positive growth for these populations. First, this growth could represent growth that occurred during this period, and participation in 21st CCLC programming may have contributed to this growth. Unfortunately, we do not have the data to rigorously explore whether this is the case now. Another possibility is that youth with lower levels of functioning in spring 2017 regressed back to the mean of the overall sample between administrations, and the survey did not capture any growth between the two time periods.

Chapter 4. Youth Academic Outcomes

Evaluation Question 4: To what extent is there evidence that students participating in services at higher levels demonstrated better performance on youth outcomes compared with youth participating at lower levels?

Generally, findings from the outcome analyses conducted in relation to the 2017–18 program year indicate positive findings across each outcome examined, replicating many of the findings identified in earlier programming periods. Important findings are summarized as follows:

Summary of Findings

To what extent do higher levels of program participation impact growth on key youth development outcomes?

- For students who responded not at all true or somewhat true to items on the YMEB Survey, higher levels of participation in the 21st CCLC program had a positive significant impact on the growth students made between 2016–17 and 2017–18 on only the Academic Identity scale.

To what extent is there a relationship between growth on the youth survey scales and youth-reported program experiences?

- There was a statistically significant, positive effect on academic identity for increased academic behaviors plus belonging and engagement. This means that youth self-reports of increased academic behaviors plus belonging and engagement while participating in a program may have an effect on youth having a greater sense of academic identity.
- There was a statistically significant, positive effect on both interpersonal skills and self-management for increased retrospective self-management plus belonging and engagement. This means that youth self-reports of self-management plus belonging and engagement while participating in a program may have an effect on youth having a greater sense of interpersonal skills and a personal self-management.
- Finally, there was a statistically significant, positive effect on positive mindsets for all three variables of program experience. This means that increased academic behaviors, self-management, plus belonging and engagement while participating in a program may have an effect on youth's positive mindsets.

To what extent does the level of program participation impact school-related outcomes for students who needed to improve on those outcomes?

- There was statistically significant, negative impact in reading and mathematics test scores for students attending programming at 30 or more and 60 or more days compared with similar students not attending programming. However, the absolute value of the effect sizes is small (<0.20). This implies that students attending programming at both 30 or more and 60 or more days had lower reading and mathematics test scores than students not attending but with a small magnitude of difference.
- There was statistically significant, positive impact in cumulative grade point average (GPA) and the percentage of credits earned for students attending programming at 30 or more and 60 or more

days compared with similar students not attending programming. The absolute value of the effect sizes is small (<0.15). This means that students attending programming at both 30 or more and 60 or more days had a higher cumulative GPA and percentage of credits earned than similar students not attending programming but with a small magnitude of difference.

- There was marginally significant, negative impact in disciplinary incidents for students attending programming at 30 or more days and more significant, negative impact in disciplinary incidents for students attending programming at 60 or more days compared with similar students not attending programming. The absolute values of the effect sizes for both are small (<0.05). This means that students attending programming at 30 or more days are likely to have had less disciplinary incidents than students not attending programming, and students attending program at 60 or more days are even more likely to have less disciplinary incidences than students not attending programming.
- There was statistically significant, negative impact in school absences for students attending programming at 30 or more and 60 or more days compared with similar students not attending programming. The absolute value of the effect sizes is small (<0.25). This means that students attending programming at 30 or more and 60 or more days had fewer absences than similar students not attending programming but with a small magnitude of difference.
- Regardless of the significance of the effect estimates, all effect sizes are small (Cohen, 1988).

To what extent does 2 years of program participation impact school-related outcomes for students who needed to improve on those outcomes?

- Students attending programming at high levels for 2o years had higher reading and mathematics test scores than comparison students who did not attend at these levels, and these differences are statistically significant. The absolute value of the effect sizes is small (< 0.25), however.
- Students attending programming at high levels for 2 years had lower number of school absences than comparison students who did not attend at these levels, and the difference is statistically significant. The effect size (-0.138) is small.
- Students attending programming at high levels for 2 years had a higher percentage of credits earned than comparison students who did not attend at these levels, and the difference is marginally significant. The effect size (0.166) is small, and a few points are noteworthy. Although many of the effects would be deemed small by traditional standards for interpreting effect sizes (Cohen, 1988), these effects should be considered substantive and commensurate with expectations for program impact based on the amount of time youth spend in programming. Youth were considered 21st CCLC participants if they participated in programming for either 30 or more or 60 or more days during the school year, which approximates to 60–120 hours or more of program participation. During the average school year, youth will spend close to 1,200 hours in school (Planty et al., 2008).

Aligned Recommendations

- Continue to use the YMEB Survey as a measure for direct program outcomes and consideration in a longitudinal study.
- When conducting impact analyses on school-related outcomes, test for additional sources of selection bias by running an analysis comparing high and low attenders.

Overview

The evaluation team ran a series of analyses to understand how participation in 21st CCLC programming might affect behavioral and academic outcomes for youth. Here, we employed both correlational and causal models to assess the relationship of program participation on key youth development outcomes, as well as the impact on school-day absences. These analyses originate from our conceptual framework for how afterschool programming can have an impact on youth. Specifically, we wanted to understand the following:

- To what extent do higher levels of program participation impact growth on key youth development outcomes?
- To what extent is there a relationship between growth on the youth survey scales and youth-reported program experiences?
- To what extent does the level of program participation impact school-related outcomes for students who needed to improve on those outcomes?
- To what extent does 2 years of program participation impact school-related outcomes for students who needed to improve on those outcomes?

To what extent do higher levels of program participation impact growth on key youth development outcomes?

To construct causal estimates, the evaluation team employed a quasi-experimental research design to examine the effect of participating in 21st CCLC programming on four key youth development outcomes—Academic Identity, Positive Mindsets, Self-Management, and Interpersonal Skills—as measured by subscales of the YMEB Survey highlighted in Chapter 3.

Specifically, the analyses compared the performance of students who participated in 21st CCLC for 60 or more days with similar students who participated fewer than 60 days. This definition of treatment was designed to ensure that the comparison of program effect was based on students who received a significant dose of 21st CCLC programming. In our past work, we have found that students who attend 60 or more days tend to have larger effects on selected youth outcomes.

To examine this question, we first had to make sure that our sample consisted of students who had data on the key youth development outcomes in both the 2016–17 and the 2017–18 program years. In addition, it was important to focus on students who had room to grow in the outcome area of interest.

Not all students had room to grow on each survey construct, so we ran a separate two-level hierarchical linear model of students nested within centers for each construct in question. Therefore, our sample for each outcome ranged from 95 to 149 students who attended programming 60 or more days (treatment) and 92–143 similar students who attended fewer than 60 days (comparison). We included a number of school- and student-level covariates in our models, such as prior year outcome, minority status, gender, free or reduced-price lunch status, English language learner status, grade level, and program quality (see Appendix C for a full list of covariates and descriptive statistics). Table 5 shows the effect sizes for higher levels of program participation on all four scales on the YMEB Survey. For students who responded not at all true or somewhat true to items on the survey, higher levels of participation in the 21st CCLC program had a positive significant impact on the growth students made between 2016–17 and 2017–18 but only on the Academic Identity scale. Please note, however, that the effect sizes are not standardized, indicating that the value represents growth or decline in survey scale score points. For example, there was positive impact of 0.18 survey scale points for students who had room to grow on the Academic Identity survey scale.

The quasi-experimental approach outlined in this report—propensity score matching (PSM)—is a method for mitigating the potential sources of bias that would otherwise make high and low attenders different from each other on key characteristics that may impact the outcomes being examined, making it hard to determine whether the program caused changes in the outcomes being examined or whether it was caused by preexisting differences between the two groups (i.e., if one were to compare the students who attended at higher levels and those who attended at lower levels). For more information on the PSM approach, see Appendix A.

Table 5. Effects of Higher Levels of Program Participation on Growth on the Youth Survey Scales

	Effect size	Standard error of effect size	*p*-value	Observation
Academic Identity	0.18	0.08	0.02*	275
Positive Mindsets	0.07	0.06	0.20	417
Self-Management	0.09	0.05	0.11	473
Interpersonal Skills	0.04	0.05	0.48	437

*$p < 0.05$.

To what extent is there a relationship between growth on the youth survey scales and youth-reported program experiences?

In this analysis, we included any student who had room to grow in any of the key youth development outcomes in the 2016–17 program year. As described in Chapter 3, youth surveys were administered directly to 21st CCLC attendees using AIR's online survey platform. The preadministration survey was collected in spring 2017, and the postadministration survey was collected in spring 2018.

Table 6 shows the effect sizes for higher levels of program experiences on all four scales of youth outcomes on the YMEB Survey. Statistically significant, positive effects on youth outcomes were found from several variables of increased program experiences.

Table 6. Association of Program Experience Scales With Cross-Year Change on Youth Outcomes Scales

Outcome	Variable	*N*	Effect	Standard error of effect size
Academic Identity	Academic behaviors (retrospective)	746	0.25**	0.05
	Self-management (retrospective)		-0.04	0.05
	Belonging and engagement		0.25**	0.06
Positive Mindsets	Academic behaviors (retrospective)	746	0.15**	0.04
	Self-management (retrospective)		0.10**	0.04
	Belonging and engagement		0.17**	0.05
Self-Management	Academic behaviors (retrospective)	746	0.07	0.04
	Self-management (retrospective)		0.22**	0.04
	Belonging and engagement		0.13**	0.05
Interpersonal Skills	Academic behaviors (retrospective)	746	0.06	0.04
	Self-management (retrospective)		0.19**	0.04
	Belonging and engagement		0.22**	0.05

**$p < 0.01$.

In summary, the following results were found:

- There was a statistically significant, positive effect on academic identity for increased academic behaviors plus belonging and engagement. This means that youth self-reports of increased academic behaviors plus belonging and engagement while participating in a program may have an effect on youth having a greater sense of academic identity.
- There was a statistically significant, positive effect on both interpersonal skills and self-management for increased retrospective self-management and belonging and engagement. This means that youth self-reports of self-management and belonging and engagement while participating in a program may have an effect on youth having a greater sense of interpersonal skills and a personal self-management.
- Finally, there was a statistically significant, positive effect on positive mindsets for all three variables of program experience. This means that increased academic behaviors, self-management, and belonging and engagement while participating in a program may have an effect on youth's positive mindsets.

To what extent does the level of program participation impact school-related outcomes for students who needed to improve on those outcomes?

It is important to define the phrase *students who needed to improve* because it has a different meaning for different outcomes.

- Students who needed to improve in mathematics and reading were categorized as below proficient on state assessment examinations in the prior year.
- Students who needed to improve in relation to the percentage of credits earned were those who had less than 100% of their credits earned in the prior year.
- Students who needed to improve on school-day absences were those who were absent 10 or more days during the prior year.
- Students who needed to improve on disciplinary incidents were those who had one or more incidents in the prior year.
- Because of smaller sample sizes, we did not set a "students who needed to improve" threshold in relation to cumulative GPA.

The evaluation team employed a quasi-experimental research design to examine the effect of participating in 21st CCLC programming on a set of school-related outcomes. The analyses compared the performance of students who participated in 21st CCLC with similar students who did not participate using a propensity score stratification approach, which used both student- and school-level variables to determine a comparison group (Table 7).

Participation was defined in two ways for the analysis. First, students who attended at least 30 days were compared with students who did not attend the program at all. Second, students who attended at least 60 days were compared with students who did not attend the program. These definitions of treatment were determined to ensure that the comparison of the program effect was based on students who received a significant dose of 21st CCLC programming.[3]

Table 7. Impact of 21st CCLC on Achievement Pooled Across Grades

Subject	Treatment	Effect size	Standard error of effect size	*p*-value
SBAC Test Score Reading[a]	30 or more days	–0.162	0.011	< 0.001
	60 or more days	–0.141	0.015	< 0.001
SBAC Test Score Math[a]	30 or more days	–0.128	0.011	< 0.001
	60 or more days	–0.149	0.015	< 0.001
SGP Reading[a]	30 or more days	0.003	0.018	0.854
	60 or more days	–0.003	0.026	0.897
SGP Math[a]	30 or more days	0.020	0.018	0.254
	60 or more days	0.032	0.025	0.200
Cumulative GPA[b]	30 or more days	0.062	0.026	0.020
	60 or more days	0.099	0.048	0.038
Percentage of credits earned[b]	30 or more days	0.072	0.031	0.020
	60 or more days	0.129	0.053	0.015
Disciplinary incidents[c]	30 or more days	–0.020	0.011	0.059
	60 or more days	–0.032	0.015	0.040
School-day absences[d]	30 or more days	–0.148	0.015	< 0.001
	60 or more days	–0.211	0.024	< 0.001

Note. SBAC = Smarter Balanced Assessment Consortium; SGP = Student Growth Percentile.
[a]This measure includes Grades 4–8. [b]This measure includes Grades 9–12. [c]This measure includes Grades 3–12. [d]This measure includes Grades 6–12.

[3] The outcome of interest in modeling propensity scores is treatment status (1 for students who participated in the program, 0 for the comparison group). To account for this binary outcome, logistic regression was used to model the logit (or log-odds) of student group assignment status.

In summary, the results showed the following findings:

- There was statistically significant, negative impact in reading and mathematics test scores for students attending programming at 30 or more and 60 or more days compared with similar students not attending programming. However, the absolute value of the effect sizes is small (<0.20). This implies that students attending programming at both 30 or more and 60 or more days had lower reading and mathematics test scores than students not attending but with a small magnitude of difference.
- There was statistically significant, positive impact in cumulative GPA and the percentage of credits earned for students attending programming at 30 or more and 60 or more days compared with similar students not attending programming. The absolute value of the effect sizes is small (<0.15). This means that students attending programming at both 30 or more and 60 or more days had a higher cumulative GPA and percentage of credits earned than similar students not attending programming but with a small magnitude of difference.
- There was marginally significant, negative impact in disciplinary incidents for students attending programming at 30 or more days and more significant, negative impact in disciplinary incidents for students attending programming at 60 or more days compared with similar students not attending programming. The absolute value of effect sizes for both is small (<0.05). This means that students attending programming at 30 or more days are likely to have had less disciplinary incidents than students not attending programming, and students attending programming at 60 or more days are even more likely to have less disciplinary incidents than students not attending programming.
- There was statistically significant, negative impact on school absences for students attending programming at 30 or more and 60 or more days compared with similar students not attending programming. The absolute value of the effect sizes is small (<0.25). This means that students attending programming at 30 or more and 60 or more days had fewer absences than similar students not attending programming but with a small magnitude of difference.
- Regardless of the significance of effect estimates, all effect sizes are small (Cohen, 1988).

To what extent does 2 years of program participation impact school-related outcomes for students who needed to improve on those outcomes?

For the purpose of this analysis, 2 years of sustained participation is defined as students who have participated in programming for 2 years, with at least 60 days in either the 2016–17 or 2017–18 school year. These students were compared with students who attended

programming but did not meet these attendance thresholds. The results reflect measures of different grade groups, as noted in Table 8. Statistical significance was found in the measures of reading and mathematics test scores, the percentage of credits earned, and absences from school. For this research question, the same definition for the phrase *students who needed to improve* was used as described in Analysis 3.

Table 8. Impact of 2 Years of Sustained Participation in Programming on School-Related Outcomes, Pooled Across Grades

Subject	Effect size	Standard error of effect size	*p*-value
SBAC Score Reading[a]	0.115	0.030	< 0.001
SBAC Score Math[a]	0.247	0.028	< 0.001
Cumulative GPA[b]	0.134	0.090	0.139
Percentage of credits earned[b]	0.166	0.086	0.053
Disciplinary incidents[c]	–0.015	0.019	0.446
School-day absences[d]	–0.138	0.049	0.004

Note. SBAC = Smarter Balanced Assessment Consortium; SGP = Student Growth Percentile.
[a]This measure includes Grades 5–8. [b]This measure includes Grades 9–12. [c]This measure includes Grades 3–12. [d]This measure includes Grades 6–12.

In summary, the results showed the following:

- Students attending programming at high levels for 2 years had higher reading and mathematics test scores than comparison students who did not attend at these levels, and these differences are statistically significant. The absolute value of the effect sizes is small (<0.25), however.
- Students attending programming at high levels for 2 years had a lower number of school absences than comparison students who did not attend at these levels, and the difference is statistically significant. The effect size (-0.138) is small.
- Students attending programming at high levels for 2 years had a higher percentage of credits earned than comparison students who did not attend at these levels, and the difference is marginally significant. The effect size (0.166) is small.

The findings in this chapter reflect similar conclusions to what we have found in past impact analyses within the state of Washington and other states for which we have executed similar

approaches and analyses. Having said that, we are still exploring possible selection bias that we have not accounted for in our impact models. In addition, questions surrounding changes in the standardized assessment within the last few years still exist.

It is important to note that the propensity score stratification approach employed in this analysis seeks to minimize the impact of selection bias on the estimates of program impact. However, it is an untestable assumption that such models can fully account for selection bias. To the extent that other variables—not available for this analysis—exist that predict student participation in 21st CCLC (e.g., unobservable characteristics such as youth motivation, parental support, and goal orientation) and are related to student achievement, unexcused absences, or disciplinary incidents, these analyses may be limited in fully accounting for all sources of selection bias. That is, there may be something fundamentally different about 21st CCLC participants compared with nonparticipants. Some variable could drive participation that is not reflected in the variables we have available. Or to put it another way, is the PSM missing a variable necessary to ensure that we compare apples with apples? To that end, these analyses provide initial evidence about the impact of 21st CCLC on the outcome examined but should not be considered equivalent to experimental studies that have strong internal validity. The evaluation team is currently exploring these questions in their work with all 21st CCLC programs.

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Appendix A. Technical Appendix

To answer the evaluation questions, the evaluation team used a variety of data collection strategies and data analysis methods. We collected surveys from site coordinators, staff, and youth participants; we used the YPQA Form A and Form B to assess program quality practices at the organizational and instructional levels. We also received youth-level data from the state data warehouse to examine school-related outcomes.

Methods for Data Collection and Analysis

Data Sources

Data collected and analyzed in this report came from six primary sources, including administrative data systems and surveys. We describe each data source and associated methods of data analysis in this section.

Continuation Report Data

In October 2014, the former federal reporting system known as the Profile and Performance Information Collection System (PPICS) went offline. PPICS was a Web-based data collection system developed and maintained by AIR on behalf of the U.S. Department of Education. Through this system, AIR collected data on the full domain of 21st CCLC programs funded nationally, including those in Washington state. The online system that would replace PPICS became available in late fall 2015 but did not capture the traditional data elements we have used for reporting, and there was no data export functionality available to states. As such OSPI, together with AIR, devised a plan to fold as many necessary data elements as possible into OSPI's annual continuation reporting requirements. We received a data file export from this continuation reporting process from OSPI and extracted the necessary information for this report.

Youth Outcome and Related Data From CEDARS

AIR constructed a unique data collection module for Washington that allowed for the collection of student-identifiable information that was extracted from the system and provided to OSPI. OSPI used this information to perform a series of merges against state data warehouses to obtain Smarter Balanced Assessment reading and mathematics scores, cumulative GPA, credits earned, and the number of unexcused absences and disciplinary incidents, as well as additional demographic information about the students in question from CEDARS, a longitudinal data warehouse of educational data maintained by OSPI. OSPI also identified students not

participating in 21st CCLC programming who attended the same schools as 21st CCLC participants and provided the same testing and related CEDARS information for these students. We used these data to conduct the descriptive analyses exploring outcomes for youth regularly attending programming compared with youth not attending regularly and those not participating in 21st CCLC programming.

Site Coordinator Survey

We administered an online survey of site coordinators working in 21st CCLC programs active in the 2017–18 program year in spring 2018. We defined the site coordinator as the individual at a given center who was responsible for the day-to-day operations of the program and was the initial point of contact for parents and staff when questions or issues arose on-site. Generally, site coordinators are middle managers in the delivery of 21st CCLC programming at sites.

The survey addressed the extent to which centers engaged in practices that the research indicates are supportive of effective afterschool programming. We organized sets of survey questions to create scales measuring the following dimensions of program operations:

- Activity enrollment policies and recruitment approaches
- Access to and use of student data
- Linkages to the school day
- Staffing approach and challenges
- Other operational challenges
- Intentionality in activity and session design
- Internal communication designed to support program development and improvement
- Practices supportive of parent involvement and engagement

Staff Survey

The purpose of the online staff survey was to obtain information from frontline staff who worked directly with youth in the 2017–18 school year. The survey focused on practices that support both positive academic outcomes and youth development outcomes. As with the site coordinator survey, the staff survey included sets of questions associated with a given scale, as

well as open-ended questions to assess the dimensions of program operations. The dimensions of program operations assessed on the staff survey included the following:

- Intentionality in activity and session design
- Practices supportive of academic skill building, including linkages to the school day and using data on student academic achievement to inform programming
- Internal communication designed to support program development and improvement
- Program climate in terms of how staff view the organizational supports and structures as supporting their work with youth

As with the site coordinator survey, we used data obtained from the staff surveys to support the leading indicator process.

Youth Program Quality Assessment Data

As noted previously, OSPI, in collaboration with the Weikart Center, took steps to craft a quality assessment improvement system and support grantees in completing the YPQI process. As part of this process, observations were conducted by program staff as a self-assessment or by trained external observers of activities provided by 21st CCLC grantees. YPQA Form A, a validated instrument designed to evaluate the quality of youth programs and identify staff training needs, was scored to provide an estimate of how safe, supportive, interactive, and engaging the observed session was for participating youth. In addition, although YPQA Form A is meant to measure program quality at the point of service, YPQA Form B is a rubric completed by program staff on how well the program has adopted organizational processes that are likely to engender and facilitate point-of-service quality. YPQA Form B focuses on program quality at the organizational level and assesses the quality of organizational supports for the youth program offering assessed in Form A. Data from YPQA Forms A and B were uploaded to the Weikart Center through the center's online score reporter.

OSPI mandated participation in the YPQI process for all Washington 21st CCLC grantees beginning in the 2014–15 school year. However, YPQA Form A data were available for only 127 of 132 centers in 2017–18, and Form B data were provided in relation to only 124 centers.

Youth Survey

In the 2017–18 program year, we administered the YMEB Survey, originally developed by the Youth Development Executives of King County, in all 21st CCLC programs serving youth in Grades 4–12. The survey measures youth experiences in programming, youth perceptions of

how the program impacted them, and how youth report they are functioning on a series of indicators of social and emotional skills and competencies.

The domain of characteristics assessed through the site coordinator and staff surveys reflect best practices in the field. This report dedicates particular attention to explaining how staff responded to site coordinator and staff survey questions and what this response might mean in terms of how programs design and deliver activities in ways that are consistent with best practices.

Analytic Approach and Methods

The findings outlined in this report are primarily quantitative. We based our approach on the evaluation questions being answered and the resources available to carry out the project. The analyses highlighted in this report fall within five general categories, as follows:

1. **Descriptive analyses.** We analyzed information related to grantee, center, and student characteristics obtained from PPICS, the surveys, and the YPQA descriptively to explore the range of variation on a given characteristic. Some leading indicators also were calculated employing descriptive analysis techniques. In addition, we conducted PSM-based analysis for the 2017–18 program year. It is important to draw a contrast between the school-related outcome indicators reported in Chapter 4 and the domain of impact analyses completed and reported on in recently published evaluation reports.
2. **Analyses to create scale scores.** Many questions on the site coordinator and staff surveys underpinning the leading indicators were part of a series of questions designed to assess an underlying construct or concept, resulting in a single scale score summarizing performance on a given area of practice or facet of 21st CCLC afterschool implementation (e.g., practices that support linkages to the school day). We illustrate an example Table A1, which outlines the questions making up the Intentionality Program Design scale that appeared on the site coordinator survey.

Table A1. Example of a Survey Scale Calibrated Using Rasch Techniques

How often do your staff provide program activities that are…	Rarely (once or twice a semester)	Sometimes (once or twice a month)	Frequently (once or twice a week)	Always (daily for every session)	Not Sure
a. Based on written plans for the session, assignments, and projects?	○	○	○	○	○
b. Planned before the start of the session?	○	○	○	○	○
c. Tied to specific learning goals?	○	○	○	○	○
d. Meant to build upon skills cultivated in a prior activity or session?	○	○	○	○	○
e. Explicitly meant to promote skill building and mastery in relation to one or more state standard?	○	○	○	○	○
f. Explicitly meant to address a specific developmental domain (e.g., cognitive, social, emotional, civic, physical, etc.)?	○	○	○	○	○
g. Structured to respond to youth feedback on what the content or format of the activity should be?	○	○	○	○	○
h. Informed by the expressed interests, preferences, and/or satisfaction of participating youth?	○	○	○	○	○

For scales such as this, we created Rasch scale scores using staff and site coordinator responses to a series of questions to create one overall score. These scale scores ranged from 0 to 100, where higher scores indicated a higher level or more frequent adoption of a specific quality practice or set of practices.

We can use scale scores resulting from the application of Rasch approaches to classify what portion of the rating scale the average scale score fell within. For example, if the statewide mean value for the Intentionality in Program Design scale highlighted in Table A1 is 59.97, then it would put the statewide average in the frequently range of the scale, indicating the typical staff member responding to the survey reported engaging in these practices on a frequent basis. This approach also allowed the evaluation team to explore the distribution of centers in light of what response option their average scale score put them in.

The primary benefit of this approach is the capacity to distill responses from several questions into an overall score for the center, simplifying the process of interpreting how a center performed on a given element of quality compared with other programs in the state.

1. **Correlational multilevel modeling techniques.** The evaluation team ran several multilevel models to explore the relationship between (a) youth reports of functioning on skill and belief areas measured on the YMEB Survey and (b) a series of school-related outcomes. Although these analyses afford the capacity to determine whether a significant relationship existed between youth scores on the survey and a given outcome such as mathematics achievement, these approaches cannot indicate that a given skill or belief measured on the survey caused a given outcome. These analyses are correlational, not causal.
2. **Hierarchical linear modeling.** To determine student- and center-level characteristics related to the outcome areas measured on the YMEB Survey, the evaluation team employed a series of hierarchical linear models to test for statistically significant relationships between student and center characteristics and results on the Academic Identity, Positive Mindsets, Self-Management, and Interpersonal Skills survey scales. This takes into consideration the nested structure of these programs, with students within centers, and centers within grantees.
3. **Propensity score matching.** In contrast to the multilevel modeling techniques, PSM approaches were employed to estimate the causal impact of 21st CCLC participation on student performance in reading and mathematics using Smarter Balance Assessment scores obtained from OSPI, as well as a series of other school-related outcomes. Given that 21st CCLC program participants were not randomly assigned to participate in the program, the problem of selection bias needed to be addressed before program impact could be explored from a causal perspective. It is likely that students who participated in 21st CCLC programming were different from those students attending the same schools who did not enroll in 21st CCLC programming. These differences can bias estimates of program effectiveness because they make it difficult to disentangle preexisting differences between participants and nonparticipants from program impact. PSM was used to mitigate that existing selection bias in program effect.

Table A2 summarizes the methods employed to answer each evaluation question.

Table A2. Summary of Methods by Evaluation Question

Evaluation question	Descriptive analysis	Rasch analysis	Correlational multilevel modeling	Propensity score matching
What were the primary characteristics associated with the grants and centers funded by 21st CCLC and the student population served by the program?	✓			
To what extent was there evidence that centers funded by 21st CCLC implement research-supported practices related to quality afterschool programming?	✓	✓		
To what extent is there evidence that students participating in services and activities funded by 21st CCLC demonstrated better performance on youth outcomes compared with similar students not participating in the program?	✓			✓
What does youth completion of the YMEB Survey indicate both about youth experiences in programming and youth functioning on social and emotional learning and noncognitive areas?	✓	✓	✓	

Appendix B. Youth Motivation, Engagement, and Beliefs Survey Measure

Scales and items	Not at all true	A little true	Somewhat true	Mostly true	Completely true
Academic Identity					
Doing well in school is an important part of who I am.	1	2	3	4	5
Getting good grades is one of my main goals.	1	2	3	4	5
I am the kind of person who takes pride in doing my best in school.	1	2	3	4	5
Getting a college education is important to me.	1	2	3	4	5
I am a hard worker.	1	2	3	4	5
It is important to me to learn as much as I can.	1	2	3	4	5
Positive Mindsets					
I plan out what I need to do to reach my goals.	1	2	3	4	5
I am good at staying focused on my goals.	1	2	3	4	5
I believe that I will be able to reach my goals.	1	2	3	4	5
I finish whatever I begin.	1	2	3	4	5
I don't get discouraged when things don't go the way I want them to.	1	2	3	4	5
I don't give up easily.	1	2	3	4	5
I try things even if I might fail.	1	2	3	4	5
I can solve difficult problems if I try hard enough.	1	2	3	4	5
I can do a good job if I try hard enough.	1	2	3	4	5
I can stay focused on my work even when it's boring.	1	2	3	4	5

Scales and items	Not at all true	A little true	Somewhat true	Mostly true	Completely true
Self-Management					
I can stop myself from doing something when I know I shouldn't do it.	1	2	3	4	5
When I'm sad, I can usually start doing something that will make me feel better.	1	2	3	4	5
I am usually aware of my feelings before I act on them.	1	2	3	4	5
I can calm myself down when I'm excited or upset.	1	2	3	4	5
When my solution to a problem is not working, I try to find a new solution.	1	2	3	4	5
I think of past choices when making new decisions.	1	2	3	4	5
School Belonging					
I fit in at my school.	1	2	3	4	5
People at my school care if I'm not there.	1	2	3	4	5
I feel proud to be part of my school.	1	2	3	4	5
My teachers take the time to get to know me.	1	2	3	4	5
I can count on my friends to listen when something is bothering me.	1	2	3	4	5
Interpersonal Skills					
I listen to other people's ideas.	1	2	3	4	5
I work well with others on shared projects.	1	2	3	4	5
I feel bad when someone gets their feelings hurt.	1	2	3	4	5
I respect other points of view, even if I disagree.	1	2	3	4	5
I try to help when I see someone having a problem.	1	2	3	4	5
When I make a decision, I think about how it will affect others.	1	2	3	4	5

Scales and items	Not at all true	A little true	Somewhat true	Mostly true	Completely true
Academic Behaviors (retrospective)					
This program has helped me become more interested in what I'm learning in school.	1	2	3	4	5
This program has helped me connect my schoolwork to my future goals.	1	2	3	4	5
This program has helped me do better in school.	1	2	3	4	5
This program has helped me complete my schoolwork on time.	1	2	3	4	5
This program has helped me do a better job on my schoolwork.	1	2	3	4	5
Self-Management (Retrospective)					
This program has helped me become better at handling stress.	1	2	3	4	5
This program has helped me become better at controlling my temper.	1	2	3	4	5
This program has helped me learn that my feelings affect how I do at school.	1	2	3	4	5
This program has helped me learn how to be patient with others.	1	2	3	4	5
This program has helped me learn how to calm myself down when I'm excited or upset.	1	2	3	4	5
This program has helped me get better at staying focused on my work even when it's boring.	1	2	3	4	5
This program has helped me learn to resist doing something when I know I shouldn't do it.	1	2	3	4	5
Revised Belonging and Engagement Scale					
I fit in at this program.	1	2	3	4	5
I feel proud to be part of my program.	1	2	3	4	5

Scales and items	Not at all true	A little true	Somewhat true	Mostly true	Completely true
The adults in this program take the time to get to know me.	1	2	3	4	5
What we do in this program will help me succeed in life.	1	2	3	4	5
There are things happening in this program that I feel excited about.	1	2	3	4	5
This program helps me explore new ideas.	1	2	3	4	5
This program helps me build new skills.	1	2	3	4	5
What we do in this program is important to me.	1	2	3	4	5
What we do in this program is challenging in a good way.	1	2	3	4	5

Appendix C. Youth Survey and Outcomes Analysis: Detailed Results

Table C1. Summary of Survey Respondents by Grade Level and Year

Grade level	Spring 2017		Spring 2018	
	N	%	*N*	%
Grade 4	749	23.9%	908	25.3%
Grade 5	723	23.1%	781	21.8%
Grade 6	619	19.8%	756	21.1%
Grade 7	438	14.0%	574	16.0%
Grade 8	338	10.8%	376	10.5%
Grade 9	66	2.1%	53	1.5%
Grade 10	61	2.0%	64	1.8%
Grade 11	66	2.1%	37	1.0%
Grade 12	68	2.2%	33	0.9%
Total	3,128	100%	3,582	100%

Evaluation Question 1: To what extent do higher levels of program participation impact growth on key youth development outcomes?

Table C2. Propensity Score Stratification With Weighting on Youth Motivation, Engagement, and Beliefs Survey Outcomes

Academic Identity			
Covariates	**Treatment (*n* = 183)**	**Comparison (*n* = 92)**	**smd**
Academic Identity time 1	2.74	2.75	0.03
School-level minority	57%	56%	0.07
School-level gender	52%	52%	0.04
School-level special education	14%	14%	0.04
School-level free or reduced-price lunch	71%	69%	0.12

Academic Identity			
Covariates	**Treatment (*n* = 183)**	**Comparison (*n* = 92)**	**smd**
School-level English language learner	22%	19%	0.20
School-level enrollment	464	447	0.09
Program-level student participation ratio	0.92	0.94	0.04
Student-level minority	0.61	0.57	0.08
Student-level gender	0.57	0.57	0.01
Student-level special education	0.26	0.27	0.03
Student-level free or reduced-price lunch	0.79	0.76	0.05
Student-level English language learner	0.29	0.25	0.09
Student-level elementary/middle school	0.0	0.0	NA
Student-level elementary school	0.57	0.54	0.05
Student-level middle school	0.43	0.46	0.05
Student-level high school	0.96	0.94	0.12
Program-level fidelity 2	0.01	0.01	0.01
Program-level fidelity 3	0.57	0.63	0.12
Program-level quality 1	0.42	0.36	0.12
Program-level quality 2	2.74	2.75	0.03
Program-level quality 3	57%	56%	0.07

Interpersonal Skills			
Covariates	**Treatment (*n* = 297)**	**Comparison (*n* = 140)**	**smd**
Interpersonal Skills time 1	2.7	2.73	0.10
School-level minority	59%	62%	0.11
School-level gender	52%	51%	0.17
School-level special education	14%	14%	0.00
School-level free or reduced-price lunch	71%	70%	0.07
School-level English language learner	22%	22%	0.03
School-level enrollment	480	492	0.07

Interpersonal Skills			
Covariates	**Treatment (*n* = 297)**	**Comparison (*n* = 140)**	**smd**
Program-level student participation ratio	0.89	0.92	0.06
Student-level minority	0.62	0.65	0.05
Student-level gender	0.6	0.53	0.14
Student-level special education	0.23	0.29	0.15
Student-level free or reduced-price lunch	0.79	0.77	0.05
Student-level English language learner	0.26	0.31	0.11
Student-level elementary/middle school	0.0	0.0	x
Student-level elementary school	0.63	0.55	0.15
Student-level middle school	0.37	0.45	0.15
Student-level high school	0.96	0.89	0.27
Program-level fidelity 2	0.03	0.04	0.05
Program-level fidelity 3	0.59	0.66	0.14
Program-level quality 1	0.37	0.3	0.16
Program-level quality 2	2.7	2.73	0.10
Program-level quality 3	59%	62%	0.11

Positive Mindsets			
Covariates	**Treatment (*n* = 294)**	**Comparison (*n* = 123)**	**smd**
Positive Mindsets time 1	2.71	2.71	0.01
School-level minority	60%	59%	0.04
School-level gender	52%	52%	0.03
School-level special education	14%	14%	0.02
School-level free or reduced-price lunch	71%	67%	0.21
School-level English language learner	23%	22%	0.07
School-level enrollment	484	497	0.07
Program-level student participation ratio	0.9	0.93	0.08

Positive Mindsets			
Covariates	**Treatment (*n* = 294)**	**Comparison (*n* = 123)**	**smd**
Student-level minority	0.65	0.65	0.02
Student-level gender	0.55	0.5	0.11
Student-level special education	0.21	0.3	0.21
Student-level free or reduced-price lunch	0.8	0.82	0.05
Student-level English language learner	0.28	0.4	0.26
Student-level elementary/middle school	0.0	0.0	x
Student-level elementary school	0.61	0.53	0.15
Student-level middle school	0.39	0.47	0.15
Student-level high school	0.95	0.88	0.24
Program-level fidelity 2	0.02	0.04	0.07
Program-level fidelity 3	0.58	0.63	0.10
Program-level quality 1	0.39	0.34	0.12
Program-level quality 2	2.71	2.71	0.01
Program-level quality 3	60%	59%	0.04

Self-Management			
Covariates	**Treatment (*n* = 330)**	**Comparison (*n* = 143)**	**smd**
Self-Management time 1	2.56	2.54	0.07
School-level minority	59%	60%	0.07
School-level gender	52%	52%	0.10
School-level special education	14%	14%	0.06
School-level free or reduced-price lunch	71%	69%	0.15
School-level English language learner	22%	22%	0.02
School-level enrollment	476	480	0.03
Program-level student participation ratio	0.91	0.96	0.11
Student-level minority	0.62	0.61	0.03

Self-Management			
Covariates	**Treatment (*n* = 330)**	**Comparison (*n* = 143)**	**smd**
Student-level gender	0.54	0.52	0.04
Student-level special education	0.21	0.28	0.16
Student-level free or reduced-price lunch	0.79	0.76	0.06
Student-level English language learner	0.26	0.28	0.05
Student-level elementary/middle school	0.0	0.0	x
Student-level elementary school	0.65	0.59	0.11
Student-level middle school	0.35	0.41	0.11
Student-level high school	0.96	0.91	0.22
Program-level fidelity 2	0.03	0.04	0.08
Program-level fidelity 3	0.58	0.63	0.09
Program-level quality 1	0.39	0.33	0.12
Program-level quality 2	2.56	2.54	0.07
Program-level quality 3	59%	60%	0.07

Table C3. Descriptives for Outcome Evaluation Question 1

Outcomes	Treatment	Weighted mean	Weighted standard deviation	*N*
Academic Identity	0	2.87	0.61	92
Academic Identity	1	3.05	0.54	183
Interpersonal Skills	0	2.79	0.48	140
Interpersonal Skills	1	2.87	0.47	297
Positive Mindsets	0	2.68	0.53	123
Positive Mindsets	1	2.77	0.47	294
Self-Management	0	2.83	0.48	143
Self-Management	1	2.87	0.48	330

Evaluation Question 2: To what extent do higher levels of program participation impact school-day absences?

Table C4. Mean Number of Days of 21st CCLC Programming Attended During the School Year

Outcome	Variable	*N*	Effect	Standard Error of Effect Size	*p*-value
Academic Identity	Days Attended	746	0.00	0.00	0.09
	Academic Behaviors		0.25	0.05	0.00
	Self-Management (retro)		-0.04	0.05	0.37
	Belonging and Engagement		0.25	0.06	0.00
Positive Mindsets	Days Attended	746	0.00	0.00	0.41
	Academic Behaviors		0.15	0.04	0.00
	Self-Management (retro)		0.10	0.04	0.01
	Belonging and Engagement		0.17	0.05	0.00
Self-Management	Days Attended	746	0.00	0.00	0.71
	Academic Behaviors		0.07	0.04	0.07
	Self-Management (retro)		0.22	0.04	0.00
	Belonging and Engagement		0.13	0.05	0.01
Interpersonal Skills	Days Attended	746	0.00	0.00	0.61
	Academic Behaviors		0.06	0.04	0.14
	Self-Management (retro)		0.19	0.04	0.00
	Belonging and Engagement		0.22	0.05	0.00

Evaluation Question 3: To what extent does the level of program participation impact school-related outcomes for students who needed to improve on those outcomes?

Table C5. Estimates by Grade Level

Outcome	Grade	Estimate	Standard error	*p*-value	Standard deviation (*SD*)	Effect size (estimate/*SD*)	Effect size *SD*
Test Score_ Reading	5	41.27	3.88	0.000	75.16	0.549	0.05
	6	15.76	4.87	0.001	76.33	0.207	0.06
	7	-5.13	4.97	0.302	80.06	-0.064	0.06
	8	-39.48	5.22	0.000	78.09	-0.506	0.07

Outcome	Grade	Estimate	Standard error	*p*-value	Standard deviation (*SD*)	Effect size (estimate/*SD*)	Effect size *SD*
Test Score_ Mathematics	5	40.38	3.80	0.000	70.23	0.575	0.05
	6	18.45	5.02	0.000	88.33	0.209	0.06
	7	11.01	4.93	0.026	92.30	0.119	0.05
	8	4.75	5.54	0.391	93.08	0.051	0.06
Cumulative GPA	9	-0.15	0.17	0.365	0.96	-0.159	0.18
	10	0.30	0.19	0.117	0.85	0.353	0.23
	11	0.24	0.18	0.183	0.59	0.396	0.30
	12	0.14	0.11	0.188	0.83	0.173	0.13
Credits earned	9	-1.41	4.20	0.737	23.35	-0.060	0.18
	10	4.48	4.99	0.369	22.19	0.202	0.22
	11	6.85	4.50	0.128	20.19	0.339	0.22
	12	4.14	2.45	0.092	19.90	0.208	0.12
Disciplinary incidents	3	0.05	0.04	0.211	0.84	0.062	0.05
	4	0.00	0.03	0.881	0.75	-0.006	0.04
	5	-0.05	0.03	0.111	0.78	-0.069	0.04
	6	-0.02	0.05	0.695	0.98	-0.021	0.05
	7	-0.04	0.08	0.666	1.66	-0.022	0.05
	8	0.02	0.07	0.781	1.41	0.015	0.05
	9	-0.27	0.29	0.358	1.81	-0.149	0.16
	10	-0.15	0.23	0.498	1.26	-0.122	0.18
	11	-0.26	0.22	0.241	1.15	-0.223	0.19
	12	0.04	0.15	0.817	0.77	0.046	0.20
Absences	6	-2.11	1.66	0.203	17.17	-0.123	0.10
	7	-4.16	2.12	0.050	21.42	-0.194	0.10
	8	-2.30	1.97	0.243	22.84	-0.101	0.09
	9	-1.45	6.24	0.816	28.51	-0.051	0.22
	10	-8.01	8.95	0.371	33.14	-0.242	0.27
	11	-7.29	6.96	0.295	34.65	-0.210	0.20
	12	-4.49	9.10	0.622	39.99	-0.112	0.23

Table C6. Pooled Results by Grade Level, Effect Size

Outcome	Grade	Effect size estimate	Effect size standard error	Two-tailed *p*-value ($\|Z\| > 1$)
Test Score_Reading	5	0.549	0.052	
	6	0.207	0.064	
	7	-0.064	0.062	
	8	-0.506	0.067	
				< .00001
Test Score_Mathematics	5	0.575	0.054	
	6	0.209	0.057	
	7	0.119	0.053	
	8	0.051	0.060	
				< .00001
Cumulative GPA	9	-0.159	0.175	
	10	0.353	0.225	
	11	0.396	0.297	
	12	0.173	0.131	
				0.139
Credits earned	9	-0.060	0.180	
	10	0.202	0.225	
	11	0.339	0.223	
	12	0.208	0.123	
				0.053
Disciplinary incidents	3	0.062	0.049	
	4	-0.006	0.042	
	5	-0.069	0.043	
	6	-0.021	0.054	
	7	-0.022	0.051	
	8	0.015	0.053	
	9	-0.149	0.162	
	10	-0.122	0.180	
	11	-0.223	0.190	
	12	0.046	0.197	
				.445
Absences	6	-0.123	0.096	
	7	-0.194	0.099	
	8	-0.101	0.086	
	9	-0.051	0.219	
	10	-0.242	0.270	
	11	-0.210	0.201	
	12	-0.112	0.228	
				.005

Outcome Evaluation Question 4: To what extent is there evidence that students participating in services at higher levels demonstrated better performance on youth outcomes compared with youth participating at lower levels?

Table C7. Pooled Results by Grade Level, Effect Sizes for 30 or More Days

Outcome	Grade	Effect size estimate	Effect size standard error	Two-tailed p-value ($\|Z\| > 1$)
Test Score_Reading	4	-0.059	0.023	
	5	-0.271	0.026	
	6	-0.068	0.026	
	7	-0.203	0.024	
	8	-0.250	0.029	
				< .00001
Test Score_ Mathematics	4	-0.129	0.024	
	5	-0.290	0.026	
	6	-0.078	0.025	
	7	-0.090	0.024	
	8	-0.058	0.028	
				< .00001
SGP_Reading	5	0.022	0.041	
	6	-0.004	0.033	
	7	0.032	0.033	
	8	-0.041	0.038	
				< .00001
SGP_Math	5	0.086	0.040	
	6	-0.005	0.033	
	7	0.014	0.033	
	8	0.004	0.038	
				< .00001
Cumulative GPA	9	0.002	0.074	
	10	0.053	0.046	
	11	0.073	0.053	
	12	0.088	0.049	
				.020
Credits earned	9	0.004	0.076	
	10	0.116	0.055	
	11	0.059	0.059	
	12	0.073	0.061	
				.020

Outcome	Grade	Effect size estimate	Effect size standard error	Two-tailed p-value (|Z| > 1)
Disciplinary incidents	3	-0.001	0.027	
	4	0.029	0.028	
	5	0.009	0.032	
	6	-0.045	0.028	
	7	-0.030	0.022	
	8	-0.063	0.029	
	9	0.050	0.073	
	10	-0.096	0.087	
	11	-0.153	0.110	
	12	-0.097	0.120	
				.059
Absences	6	-0.189	0.028	
	7	-0.186	0.026	
	8	-0.144	0.032	
	9	0.022	0.068	
	10	0.007	0.074	
	11	-0.007	0.092	
	12	0.186	0.110	
				< .00001

Table C8. Pooled Results by Grade Level, Effect Sizes for 60 or More Days

Outcome	Grade	Effect size estimate	Effect size standard error	Two-tailed p-value (|Z| > 1)
Test Score_Reading	4	-0.062	0.027	
	5	-0.186	0.031	
	6	-0.071	0.033	
	7	-0.181	0.036	
	8	-0.339	0.047	
				< .00001
Test Score_ Mathematics	4	-0.175	0.028	
	5	-0.285	0.031	
	6	-0.072	0.032	
	7	-0.104	0.035	
	8	-0.006	0.047	
				< .00001
SGP_Reading	5	-0.014	0.052	
	6	-0.025	0.044	
	7	0.070	0.052	
	8	-0.054	0.063	
				.897

Outcome	Grade	Effect size estimate	Effect size standard error	Two-tailed p-value ($\|Z\| > 1$)
SGP_Math	5	0.088	0.050	
	6	0.005	0.043	
	7	0.047	0.051	
	8	-0.018	0.062	
				.200
Cumulative GPA	9	0.010	0.177	
	10	-0.009	0.085	
	11	0.206	0.079	
	12	0.107	0.096	
				.038
Credits earned	9	0.065	0.186	
	10	0.037	0.091	
	11	0.191	0.085	
	12	0.186	0.117	
				.015
Disciplinary incidents	3	-0.005	0.033	
	4	-0.007	0.035	
	5	-0.036	0.044	
	6	-0.056	0.037	
	7	-0.062	0.038	
	8	-0.032	0.051	
	9	-0.100	0.183	
	10	-0.058	0.152	
	11	-0.186	0.189	
	12	0.140	0.226	
				.040
Absences	6	-0.243	0.038	
	7	-0.266	0.041	
	8	-0.163	0.056	
	9	-0.107	0.171	
	10	0.009	0.126	
	11	0.095	0.169	
	12	0.262	0.207	
				< .00001

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